

# A LEADING SMART ENERGY SAVING SERVICES PROVIDER

## **Technovator International Limited**

(incorporated in Singapore with limited liability)

Stock Code: 1206





## **CORPORATE INFORMATION**

## **BOARD OF DIRECTORS**

## **Executive Directors**

Mr. Zhao Xiaobo (趙曉波)

Mr. Seah Han Leong (謝漢良) (resignation effective on 7 February 2018)

Mr. Qin Xuzhong (秦緒忠) (Chairman since 3 April 2018) (appointed as executive director on 7 February 2018 and as chairman on 3 April 2018)

## **Non-executive Directors**

Mr. Huang Yu (黃俞) (Chairman up to 2 April 2018) (retired as Chairman on 3 April 2018)

Mr. Liu Tianmin (劉天民) Mr. Wang Yinghu (王映滸)

## **Independent Non-executive Directors**

Mr. Fan Ren Da Anthony (范仁達)

Mr. Chia Yew Boon (謝有文)

Ms. Chen Hua (陳華)

## **BOARD COMMITTEES**

## **Audit Committee**

Ms. Chen Hua (Chairman)

Mr. Chia Yew Boon

Mr. Fan Ren Da Anthony

## **Nomination Committee**

Mr. Chia Yew Boon (Chairman)

Mr. Fan Ren Da Anthony

Mr. Huang Yu

## **Remuneration Committee**

Mr. Fan Ren Da Anthony (Chairman)

Mr. Huang Yu (appointed on 16 March 2018)

Mr. Chia Yew Boon

Mr. Seah Han Leong (resignation effective on

7 February 2018)

## **Risk Management Committee**

Mr. Fan Ren Da Anthony (Chairman)

Mr. Huang Yu

Ms. Chen Hua

Mr. Chia Yew Boon

Mr. Liu Tianmin

Mr. Seah Han Leong (resignation effective on

7 February 2018)

Mr. Wang Yinghu

Mr. Zhao Xiaobo

Mr. Qin Xuzhong (秦緒忠) (appointed on 7 February 2018)

## **JOINT COMPANY SECRETARIES**

Mr. Leung Lok Wai

Mr. Teo Meng Keong (passed away on 23 January 2018)

## **AUTHORISED REPRESENTATIVES**

Mr. Zhao Xiaobo

Mr. Seah Han Leong (resignation effective on

7 February 2018)

Mr. Qin Xuzhong (秦緒忠) (appointed on 7 February 2018)

## **REGISTERED OFFICE**

66 Tannery Lane #04-10/10A Sindo Industrial Building Singapore 347805

# HEADQUARTERS AND PRINCIPAL PLACE OF BUSINESS IN SINGAPORE

66 Tannery Lane #04-10/10A Sindo Industrial Building Singapore 347805

# PRINCIPAL PLACE OF BUSINESS IN HONG KONG

15th Floor Allied Kajima Building 138 Gloucester Road Wanchai, Hong Kong

# LEGAL ADVISER AS TO HONG KONG LAWS

Luk & Partners in Association with Morgan, Lewis & Bockius



## **AUDITORS**

KPMG KPMG LLP

# SINGAPORE PRINCIPAL SHARE REGISTRAR

Tricor Barbinder Share Registration Services 8 Cross Street #11-00 PWC Building Singapore 048424

## HONG KONG SHARE REGISTRAR

Tricor Investor Services Limited Level 22, Hopewell Centre 183 Queen's Road East Hong Kong

## **COMPANY WEBSITE**

www.technovator.com.sg

## PRINCIPAL BANKERS

Standard Chartered Bank
DBS Bank
The Hong Kong and Shanghai Banking Corporation Limited
Agriculture Bank of China
Bank of China
Industrial and Commercial Bank of China
China CITIC Bank
China Construction Bank
China Merchant Bank
Bank of Beijing

## **INVESTOR RELATIONS CONTACT**

Beijing office Ms. Hannah Zhang Tel: +86 10 8239 9391 Email: zhanghan@thtf.com.cn

Hong Kong office Ms. Janet Lai Tel: +852 2736 8180

Email: janet\_lai@thtf.com.cn/janet@technovator.com.sg







## **CHAIRMAN'S STATEMENT**

## Dear Honorable Shareholders,

On behalf of the board of directors and the management of Technovator International Limited ("Technovator"), I am pleased to present to the shareholders the report on the development and operating results of Technovator and its subsidiaries (the "Group") for the year ended 31 December 2017.

# **Strategic Transformation: Buoyant Revenue and Profit Growth**

In 2017, China's economy has been transitioning from a phase of rapid growth to a stage of high-quality development. The overall economic outlook remained stable and favorable, underpinned by the economic vitality, impetus and potential released constantly from different sectors, and innovation and development continued to exert strength. At the same time, the country continued to vigorously promote green production and consumption. Establishing a sound green low-carbon and recycling economic system has also become the general requirement for the country's green development.

As a leading urban energy, smart energy and energy saving services provider in the People's Republic of China (the "PRC"), Technovator is committed to building a green China, based on the three major areas of transportation,

construction and energy, to provide customers with high quality integrated smart energy-saving solutions and services. At present, the Group keeps abreast of the development trend and the changes in the industrial landscape to build a strong foothold amidst strategic transformation and to seize opportunities arising from reforms, while seeking for innovation and development. Throughout the year of 2017, the strategic transformation of the Group has promoted at a steady pace. On top of improving its income structure and stabilizing revenue growth, the overall profitability of the Group has increased substantially throughout the year, and significant progress has been made in the sustainable business of all segments. The overall transformation has achieved remarkable results.

# **Business Development: Innovation Driving Transformation**

With the concept of "Digital China" and "Intelligent Society", China has entered the "Era of Intelligence". The Era of Intelligence is an era driven by science and technology, and also is an era driven by innovation. Over the years, Technovator has been adhering to the principal of "technology-based". In light of the new environment and new policy and with sharp insight of new business opportunities, Technovator actively explored new technologies, and decisively selected new strategies. On the basis of solid foundation building on the core technologies in the three major sectors of transportation, construction, and energy and project implementation experiences, together with the high-tech means of the Internet big data cloud computing artificial intelligence



and cross-disciplinary applications, Technovator is realizing double innovations in business field and business mode, and has promoted the Group's transformation development in different business segments with strong innovative capability.

The smart transportation business segment integrated the core technological achievements in research and development over the years to open a new chapter in service architecture and customer experience with family solution models. With the development of "Big Data Analysis Platform for Railway Energy Consumption", Technovator has firmly secured the Group's leading position in the PRC urban rail transit network control center and boosted the innovation and upgrading of the business. The energy-saving and transformation business in relation to subway stations has incorporated new areas and new operation model to expand new market by leveraging innovative energy-saving technologies and proprietary products. Irrespective of the market conditions, the smart building and complex business segment actively explored ways for innovation and transformation. With the launch of the "E+ Building Energy Efficiency" solution system, it opened up new ideas for building energy saving business. It focused on high-end and quality major projects by joining hands with large-scale commercial real estate developers, and tapped into new business areas including city green pipeline, helping to boost the revenue and profits of the business segment. As an important innovation in the business model of the segment, the entrusted energy operation and regional energy station projects have successfully expanded and also become a powerful guarantee for the Group's sustainable business strategy. The smart energy business segment promoted the business transformation and upgrading through technological innovation, and successfully developed a "smart heating information service platform" that integrates cutting-edge technologies such as multi-discipline, internet and big data. The idea of "A Master Map for A Municipality" has opened up the new applications in transformation of energy-saving heating network in terms of municipallevel. The smooth promotion of the energy performance contracting (EPC) mode has become a powerful driving

force for the improvement of profitability of the business segments. The exploration and innovation of the entrusted operation model for heating also helped the sustainable development of the business segments in long term.

## **Building up for the future**

The Group will strengthen its strategic development plan for innovation and transformation. With research and development of technology and talent cultivation as driving force for innovation, streamlined internal structure, efficiency improvement, the Group aims to grasp accurately the external opportunities in China's urban energysaving market. The Group will consolidate the traditional advantageous businesses, explore the emerging business areas, foster multiple business models, and adjust income structure so as to increase profits and to build a more complete commercial system and enter into a healthy development path for long-term sustainable operation as soon as practicable. We believe that with strong strengths and light assets, Technovator will continue to surpass the development of the peers in the PRC urban energy-saving industry.

Lastly, on behalf of the Board of Technovator, I would like to express my heartfelt gratitude to all of staff of the Group for their unremitting contribution, to all our customers and business partners for their tremendous support, and to all shareholders and investors for their support and trust. For the coming year, the Group is willing to create a bigger venue for employees, provide better services to customers, seek greater benefits for shareholders, and make greater contribution to the urban energy saving business in the PRC. Behold, here comes another springtime, the time for us to prepare our work ahead. In the juvenile stage of development, Technovator will venture ahead with confidence.

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Huang Yu Chairman

16 March 2018

## **FIVE YEAR FINANCIAL SUMMARY**

	2013	2014	2015	2016	2017
('000 RMB) Consolidated income statement Continuing operations Revenue	1,082,598	1,394,346	1,692,624	1,786,341	1,979,970
Cost of sales	(818,385)	(1,023,120)	(1,297,085)	(1,357,747)	(1,485,861)
Gross profit	264,213	371,226	395,539	428,594	494,109
Other revenue Other net gain/(loss) Selling and distribution costs Administrative and other operating expenses Financial expenses	21,977 (7,247) (60,865) (84,162) (11,869)	24,675 1,291 (67,960) (109,003) (22,349)	58,475 1,888 (70,269) (144,193) (34,794)	40,162 27,999 (66,183) (131,647) (30,897)	38,329 2,822 (81,949) (133,432) (13,500)
Profit before taxation Income tax	122,047 (23,868)	197,880 (41,803)	206,646 (21,351)	268,028 (36,303)	306,379 (43,488)
Profit for the year from continuing operations	98,179	156,077	185,295	231,725	262,891
<b>Discontinued operation</b> Profit for the year from a discontinued operation	33,985	40,967	599,318	-	-
Profit for the year	132,164	197,044	784,613	231,725	262,891
Equity shareholders of the Company Non-controlling interests	124,677 7,487	184,510 12,534	778,919 5,694	234,127 (2,402)	259,358 3,533
Profit for the year	132,164	197,044	784,613	231,725	262,891
Basic earnings per share (RMB) Diluted earnings per share (RMB)	0.2040 0.1871	0.2959 0.2677	1.0680 1.0092	0.2935 0.2870	0.3269 0.3269
Non-current assets	829,220	982,245	778,117	832,941	991,381
Current assets Current liabilities	1,567,232 1,022,038	1,933,958 1,268,677	3,187,256 1,754,975	2,996,669 1,607,886	3,234,312 1,801,227
Net current assets	545,194	665,281	1,432,281	1,388,783	1,433,085
Total assets less current liabilities Non-current liabilities	1,374,414 440,995	1,647,526 466,968	2,210,398 203,602	2,221,724 27,606	2,424,466 34,202
Total equity attributable to equity shareholders of the Company Non-controlling interests Total equity	903,260 30,159 933,419	1,150,642 29,916 1,180,558	1,998,710 8,086 2,006,796	2,188,427 5,691 2,194,118	2,372,140 18,124 2,390,264
Net assets per share (RMB)	1.79	1.83	2.52	2.74	3.05
Financial ratio					
Cost to income ratio Pre-tax profit margin Return on Equity Current ratio	75.6% 11.3% 10.5% 1.5	73.4% 14.2% 13.2% 1.5	76.6% 12.2% 9.2% 1.8	76.0% 15.0% 10.6% 1.9	75.0% 15.5% 11.0% 1.8

## MANAGEMENT DISCUSSION AND ANALYSIS

(The following discussion is based on continuing operations)

## **GENERAL**

In 2017, Technovator entered into a new era of transformation in various aspects. Driven by technological upgrades and business model innovation, and integration of big data applications and cloud platform services, Technovator is building an urban energy service system with a wider vision to meet the demands of a more diversified customer base and the needs of a higher level of intelligence control and energy management.

Positioning itself as a leading urban smart energy saving service provider in China, Technovator focuses on the large future market and proactively adjusts its development pace by listening to customers' feedbacks continuously. The performance for 2017 was stable and the overall transformation achieved remarkable results. For the year, the Group recognised revenue of approximately RMB1,980 million, representing a year-on-year increase of 10.8%, evidencing that income structure has effectively improved. Net profit was approximately RMB263 million during the same period, representing a year-on-year increase of 13.5%. Had the effect of the one-off exchange gain in 2016 been excluded, the year-on-year net profit would have increased by 29.3%, and the net profit margin would have increased significantly by 2.0 percentage points to 13.3%. The sustainable development strategy has been steadily implemented.

## **BUSINESS REVIEW**

## Smart Transportation Business: Business Transformation and Upgrade; Being the Leading Player in the Industry

The development of the Group's rail transit operations continued to benefit from the rapid construction of urban rail transit systems in China. Meanwhile, as the Group is entering into the transformation transition period, shifting from automatization and informatization to smart business, the Group continued to be the leading player in the industry under this era of smart movement. Under the backdrop of the temporary contraction of the market size of the China's rail transit in 2016, the segment revenue showed a downward adjustment accordingly in 2017. However, with the significant increase of awarded tenders and contracted orders during the year, the Group remained optimistic of the development of this segment.

The segment's core technology was integrated and upgraded in all aspects during the year. The Group rolled out a host of M+ urban rail transit solutions at the beginning of the year, which used cloud computing and big data platform as its core, connecting the upper-level smart application and integrating a dozen types of system solutions, including Network Command Center (NCC), Integrated Supervision and Control System (ISCS), Building Automation System (BAS), and Platform Screen Door (PSD) System, so as to build up an integrated one-stop solution for customers, to facilitate the full implementation transforming from the traditional automatization and informatization to smart intelligent network urban rail transport. In the meantime, the Group successfully developed a cloud platform for the integrated monitoring and control of rail transit system by fully integrating the current internet, big data, and cloud computing technology, so as to build up a more smart and effective high-ended integrated monitoring and control system for subway routes. When the big data analysis platform of rail transit energy consumption steps into post-development stage, the application of such platform will entirely turn to a new page for the management and control of energy consumption of the municipal subway network. In addition, during the year, the Group fulfilled its social responsibilities and shared its knowledge by participating in the drafting of the national standard of "The Technical Code for Engineering of Integrated Supervision System of Urban Rail Transit" (《城市軌道交通綜合監控系統工程技術規範》), which enabled the Group to use its own technology and experience as example to contribute its wisdom for green cities.

#### MANAGEMENT DISCUSSION AND ANALYSIS

(The following discussion is based on continuing operations)

Various undertakings under the smart transportation segment achieved significant progress during the year. The municipal rail transportation network command center, which acted as an indicative operation shifting from automatization and informatization towards intelligence and smart upgrade of the sector, achieved another material progress during the year. The Group has successfully won bids for projects in Xi'an and Qingdao after those at Beijing, Guangzhou and Shenzhen, expanding the Group's advantages in those fields from first-tier cities to second-tier cities. With its proprietary software products, the Group anchored its leading position in the urban traffic control center market in China, which helped the increase of profit margin of the segment. The traditional and outstanding subway integrated supervision and control business has been developing smoothly. During the year, the Group continued to implement projects such as in Pakistan, and in Qingdao, Xi'an and Shenzhen in China, while successfully contracted for various subway lines such as in Wuhan, Harbin, Shenyang and Jinan in China. Meanwhile, as the highlight of the segment, subway station energy saving transformation business has made another breakthrough. The energy saving business in the trial city, Beijing, continued to achieve significant progress. We also successfully tapped into Ningbo market, establishing a typical energy-saving application project of subway in the southern region with extreme hot and wet weather. Through the strategy of connecting lines and networks, the Group has become the leader in China's rail transit energy-saving market and injected great momentum to the segment's sustainable development.

# Smart Building and Complex Business: Targeting at High-End Projects and Expanding Business Areas and Models

The transformation of smart building and complex segment in 2017 achieved remarkable results. The segment has focused on solutions integration and proprietary products upgrades and application as its core driving force. By targeting at high-end projects, expanding its business areas and developing various new business models, the structure of business segments has shown substantial improvement whereas the revenue and profit of the segment has soared during the year.

Relying on the Group's entirely proprietary E-series energy-saving products, using the Internet to integrate the traditional energy-saving equipment, system and service, "E+ energy-saving building" solution system was launched during the year, providing customers with green building solutions throughout the full life cycles of energy management solutions, while allowing the city administrators to effectively control building energy consumption and operations. The launch of the system was not only the promotion of technical concepts, but also a symbol of the Group's brand new interpretation and innovation ideas in respect of the energy-saving building business. In addition, during the year, the Group comprehensively upgraded the IBS 4.0 smart information integration system. As a result, the subsystem integration was more comprehensive, and the data processing and updating speed has greatly enhanced. The upgraded system has been successfully applied to various Huiyun System Construction Projects for Wanda Plazas. With solid technical foundation and continuous research and development innovation, the Group continued to hold the "Top Ten Building Automation Control Brands" in 2017 in China and won several honors such as "Top Ten Brands in China's Energy-Saving and Power-Saving Industry".

During the year, with technological innovation as a driving force, intelligent building and building complex business made a great breakthrough in terms of the scale of individual projects, service area and business model. The urban intelligent building project contracted for a Northern China first-tier city during the year has become the single largest project undertaken by the Group to date, and such project attaches great significance. The Group continued to focus on high-end area such as high-end office buildings, data centers and chained commercial real estate with the goal of enhancing profit margin of the segment. Also, during the year, the Group expanded its business to major transport hubs such as airports and railway stations, as well as emerging sectors including urban green utility tunnels, successfully contracted several energy-saving projects such as Beijing China Central Place and Hefei Xinqiao Airport, and continued to cooperate with Wanda, Jinmao and Evergrande groups to assist in the technological transformation among the high-end commercial real estate in China by starting from energy monitoring and management. Meanwhile, the successful signing of entrusted energy operation project of Zhichun Plaza in Beijing, the smooth progress of Hengqin Integrated Smart Energy Station and the winning of bids for the Chongqing Xiantao Data Valley Regional Energy Station project have symbolized the successful innovative transformation strategy of the segment's business model and become a strong guarantee for the Group's sustainable operation strategy.

## Smart Energy Business: Seizing the Energy Saving Opportunity and Arranging the Layout of Application at **Municipal Level**

Enhancing urban heating quality, reducing energy consumption, reducing carbon emission and achieving heating intelligence and cleaning heating were the core targets of the Group in smart energy segment technology development and business expansion. During the year, various breakthroughs in technological research and development has been used in the industry, promoting the project applications of smart energy business at municipal level. During the year, the revenue and profit of the segment have enjoyed continuous and steady growth.

In respect of technology research and development, during the year, the Group has successfully developed the smart heating information service platform, which integrated avant-garde technology from various academics in different fields. With the advanced geographic information system as a fundamental framework structure, coupled with the IoT, the internet and big data technology, it was the first time to achieve an unified display, a centralized management, cross-analysis and integrated application for various types of data of heating source, heating network and users. The "A Master Map for Municipality" has effectively enhanced the management level, energy efficiency and economic benefits in respect of heating supply of a city, and has formed the foundation for big data analysis in respect of urban heating supply. At the same time, the Group actively responded to the national policy of "utilization of waste heat for people" (餘熱暖民) by cooperating with Tsinghua University in the research and development of heating exchange units through huge temperature difference absorption (吸收式大溫差 換熱機組) and put into operation. By enlarging the temperature difference between supply and return of water via network, the units enhanced the transportation and distribution capability of urban heating network, achieved high utilization of clean residual heat across the city to reduce the consumption of heat supply from traditional energy sources and helped achieve China's heat supply revolution.

The smart energy segment business has fully benefited from the development of China's urbanization, the "Separation and transfer of water, power and gas supply and property management business" reform policy of state-owned enterprises and the technological revolution of the segment. During the year, we also entered into agreements with Karamay, Xinjiang and with Anshan, Liaoning to develop the regional cooperation. At the same time, the smart heating information service platform has successfully been launched in Taiyuan, Shanxi and Shihezi, Xinjiang, turning a new page for municipal level application of the Group's renovation in energy-saving of centralized heating supply. EMC model continued to be the key contract mode of energy-saving reform for the segment during the year. With various new EMC projects signed in Fushun, Liaoning, Shihezi, Xinjiang, Heze and Linyi, Shandong, such model has become the core driver for smart energy segment to enhance profit margin and achieve sustainable development. Moreover, the Group continued to actively explore the business model of heating supply entrusted operation, using Youyi Heating Company (友誼熱力公司) in Heilongjiang as its role model, to promote and replicate such business model to facilitate the sustainability of this segment.

## **OUTLOOK**

Currently, urban construction in China has entered a "smart" era. The urban energy-saving industry is also developing fast towards technology, smart and ecology. Adhering to the principle of "technology as core", Technovator, leveraging on its solid experience accumulated for over 20 years, has worked closely with university research institutes. Along with the new and advanced technology methods, such as the Internet, big data, cloud computing, artificial intelligence, and interdisciplinary applications, the Group continue to realize leap-forward upgrade on core technologies in various fields and elevate the industrial application, providing a high-end "Smart + Energy Saving" integrated solutions for areas such as urban buildings, rail transit and energy, and continue to lead the industry in this digital age.

Looking ahead, the Group will continue to stick to its strategic transformation. Internally, it will streamline the structure and enhance efficiency. Externally, it will innovate the models and integrate the industrial chain. It will timely seize the urban energy-saving opportunities in China and its favorable policies, continue to explore new potential customers and partners with high quality, strategically promote the existing market for energy-saving in all areas, and proactively seek for a more stable and efficient financial support system and service. While adjusting our income structure and increasing our profit margins, the Group will build a more comprehensive commercial system and step into the track of sound development for long-term sustainable operation as soon as practicable, so as to create higher value for Shareholders and make greater contributions to the green urban construction.

#### MANAGEMENT DISCUSSION AND ANALYSIS

(The following discussion is based on continuing operations)

## **FINANCIAL REVIEW**

#### Revenue

The Group recorded a revenue of approximately RMB1,980.0 million for 2017, representing a year-on-year increase of 10.8%. During the year, the Company fully entered into a new era of transformation with outstanding results. Smart building and complex business effectively improved the revenue structure, and together with the successful signing of highend projects, it has driven the revenue growth of the segment significantly. Meanwhile, benefitted from China's intensive development of energy-saving industry and with its stronger comprehensive strength, the Company undertook certain smart energy EMC projects, providing continuous and steady growth of the smart energy business. Under the influence of the temporary contraction of the industry's market scale in 2016, the revenue of the smart transportation business has experienced a downward adjustment in 2017.

## Revenue by business segment

The table below sets out the breakdown of the Group's revenue by business segments for the year indicated.

	2017		2016		
		% of		% of	
	Revenue (RMB'000)	revenue	Revenue (RMB'000)	revenue	Comparison
Smart transportation	534,792	27%	677,632	38%	-21.1%
Smart building and complex	918,161	46%	633,308	35%	45.0%
Smart energy	527,017	27%	475,401	27%	10.9%
Total	1,979,970	100%	1,786,341	100%	10.8%

## **Smart transportation**

Revenue from the smart transportation business segment decreased by 21.1%, from approximately RMB677.6 million for 2016 to approximately RMB534.8 million for 2017. During the year, the Group promoted the implementation of various subway intelligent projects including Pakistan Orange Line, Qingdao Subway Line No. 2, Xi'an Subway Line No. 4 as well as Shenzhen rail NOCC Project, and successfully signed the contracts and smoothly implemented the construction of Wuhan Subway Line No. 11. However, the new rail transit projects awarded and contracted this year, such as in Harbin and Shenyang, were still in the preparation stage, with no settlement taking place. This, together with the influence of a temporary contraction of the industry's market scale in 2016, has resulted in a year-on-year revenue decline of the smart transportation segment for the year. However, the technological innovation and upgrade of rail transit business, the successful development of the strategy of connecting lines and networks for subway energy saving business by the Company for the year, as well as the success in bidding the projects including Xi'an and Qingdao network command center, have provided a more solid base for future development of the smart transportation business of the Company during the year.

## Smart building and complex

During the year, revenue from the smart building and complex segment significantly increased by 45.0% from approximately RMB633.3 million for 2016 to approximately RMB918.2 million for 2017. During the year, the Group successfully signed and implemented certain intelligent building project for a first-tier city in the North China, and projects such as Museum of Kaifeng and Yujiapu Financial District of Tianjin, while continuing to deepen cooperation with large-scale business groups which included installing the "Huiyun" system for Wanda Plazas, as well as installing the asset and energy management platform for the Jinmao Group. At the same time, the Group adopted for the first time the new business model of "Energy Saving Renovation + Entrusted Energy Operation" and contracted for and proceeded with the project for the entrusted energy operation of Zhichun Plaza and focused on exploring new business growth points such as regional power stations.

(The following discussion is based on continuing operations)

#### **Smart energy**

Revenue from smart energy business segment recorded an increase of 10.9%, from approximately RMB475.4 million for 2016 to approximately RMB527.0 million for 2017. Benefitted from the continuous increase in urban energy-saving demands and supported by China's favorable policies on energy-saving, the smart energy segment business continued to show a steady and rapid growth. During the year, the Group signed and successfully promoted the EMC energy transformation projects for Xingjiang Tianfu Energy and Linyi City Hengyuan Thermal and drove the revenue growth of the energy business. Three heating supply projects signed in succession by the Company and Taiyuan City Thermal Company have successfully commenced in the year, generating income while enabling the Company to strengthen its brand awareness in the energy business in Shanxi market. In addition, the Group signed heating supply improvement projects of Karamay Thermal Company and successfully opened up another market in Xinjiang.

## Cost of sales

Cost of sales increased by approximately 9.4%, from approximately RMB1,357.7 million for 2016 to approximately RMB1,485.9 million for 2017. The increase was driven by the increase in revenue. Meanwhile, thanks to further improvement in gross profit margin of the projects (as further discussed in the section headed "Gross profit" below), the increase in cost of sales was lower than the increase in revenue.

## **Gross profit**

Gross profit increased by 15.3%, from approximately RMB428.6 million for 2016 to approximately RMB494.1 million for 2017. Gross profit margin increased by 1.0 percentage point, from approximately 24.0% for 2016 to approximately 25.0% for 2017. The increase in overall gross profit margin was mainly driven by higher gross profit margins in the business segments of smart energy.

#### Other revenue

Other revenue decreased by approximately RMB1.9 million, from approximately RMB40.2 million for 2016 to approximately RMB38.3 million for 2017.

## Other net gain

Other net gain decreased substantially by RMB25.2 million, from approximately RMB28.0 million for 2016 to approximately RMB2.8 million for 2017. As the foreign cash exchange in 2016, which brought a one-off foreign exchange gain of approximately RMB28.4 million for the Group, was not subsisted in 2017, other net gains has seen a significant decrease during the year.

## Selling and distribution costs

Selling and distribution costs for 2017 were approximately RMB81.9 million, representing an increase of 23.8% as compared to that for 2016. Selling and distribution costs as a percentage of revenue was 4.1%, representing an increase of approximately 0.4 percentage point as compared to 3.7% in 2016, the increase was mainly attributable to the increase of staff costs and travel expenses as the Group's businesses developed.

## Administrative and other operating expenses

Administrative and other operating expenses increased by 1.4%, from approximately RMB131.6 million for 2016 to approximately RMB133.4 million for 2017. Administrative and other operating expenses as a percentage of revenue was 6.7% for the year, representing a decrease of approximately 0.7 percentage point as compared to that in 2016.

## Finance costs

Finance costs decreased by 56.3% to approximately RMB13.5 million for 2017 from approximately RMB30.9 million for 2016, which was mainly due to the corresponding increase in finance costs of approximately RMB12.3 million for 2016 as the consideration payable increased due to the acquisition of the Intelligent Rail Transit Business, the Intelligent Building Business and Intelligent Urban Heating Network Business from Tsinghua Tongfang Co, Ltd., a controlling shareholder of the Company during the second half of 2015, and such consideration payable was fully settled in the second half of 2016. Since such finance expenses did not recur in 2017, finance costs for the year declined significantly.

#### MANAGEMENT DISCUSSION AND ANALYSIS

(The following discussion is based on continuing operations)

## Income tax

Income tax increased by 19.8%, from approximately RMB36.3 million for 2016 to approximately RMB43.5 million for 2017. The effective tax rate increased from 13.5% for last year to 14.2% for the current year.

#### **Profit for the Year**

During the year, profit for the year increased by approximately 13.5%, from approximately RMB231.7 million for 2016 to approximately RMB262.9 million for 2017. Net profit margin increased by approximately 0.3 percentage point, from 13.0% for 2016 to approximately 13.3% for 2017. Had the effect of such one-off exchange gain in 2016 been excluded, the profit for the year would have increased year-on-year by 29.3% or approximately RMB59.6 million for the year. The net profit margin increased year-on-year by approximately 2.0 percentage points (the net profit margin after excluding the effect of such one-off exchange gain for 2016 was 11.3%).

The basic earnings per share of the Group increased by 11.4% year-on-year to RMB0.3269 (2016: RMB0.2935), while diluted earnings per share increased by 13.9% year-on-year to RMB0.3269 (2016: RMB0.2870).

## **Working Capital and Financial Resources**

The following table sets forth the Group's current assets and liabilities as at the indicated dates:

	2017 (RMB'000)	2016 (RMB'000)
Inventories Trade and other receivables Trade and other payables	375,525 1,438,201 1,512,632	302,950 1,345,417 1,292,923
Average inventories turnover days  Average trade receivables turnover days  Average trade payables turnover days	62 212 266	59 208 226

<sup>\*</sup> The calculation of turnover days excluded other receivables, other payables and related party amounts

The Group's inventories increased from approximately RMB303.0 million as at 31 December 2016 to approximately RMB375.5 million as at 31 December 2017, mainly due to the Group's business expansion which increased the corresponding inventories. The inventory turnover days increased from approximately 59 days for 2016 to approximately 62 days for 2017.

The Group's trade and other receivables increased from approximately RMB1,345.4 million as at 31 December 2016 to approximately RMB1,438.2 million as at 31 December 2017. The average trade receivables turnover days increased from approximately 208 days for 2016 to 212 days for 2017. The increase in trade receivables was driven by the Group's continuous business expansion.

The Group's trade and other payables increased by approximately RMB1,292.9 million as at 31 December 2016 to approximately RMB1,512.6 million as at 31 December 2017. The Group's average trade payables turnover days increased from approximately 226 days for 2016 to approximately 266 days for 2017, mainly attributable to the increase in the Group's purchase of goods and the negotiation with suppliers for favorable payment terms, thus the payment process was slowed down which resulted in an increase of trade payables.

## Liquidity and financial resources

In 2017, the Group financed its operations primarily through cash flow from operations and cash balance on hand. As at 31 December 2017, the Group had approximately RMB521.3 million in cash and cash equivalents, which accounted for 21.8% of the Group's net assets (31 December 2016: cash of approximately RMB665.8 million). Depending on the financial costs in the market and the requirements of the Group, the Group will reasonably allocate the funds for the normal working capital purposes, and/or for future acquisitions and/or repayment of loans, so as to maximize the utilization and efficiency of financial resources to facilitate the business development and to achieve the transformation of the Group. The Group's cash and cash equivalents primarily consisted of cash in banks and on hand and deposits that are readily convertible into known amounts of cash.

(The following discussion is based on continuing operations)

As at 31 December 2017, the Group's indebtedness consisted of short-term bank loans of approximately RMB175.7 million with an average annual interest rate of 4.7%, and a borrowing of approximately RMB66.6 million. The Group's indebtedness decreased as at 31 December 2017 as compared to the indebtedness as at 31 December 2016, mainly because the Group repaid part of its bank loans and borrowings during the year 2017.

As at 31 December 2017, the Group's debts were primarily bank loans and borrowings denominated in RMB. Cash and cash equivalents were primarily bank deposits and cash on hand denominated in RMB, USD, HKD, MOP and SGD, and deposits that are readily convertible into known amounts of cash.

As at 31 December 2017, the net cash of the Group was approximately RMB279.0 million. Gearing ratio, defined as loans and borrowings divided by total assets, was approximately 5.7% (2016: approximately 7.6%).

## Pledge of assets

As at 31 December 2017, the Group had no pledge of assets.

## Contractual obligation and capital commitments

The following table sets forth the Group's non-cancellable operating lease commitments as at 31 December 2017 and 31 December 2016. The Group's operating lease commitments relate primarily to its leases of office spaces, workspaces and machinery.

	2017 RMB'000	2016 RMB'000
Within 1 year After 1 year but within 5 years	15,758 8,327	11,883 5,730
	24,085	17,613

Capital commitments outstanding at 31 December 2017 and 31 December 2016 not provided for in the financial statements are as follows:

	2017 RMB'000	2016 RMB'000
Contracted for	131,121	188,641

## **Contingent liabilities**

As at 31 December 2017, the Group did not have any material contingent liabilities.

## Off-balance sheet arrangements

The Group did not have any special purpose entities that provided financing, liquidity, market risk or credit support to it or were engaged in leasing, hedging or research and development services with it. The Group did not enter into any derivative contracts that were indexed to the shareholders of the Group (the "Shareholders") and classified as Shareholders' equity, or that were not reflected in its financial statements. Moreover, the Group did not have any retained or contingent interest in such assets that were transferred to unconsolidated entities to provide credit, liquidity or market risk support for such entities.

## Employee, training and development

As at 31 December 2017, the Group had a total of 779 employees compared to the 735 employees as at 31 December 2016. Total staff costs for 2017 slightly increase from approximately RMB125.2 million for the year ended 2016 to approximately RMB128.4 million.

As a matter of policy, employees of the Group are remunerated based on their performance, experience and prevailing industry practices, with all compensation policies and packages reviewed on a regular basis.

## MANAGEMENT DISCUSSION AND ANALYSIS

(The following discussion is based on continuing operations)

The Group provides training to its employees on a regular basis to keep them abreast of their knowledge in the Group's products, technology developments and market conditions of its industry. The Group also provides additional training for each new product launch so to facilitate its frontline sales staff's sales and orientation efforts. In addition, the Group's senior management also participates in conferences and exhibitions to deepen their knowledge in the industry.

See also the "Environment, Society and Governance Report – Employees" in this annual report for more information.

## Material acquisitions and disposals

For the year ended 31 December 2017, the Group did not make any material acquisition or disposal of subsidiaries or associates.

## Significant investment

For the year ended 31 December 2017, the Group had no significant investment.

## **DIRECTORS AND SENIOR MANAGEMENT**

## **Executive Directors**





Mr. Zhao Xiaobo (趙曉波), aged 48, is an executive director of the Company (the "Director") and chief executive officer of the Company, responsible for overall strategic planning and general management of the Group. He joined the Group in May 2005 and was appointed a Director on 26 May 2005 and was re-designated as an executive Director on 12 April 2011. Mr. Zhao received his Bachelor's degree in Thermal Engineering from Tsinghua University in 1993 and Executive Master of Business Administration from Tsinghua University in 2005. Mr. Zhao was qualified as professor and researcher level senior engineer (教授研究員級高級工程師) in 2009.

Mr. Zhao joined Beijing Tsinghua Artificial Environmental Engineering Co. (清華人工環境工程公司), which was the predecessor of Tsinghua Tongfang Co., Ltd. (同方股份 有限公司) ("THTF", which is listed on the Shanghai Stock Exchange (stock code: 600100)) in 1993, and has worked in various departments within that company, responsible for R&D for product technology, software programming, solutions and sales, project management, as well as business strategies and planning. He had participated in many "intelligent building" projects, such as projects with the Beijing Hotel in the PRC and the Tehran Metro in Tehran, Iran. Mr. Zhao and such projects that he was involved in received various awards including the building low-carbon technology innovation award issued by Ministry of Science and Technology of the PRC (中華人民共和國科 學技術部). Mr. Zhao was also previously an assistant to the president of THTF and a general manager of "Digital City Division" of THTF.

Mr. Qin Xuzhong (秦緒忠), aged 45, was appointed as an executive Director of the Company on 7 February 2018. He was appointed as the chairman of the Board of the Company on 3 April 2018.

Mr. Qin has over 17 years of experience in engineering. He joined Tsinghua Tongfang Co., Ltd.\* (同方股份有限 公司), a company listed on Shanghai Stock Exchange (stock code: 600100) in June 2000. He is currently the vice president of Tsinghua Tongfang Co., Ltd.\* (同方股 份有限公司), the general manager of Tongfang Smart Energy Saving Division\* (同方智慧節能產業本部) and the chairman of Tongfang Artificial Environment Co., Ltd\* (同 方人工環境有限公司). He also held several positions in Tsinghua Tongfang Co., Ltd.\* (同方股份有限公司) including the assistant of president in Tsinghua Tongfang Co., Ltd.\* (同方股份有限公司), the standing vice general manager and project center general manager of Tongfang Digital City Division\* (同方數字城市產業本部). He obtained the doctor degree in heating, gas supply, ventilating and air conditioning engineering from Tsinghua University\* (清華大 學) in June 2000, the executive master degree in business administration from Tsinghua University\* (清華大學) in March 2007. He was awarded as the professor senior engineer\* (教授級高級工程師) in Beijing in May 2012. He is also the standing vice president of China Construction Industry Association – Intelligent Building branch\* (中國建 築業協會智能建築分會), the vice president of counsel of the Engineering Design Committee of Chinese Association of Automation\* (中國自動化學會工程設計委員會) and a member of Technical Committee of China District Heating Association\* (中國城鎮供熱協會技術委員會).

## **Non-Executive Directors**





Mr. Huang Yu (黃俞), aged 49, was appointed as a non-executive Director and the chairman of the Board of the Company on 15 July 2016. Mr. Huang resigned as the chairman of Board of the Company on 3 April 2018.

He is also (i) the chairman of the board of directors of Shenzhen Huakong Seg Co., Ltd. (深圳華控賽格股份有限 公司), a company listed on the Shenzhen Stock Exchange (stock code: 000068), (ii) the senior vice president of Tsinghua Holdings Co., Ltd. (清華控股有限公司), (iii) an executive director of Shenzhen Aorongxin Investment Development Co., Ltd. (深圳市奥融信投資發展有限公司), (iv) the chairman of the supervisory committee of Penghua Fund Management Co., Ltd. (鵬華基金管理有限公司), (v) the President and chief executive officer of Tsinghua Tongfang Co., Ltd. (同方股份有限公司), a company listed on the Shanghai Stock Exchange (stock code: 600100) and the controlling shareholder of the Company, (vi) an executive director and the chairman of the board of directors of Tongfang Kontafarma Holdings Limited (同方 康泰產業集團有限公司)), a company listed on the Stock Exchange (stock code: 1312), and (vii) a non-executive director and the chairman of the board of directors of Neo-Neon Holdings Limited (同方友友控股有限公司), a company listed on the Stock Exchange (stock code: 1868).

Mr. Huang holds a master degree in science from the University of Greenwich.

Mr. Liu Tianmin (劉天民), aged 56, was appointed as a non-executive director on 8 September 2011. Mr. Liu had over eight years of experience in strategic investments and portfolio management. In March 2003, he was appointed as the vice president of THTF and general manager of "Digital TV System" Division, one of the divisions of THTF. Such division stresses on enhancing technological products and services on digital television network and Mr. Liu was responsible for strategic investment and management of extensive portfolio of companies with business covering information technology, new media, internet, broadcasting services, telecommunication and information technologies equipment such as Beijing Tongfang Ehero Co., Ltd (北 京同方易豪科技有限公司), Beijing Tsinghua Tongfang Innovative Investment Co., Ltd. (北京同方創新投資有 限公司), Know China International Holdings Limited (知 網國際控股有限公司), Beijing Tongfang Legend Silicon Tech. Co., Ltd (北京同方淩訊科技有限公司) and Beijing Tongfang Gigamega Tech Co., Ltd (北京同方吉兆科技有 限公司).

Mr. Liu left THTF in 2009 and subsequently joined SB China Venture Capital (軟銀中國創業投資有限公司) ("SBCVC") as Managing Partner in November 2009. Established in 2000, SB China Venture Capital is a one of the top 10 venture capital firms in China as ranked by CNBWeekly in 2009. Mr. Liu's previous experience in investing in technological fields has allowed him to manage SBCVC's related funds.

Mr. Liu is also the independent non-executive director of Neo-Neon Holdings Limited (stock code: 1868). Neo-Neon Holdings Limited is listed on the main board of the Stock Exchange.



Mr. Wang Yinghu (王映滸), aged 43, was appointed as a non-executive director of the Company in November 2015. Mr. Wang held various positions in THTF, a company listed on the Shanghai Stock Exchange (stock code: 600100) and a controlling shareholder of the Company, including the Chief Manager of Audit Department (審計部總經理), Chief Manager of Finance Department (財務部總經理), Vice Chief Accountant (副總會計師), Chief Accountant cum Chief Manager of Financial Management Center (總會計師兼財 務管理中心總經理). Mr. Wang was transferred to Tsinghua Holdings Co., Ltd. (清華控股有限公司) in February 2018, and is currently the Director of Financial Management (財 務管理總監) of the funding and finance center of that company. He has nearly 20 years of experience in the areas of accounting, audit and financial management, where he was employed by Shine Wing Certified Public Accountants\* (信永中和會計師事務所) and was a Senior Auditor (高級審計員), Senior Project Manager (高級項目經 理) and Assistant Manager of Audit Department (審計部副 經理). He is a Senior Accountant (高級會計師), a member of the Chinese Institute of Certified Public Accountants (CICPA) and Association of International Accountants (AAIA), and a Certified Internal Auditor (CIA). He graduated with a bachelor's degree in Transport Economics (運輸經濟) from Beijing Jiaotong University\* (北方交通大學, currently known as 北京交通大學).

## **Independent Non-Executive Directors**





Mr. FAN Ren Da, Anthony (范仁達), aged 57, was appointed as an independent non-executive director of the Company in September 2011. Mr. Fan is currently the chairman and managing director of AsiaLink Capital Limited and also an independent non-executive director of Neo-Neon Holdings Limited (stock code: 1868), Uni-President China Holdings Ltd. (stock code: 220), Raymond Industrial Limited (stock code: 229), Shanghai Industrial Urban Development Group Limited (stock code: 563), Renhe Commercial Holdings Company Limited (stock code: 1387), Tenfu (Cayman) Holdings Ltd. (stock code: 6868), Citic Resources Holdings Limited (stock code: 1205), Guodian Technology & Environment Group Corporation Limited (stock code: 1296), China Development Bank International Investment Limited (stock code: 1062), Hong Kong Resources Holdings Company Limited (stock code: 2882), CGN New Energy Holdings Co., Ltd. (stock code: 1811) and LT Commercial Real Estate Limited (stock code: 112), all of which are listed on the main board of the Stock Exchange. Mr. Fan is also the President of the Hong Kong Independent Non-Executive Director Association. Mr. Fan holds a master's degree in business administration from the United States.

Mr. Chia Yew Boon (謝有文), aged 59, was appointed as an independent non-executive director of the Company on 8 September 2011. He received his Diploma of Chemical Engineering from Ecole Nationale Supérieure de Chimie de Strasbourg, France in July 1983.

Before entering the financial sector, Mr. Chia worked for the Economic Development Board of the Singapore government in various capacities from 1985 to 1990. He then spent eight years in equity research and corporate finance with regional investment banks from 1990 to 1998. From 1999 to 2005, Mr. Chia served as the senior vice president at GIC Special Investments Pte Ltd, a subsidiary of the Government of Singapore Investment Corporation. From 2005 to 2007, he was the chief executive officer of EasyCall International Ltd. a company involved in tertiary education in China and Australia, which was previously listed on the Australian Securities Exchange (stock code: EZY) and Singapore Stock Exchange, and a director of Strategic Planning at Boustead Singapore Limited, an engineering and information technology services company whose shares are listed and traded on the Singapore Stock Exchange (stock code: SGX: F9D). Since April 2007, he has been an independent private equity and venture capital consultant.

Mr Chia is also an Independent non-executive director of EC World Asset Management Pte Ltd, which manages EC World Real Estate Investment Trust; EC World REIT is listed on the Singapore Stock Exchange (stock code: SGX: BWCU) and has a diversified portfolio of income-producing real estate used primarily for e-commerce, supply chain management and logistics purposes, with an initial geographic focus on China.



Ms. Chen Hua (陳華), aged 52, was appointed as an independent non-executive director on 8 September 2011. Ms. Chen received a Bachelor's degree in Science from New York University in 1988, and a Master's degree in Science with major in taxation from Fordham University in 1992. Since 2010, Ms. Chen is the operating partner and chief financial officer of SB China Venture Capital (軟銀中國創業投資有限公司). Ms. Chen was a director in the asset management division of Credit Suisse from 25 September 2000 to 31 December 2009. From 1993 to 2000, Ms. Chen was a Tax Consulting Manager with Arthur Andersen LLP and Ernst & Young's financial service division, providing tax and structure consulting services to broker/dealers, hedge fund, private equity, venture fund and 40 Act mutual fund companies. Ms. Chen is a U.S. certified public accountant.

## **DIRECTORS AND SENIOR MANAGEMENT**

## **Senior Management**







Mr. Qin Xuzhong (秦緒忠), please refer to the details set out above under the paragraph headed "Executive Directors".



Mr. Leung Lok Wai (梁樂偉), aged 42, is the chief financial officer of the Group and a joint company secretary of the Company. He joined the Group in June 2010. Mr. Leung received his Bachelor's degree in accountancy from the Hong Kong Polytechnic University in December 1999. He is a member of Hong Kong Institute of Certified Public Accountants and a member of the Institute of Internal Auditors. He has over 15 years of experience in accounting, audit, due diligence and financial management, including transaction services in PricewaterhouseCoopers, group internal audit in Swire Group and audit assurance services in KPMG. Mr. Leung is also the company secretary of Neo-Neon Holdings Limited (stock code: 1868), which is listed on the main board of the Stock Exchange.

## **JOINT COMPANY SECRETARIES**

Mr. Leung Lok Wai (梁樂偉), please refer to the details set out above under the paragraph headed "Senior Management".

Mr. Teo Meng Keong was a joint company secretary of the Company for the year ended 31 December 2017, who passed away on 23 January 2018. Mr. Teo was appointed as a company secretary of the Company to satisfy the requirement under the Singapore Companies Act (Cap. 50) that the company secretary shall be residing locally in Singapore. The Board will seek a suitable candidate to fill the vacancy of the office of secretary as soon as practicable, in any event within six months from the date of vacancy as required under the Singapore Companies Act (Cap. 50). See also the announcement of the Company dated 24 January 2018 for further details.

## REPORT OF THE DIRECTORS

The directors of the Company (the "Directors") have pleasure in presenting their report together with the audited financial statements for the year ended 31 December 2017.

## PRINCIPAL ACTIVITIES

The Group is principally engaged in integrated urban energy saving services. Its business covers three major segments including smart transportation, smart building and complex and smart energy, providing the customers with smart energy management products, solutions and integrated services throughout their full life cycles.

## **BUSINESS REVIEW**

The business review of the Group as at 31 December 2017 is set out under the section headed "Management Discussion and Analysis" of this annual report on pages 9 to 11.

## ANALYSIS OF FINANCIAL KEY PERFORMANCE INDICATORS

For details of the key financial performance indicators to the performance the Group's business, please refer to "Five Year Financial Summary" on page 8 of this annual report.

## **SUBSIDIARIES**

Details of the principal subsidiaries of the Group as at 31 December 2017 are set out in note 14 to the financial statements.

## **FINANCIAL STATEMENTS**

The profit of the Group for the year ended 31 December 2017 and the state of the Company's and the Group's affairs as at that date are set out in the financial statements on pages 65 to 136 of this annual report.

## **DIVIDENDS**

During 2017, the Company has not declared any dividend in respect of the financial year ended 31 December 2016. The Board does not recommend any final dividend for the year ended 31 December 2017.

## **RESERVES**

Details of movements in reserves of the Company and the Group are set out in note 25 to the financial statements and in the consolidated statement of changes in equity, respectively.

## **DISTRIBUTABLE RESERVES OF THE COMPANY**

As at 31 December 2017, the aggregate amount of reserves available for distribution to equity shareholders of the Company was RMB441,050,000 (2016: RMB451,641,000). Details of the reserves of the Company as at 31 December 2017 are set out in note 25 to the financial statements.

## CHARITABLE DONATIONS

Charitable donations made by the Group during the year ended 31 December 2017 amounted to approximately RMB84,120 (2016: RMB232,290).

## PROPERTY, PLANT AND EQUIPMENT

Movements in property, plant and equipment of the Group for the year ended 31 December 2017 are set out in note 11 to the financial statements.

## SHARE CAPITAL

Details of the movements in share capital of the Company during the year ended 31 December 2017 are set out in note 25 to the financial statements.

## **DIRECTORS**

The Directors during the year ended 31 December 2017 and as at the date of this report were:

## **Executive Directors**

Mr. Zhao Xiaobo (趙曉波)

Mr. Seah Han Leong (謝漢良) (resignation effective on 7 February 2018)

Mr. Qin Xuzhong (秦緒忠) (Chairman) (appointed as executive director on 7 February 2018 and as Chairman on 3 April 2018)

## **Non-executive Directors**

Mr. Huang Yu (黃俞) (Chairman) (retired as Chairman on 3 April 2018)

Mr. Liu Tianmin (劉天民)

Mr. Wang Yinghu (王映滸)

## **Independent Non-executive Directors**

Mr. Fan Ren Da Anthony (范仁達)

Mr. Chia Yew Boon (謝有文)

Ms. Chen Hua (陳華)

The Company has received annual confirmations of independence from each of the existing independent non-executive Directors in accordance with Rule 3.13 of the Rules Governing the Listing of Securities on the Stock Exchange (the "Listing Rules"). The Company considers that all the independent non-executive Directors are independent in accordance with the Listing Rules.

Each of the executive, non-executive and independent non-executive Directors on the Board other than Mr. Huang Yu, Mr. Wang Yinghu and Mr. Qin Xuzhong had entered into a service contract with the Company for an initial term of one year, commencing from 27 October 2011. Mr. Huang Yu has entered into a service contract with the Company for an initial term of one year commencing from 15 July 2016. Mr. Wang Yinghu has entered into a service contract with the Company for an initial term of one year commencing from 16 November 2015. Mr. Qin Xuzhong has entered into a service contract with the Company for an initial term of one year commencing from 7 February 2018. Each of the service contracts are automatically renewed upon expiration and until terminated by either party upon a three-month prior written notice.

In accordance with article 104 of the Company's Constitution (the "Constitution"), Mr. Liu Tianmin, Mr. Wang Yinghu and Mr. Fan Ren Da Anthony will retire from the Board by rotation at the forthcoming annual general meeting and, being eligible, offer themselves for re-election. In accordance with Article 108 of the Constitution, Mr. Qin Xuzhong, who was appointed as executive Director on 7 February 2018, holds office until the forth coming annual general meeting and being eligible, would offer himself for re-election.

No Director proposed for re-election at the forthcoming annual general meeting has an unexpired service contract which is not determinable by the Company or any of its subsidiaries within one year without payment of compensation, other than statutory compensation.

## **DIRECTORS' AND SENIOR MANAGEMENT'S BIOGRAPHIES**

Biographical details of the Directors and senior management are set out on pages 17 to 23 of this annual report.

## **DIRECTORS' INTERESTS IN CONTRACTS**

Save as disclosed below, there was no contract of significance to which the Company, its holding company, or any of its subsidiaries was a party, and in which a Director of the Company had a material interest, whether directly or indirectly, subsisted during or at the end of the year ended 31 December 2017.

# DIRECTORS' AND CHIEF EXECUTIVE'S INTERESTS AND SHORT POSITIONS IN SHARES. UNDERLYING SHARES AND DEBENTURES

As at 31 December 2017, the Directors and the chief executive of the Company and their respective associates had the following interests or short positions in the Shares, underlying shares of the Company (the "Shares") and debentures of the Company and its associated corporations (within the meaning of Part XV of the Securities and Futures Ordinance (Chapter 571 of Laws of Hong Kong) (the "SFO")) which have been notified to the Company and the Stock Exchange pursuant to Division 7 and 8 of Part XV of the SFO, including interests and short positions which the Directors and the chief executive of the Company are taken and deemed to have under such provisions of the SFO, or which are required to be and are recorded in the register required to be kept under Section 352 of the SFO or as otherwise notified to the Company and the Stock Exchange pursuant to the Model Code for Securities Transactions of Directors of Listed Issuers (the "Model Code"):

## Long Positions in the Company

Name of Director and chief executive	Capacity/Nature of interest	Number of Shares interested	Approximate percentage of interest in the issued share capital of the Company <sup>(3)</sup>
Mr. Seah Han Leong	Interest in a controlled corporation(1)	8,000,000	1.02%
	Beneficial owner	14,920,000	1.91%
	Beneficial owner	1,000,000(2)	0.13%
Mr. Zhao Xiaobo	Beneficial owner	8,728,000	1.11%
	Beneficial owner	1,000,000(2)	0.13%
Mr. Leung Lok Wai	Beneficial owner	1,130,000	0.14%
	Beneficial owner	600,000(2)	0.08%
Liu Tianmin	Beneficial owner	500,000(2)	0.06%
Fan Ren Da Anthony	Beneficial owner	500,000(2)	0.06%
Chia Yew Boon	Beneficial owner	500,000(2)	0.06%
Chen Hua	Beneficial owner	500,000(2)	0.06%

#### Notes:

- (1) Mr. Seah Han Leong is the sole shareholder of M2M Holdings Ltd and hence is deemed to be interested in all the Shares held by M2M Holdings Ltd.
- (2) Shares subject to options under the Share Option Scheme.
- (3) The percentage of interest in the issued share capital of the Company is calculated based on the number of issued Shares without taking into account Shares which may be allotted and issued to all grantees upon their after full exercise of the options under the Share Option Scheme.
- (4) Mr. Qin Xuzhong's interest in 4,000,000 Shares subject to options under the Share Option Scheme is not included in this report for the year ended 31 December 2017 as he was only appointed as a Director on 7 February 2018.

Save as disclosed above, as at 31 December 2017, none of the Directors or the chief executive of the Company had or was deemed to have any interests or short position in the Shares, underlying Shares or debentures of the Company and its associated corporations (within the meaning of Part XV of the SFO), which had been recorded in the register maintained by the Company pursuant to section 352 of the SFO or which had been notified to the Company and the Stock Exchange pursuant to the Model Code.

At no time was the Company, its holding company, or any of its subsidiaries a party to any arrangements to enable the Directors and the chief executive of the Company (including their spouse and children under 18 years of age) to hold any interest or short positions in the Shares, underlying Shares or debentures of the Company or its associated corporations (within the meaning of Part XV of the SFO).

## SHARE OPTION SCHEME

The shareholders of the Company have approved and the Company has adopted a share option scheme (the "Share Option Scheme") on 18 May 2012 to grant options to Eligible Persons.

Pursuant to an ordinary resolution adopted in general meeting by the shareholders of the Company on 14 July 2014, the maximum number of Shares which may be issued upon exercise of all options to be granted under the Share Option Scheme and any other schemes of the Group shall not in aggregate exceed 10% of the Shares in issue as at 14 July 2014, being the date of the extraordinary general meeting at which the said ordinary resolution was adopted, i.e. 52,152,000 Shares. No option may be granted to any participant of the Share Option Scheme such that the total number of Shares issued and to be issued upon exercise of the options granted and to be granted to that person in any 12-month period up to the date of the latest grant exceeds 1% of the Company's shares in issue from time to time.

The Board may, at its absolute discretion, offer options to subscribe for such number of Shares in accordance with the terms set out in the Share Option Scheme to the Eligible Persons. "Eligible Person(s)" means (a) any executive director of, manager of, or other employee holding an executive, managerial, supervisory or similar position in any member of the Group (collectively, the "Executives"), any full-time or part-time employee, or a person for the time being seconded to work full-time or part-time for any member of the Group, or of an Eligible Entity; (b) a director or proposed director (including an independent non-executive director) of any member of the Group or of an Eligible Entity; (c) direct or indirect shareholder of any member of the Group; (d) a supplier of goods or services to any member of the Group or of an Eligible Entity; (e) a customer, consultant, business or joint venture partner, franchisee, contractor, agent or representative of any member of the Group or of an Eligible Entity; (f) person or entity that provides design, research, development or other support or any advisory, consultancy, professional or other services to any member of the Group or of an Eligible Entity; and (g) an associate of any of the persons referred to in paragraphs (a) to (f) above. "Eligible Entity" means any substantial shareholders or holding companies (as defined in the Companies Ordinance) of the Company and any of their respective subsidiaries, and any entity (including associated company) in which any substantial shareholders or holding companies of the Company or any of their respective subsidiaries holds any equity interest.

An option may be exercised in accordance with the terms of the Share Option Scheme at any time during a period as determined by the Board and not exceeding 10 years from the date of the grant. There is no minimum period for which an option must be held before it can be exercised. Participants of the Share Option Scheme are required to pay the Company HK\$1.0 upon acceptance of the grant on or before 28 days after the offer date. The exercise price of the options is determined by the Board in its absolute discretion and shall not be less than whichever is the highest of:

- (a) the closing price of a Share as stated in the Stock Exchange's daily quotations sheets on the offer date; and
- (b) the average closing price of a Share as stated in the Stock Exchange's daily quotation sheets for the five business days immediately preceding the offer date.

The Share Option Scheme shall be valid and effective for a period of 10 years from the date of adoption of the Share Option Scheme by the shareholders of the Company, 18 May 2012, after which no further options will be granted or offered. As at the date of this report, the remaining life of the Share Option Scheme is approximately 4 years and one month.

## REPORT OF THE DIRECTORS

Details of such share options granted under the Share Option Scheme as at 31 December 2017 are as follows:

# Number of shares issuable under the share options

Name	Date of Grant <sup>(1)</sup>	Exercise price per Share	Exercise period <sup>(2),(3),(4)</sup>	Outstanding as at 1 January 2017	Exercised during the year ended 31 December 2017 <sup>(5)</sup>	Forfeit during the year ended 31 December 2017	Outstanding as at 31 December 2017
Director, chief exec							
Zhao Xiao bo	23 July 2012 5 September 2013	HK\$1.15 HK\$3.06	23 July 2014–22 July 2017 5 September 2015– 4 September 2018	1,000,000	-	-	1,000,000
Seah Han Leong	23 July 2012 5 September 2013	HK\$1.15 HK\$3.06	23 July 2014–22 July 2017 5 September 2015– 4 September 2018	3,000,000 1,000,000	(3,000,000)	- -	1,000,000
Liu Tianmin	15 August 2014	HK\$3.83	15 August 2014– 14 August 2019	500,000	-	-	500,000
Fan Ren Da Anthony	15 August 2014	HK\$3.83	15 August 2014– 14 August 2019	500,000	-	-	500,000
Chia Yew Boon	15 August 2014	HK\$3.83	15 August 2014– 14 August 2019	500,000	-	-	500,000
Chen Hua	15 August 2014	HK\$3.83	15 August 2014– 14 August 2019	500,000	- (4 500 000)	-	500,000
Leung Lok Wai	23 July 2012 5 September 2013	HK\$1.15 HK\$3.06	23 July 2014–22 July 2017 5 September 2015– 4 September 2018	1,500,000 600,000	(1,500,000)	-	600,000
Other Employees	00 11 0010	111/04 45	00 11 0011 00 11 0017	0.000.000	(0.000.000)		
In aggregate	23 July 2012 5 September 2013	HK\$1.15 HK\$3.06	23 July 2014–22 July 2017 5 September 2015– 4 September 2018	9,320,000 13,100,000	(9,320,000)	(3,750,000)	9,350,000
	15 August 2014	HK\$3.83	15 August 2016– 14 August 2019	4,300,000	-	-	4,300,000
	17 October 2014	HK\$3.444	17 October 2015– 16 October 2019	5,900,000	-	(500,000)	5,400,000
<b>Suppliers of goods</b> In aggregate	or services 5 September 2013	HK\$3.06	5 September 2015– 4 September 2018	1,800,000	-	-	1,800,000
Others In aggregate	23 July 2012	HK\$1.15	23 July 2014– 22 July 2017	2,900,000	(2,900,000)	-	-
	5 September 2013	HK\$3.06	5 September 2015– 4 September 2018	30,650,000	-	-	30,650,000
	15 August 2014	HK\$3.83	15 August 2014– 14 August 2019	1,000,000	-	-	1,000,000
	17 October 2014	HK\$3.444	17 October 2015– 16 October 2019	1,100,000	-	-	1,100,000
Total				79,170,000	(16,720,000)	(4,250,000)	58,200,000

The weighted average closing price of the Shares immediately before the respective dates on which the options were exercised during the year ended 31 December 2017 was HK\$2.76 per Share.

#### Notes:

- (1) The closing price per Share immediately before 23 July 2012, 5 September 2013, 15 August 2014 and 17 October 2014 (the dates on which the share options were granted) was HK\$1.15, HK\$3.06, HK\$3.83 and HK\$3.34, respectively.
- (2) Share options granted under the Share Option Scheme on 23 July 2012 and 5 September 2013 (each a "Date of Grant A") shall have an Option Period (as defined in the Share Option Scheme) of 5 years from the respective Date of Grant A and conditional upon, the achievement of certain performance targets as set out in the offer letter, shall vest in the grantees in accordance with the timetable below (for this purpose, the date or each such date on which the Options are to vest being hereinafter referred to as a "Vesting Date A"):
  - (i) For the Directors, chief executive or substantial shareholder, other employees and others:

# Any time after the second anniversary of the Date of Grant A Any time after the third anniversary of the Date of Grant A Any time after the third anniversary of the Date of Grant A 50% of the total number of options granted 50% of the total number of options granted For suppliers of goods or services: Vesting Date A Percentage of options to vest Any time after the second anniversary of the Date of Grant A 100% of the total number of options granted

- (3) Share options granted under the Share Option Scheme on 15 August 2014 (each a "Date of Grant B") shall have an Option Period (as defined in the Share Option Scheme) of 5 years from the respective Date of Grant B and conditional upon, the achievement of certain performance targets as set out in the offer letter, shall vest in the grantees in accordance with the timetable below (for this purpose, the date or each such date on which the Options are to vest being hereinafter referred to as a "Vesting Date B"):
  - (i) For the Directors:

Vesting Date B

	On the Date of Grant B	100% of the total number of options granted
(ii)	For other employees:	
	Vesting Date B	Percentage of options to vest
	On the date of the second anniversary of the Date of Grant B	100% of the total number of options granted

Percentage of options to vest

(4) Share options granted under the Share Option Scheme on 17 October 2014 (each a "Date of Grant C") shall have an Option Period (as defined in the Share Option Scheme) of 5 years from the respective Date of Grant C and conditional upon, the achievement of certain performance targets as set out in the offer letter, shall vest in the grantees in accordance with the timetable below (for this purpose, the date or each such date on which the Options are to vest being hereinafter referred to as a "Vesting Date C"):

Vesting Date C	Percentage of options to vest
On the date of the first anniversary of the Date of Grant C On the date of the second anniversary of the Date of Grant C	50% of the total number of options granted 50% of the total number of options granted

- (5) The weighted average closing price of the Shares immediately before the date(s) on which the options were exercised is HK\$2.76.
- (6) Mr. Qin Xuzhong's interest in 4,000,000 Shares subject to options under the Share Option Scheme is not included in this report for the year ended 31 December 2017 as he was only appointed on 7 February 2018.

No option was granted under the Share Option Scheme during the year ended 31 December 2017. Save as disclosed above, no options granted under the Share Option Scheme were exercised, lapsed or cancelled during the year ended 31 December 2017.

As at the date of this report, the total number of Shares available for issue under the Share Option Scheme is 58,200,000 Shares, representing approximately 7.43% of the issued share capital of the Company.

## ARRANGEMENT FOR DIRECTORS TO PURCHASE SHARES OR DEBENTURES

Save as disclosed in "Share Option Schemes" above, at no time during the year were rights to acquire benefits by means of the acquisition of shares in or debentures of the Company granted to any Director of the Company or their respective spouses or minor children, or were such rights exercised by them, or was the Company, its holding company or any of its subsidiaries a party to any arrangements to enable the Directors of the Company to acquire benefits by means of the acquisition of shares in, or debt securities (including debentures) of the Company or any other body corporate.

# SUBSTANTIAL SHAREHOLDERS' INTERESTS AND SHORT POSITIONS IN SHARES AND UNDERLYING SHARES

So far as is known to any Director or chief executive of the Company, as at 31 December 2017, the persons or corporations (other than Director or chief executive of the Company) who had interest or short positions in the Shares and underlying Shares of the Company which were required to be disclosed to the Company under the provisions of Division 2 and 3 of Part XV of the SFO, or which were recorded in the register required to be kept under section 336 of the SFO were as follows:

Name of Shareholders	Capacity/Nature of interest	Number of Shares interested	Approximate percentage of interest in the issued share capital of the Company
Tsinghua Tongfang Co., Ltd (同方股份有限公司)	Beneficial owner Interest in a controlled corporation <sup>(1)</sup>	92,000,000 188,930,142	11.75% 24.13%
Resuccess Investments Limited	Beneficial owner	188,930,142	24.13%

## Note:

(1) Tsinghua Tongfang Co., Ltd (同方股份有限公司) ("Tongfang") is the sole shareholder of Resuccess Investments Limited and hence is deemed to be interested in all the Shares held by Resuccess Investments Limited.

Save as disclosed above, as at 31 December 2017, the Directors and the chief executive of the Company are not aware of any other person or corporation having an interest or short position in the Shares and underlying Shares of the Company which would require to be disclosed to the Company under the provisions of Division 2 and 3 of Part XV of the SFO, or which were recorded in the register required to be kept by the Company pursuant to Section 336 of the SFO.

## PURCHASE, SALE OR REDEMPTION OF THE COMPANY'S LISTED SECURITIES

During the year, the Company repurchased a total of 35,546,000 ordinary shares of the Company on the Stock Exchange. For the year ended 31 December 2017, the Company has cancelled a total of 35,530,000 Shares, of which, 234,000 Share were repurchased in December 2016, and the remaining 35,296,000 Shares were repurchased during the year ended 31 December 2017. As at 31 December 2017, a total of 250,000 Share repurchased during the year ended 31 December 2017 were not yet cancelled. The Directors considered that by making these share repurchases would further enhance the shareholders' value. The details of the repurchases were disclosed as follows:

	Aggregate number of shares	Repurcha	se price	Total consideration
Month of Repurchase	repurchased	Highest HK\$	Lowest HK\$	paid <sup>(Note)</sup> HK\$
January 2017	100,000	2.90	2.88	288,800
March 2017	282,000	2.99	2.96	838,520
April 2017	5,094,000	2.99	2.93	15,087,820
May 2017	9,682,000	2.95	2.74	27,760,480
June 2017	10,724,000	2.85	2.50	28,602,180
July 2017	5,914,000	2.56	2.34	14,392,460
September 2017	1,800,000	2.41	2.34	4,288,640
December 2017	1,950,000	2.37	1.91	4,129,500
Total	35,546,000			95,388,400

Note: The total consideration paid excludes expenses paid for the Share repurchase.

Save as disclosed above, neither the Company nor any of its subsidiaries has repurchased, sold or redeemed any of the Company's listed securities during the year ended 31 December 2017.

## CONNECTED TRANSACTION

During the year, there was no connected transaction required to be reported.

## **CONTINUING CONNECTED TRANSACTIONS**

## **Connected persons**

(a) Tsinghua Tongfang Co., Ltd. (i.e. THTF): THTF is a controlling shareholder of the Company (the "Controlling Shareholder") and is therefore a connected person of the Company under Rule 14A.11(1) of the Listing Rules.

## The continuing connected transactions

1. Sales of products to THTF from Technovator Beijing and such other parties procured by Technovator Beijing and agreed by THTF

On 1 November 2017, Technovator Beijing and THTF entered into a sales agreement (the "2017 Sales Agreement") to terminate the 2016 sales agreement entered into between the parties on 30 May 2016 and to enter into a new term among the parties, pursuant to which Technovator Beijing agreed to sell or procure such other parties agreed by THTF, including members of the Group, to sell building and municipal infrastructure construction related products, equipment and services, which include control security systems, and fire alarm systems to THTF, its subsidiaries and their respective associates and affiliates (the "Tongfang Group") for a term of three years from 1 January 2017 to 31 December 2019 and annual caps for the years ending 31 December 2017, 2018 and 2019, being RMB120.0 million, RMB280.0 million and RMB300.0 million, respectively. The price at which the Group sells such products to the Tongfang Group will be determined based on normal commercial terms after arm's length negotiation.

For the year ended 31 December 2017, the Group sold products to Tongfang Group in the amount of approximately RMB113.3 million, which was within the approved cap of RMB120.0 million.

#### REPORT OF THE DIRECTORS

The Group entered into the 2017 Sales Agreement to accommodate the business needs of the Group's non-core businesses. Further details of the 2017 Sales Agreement are set out in the announcement of the Company dated 1 November 2017 and the circular of the Company dated 6 December 2017.

# 2. Purchase of raw materials from THTF and such other parties procured by THTF and agreed by Technovator Beijing to Technovator Beijing

On 1 November 2017, Technovator Beijing and THTF entered into a purchase agreement (the "2017 Purchase Agreement") to terminate the 2016 sales agreement entered into between the parties on 30 May 2016 and to commence a new term for the transactions, pursuant to which THTF agreed to sell or procure such other parties agreed by Technovator Beijing, including members of the Tongfang Group, to sell wiring, lighting and other products, equipment and systems and services relating to the Group's business of energy management, energy saving and environmental protection to the Group for a term of three years from 1 January 2017 to 31 December 2019 and annual caps for the years ending 31 December 2017, 2018 and 2019, being RMB150.0 million, RMB280.0 million and RMB300.0 million, respectively. The price of such goods and services supplied by the Tongfang Group to the Group will be determined based on normal and commercial terms after arm's length negotiation, with reference to the prevailing market price of similar goods and services at the time of a particular transaction, and in any event no less favorable to the Group than those offered by independent third party suppliers to the Group.

For the year ended 31 December 2017, the Group purchased such raw materials from Tongfang Group in the amount of approximately RMB133.0 million, which was within the approved cap of RMB150.0 million.

The Group entered into the 2017 Purchase Agreement to accommodate the business needs of the Group's non-core businesses. Further details of the 2017 Purchase Agreement are set out in the announcement of the Company dated 1 November 2017 and the circular of the Company dated 6 December 2017.

## 3. Provide to or receive from the Tongfang Group miscellaneous products and services

On 1 November 2017, Technovator Beijing and THTF entered into a master agreement (the "2017 Master Agreement") to terminate the 2016 master agreement entered into between the parties on 30 May 2016 and to commence a new term for the transactions, pursuant to which the Group may provide to or receive from the Tongfang Group miscellaneous products and services for a period of three years from 1 January 2017 to 31 December 2019 as may be required to satisfy the operational needs of the Group/Tongfang Group from time to time in the ordinary course of business of the Group with annual caps for the category of "provision of miscellaneous products and services by the Group to the Tongfang Group" for the years ending 31 December 2017, 2018 and 2019, being RMB30.0 million, RMB40.0 million, respectively, and annual caps for the years ending 31 December 2017, 2018 and 2019, being RMB30.0 million, RMB40.0 million, RMB40.0 million, respectively.

Pursuant to the 2017 Master Agreement, the miscellaneous products and services provided by the Group to the Tongfang Group mainly include (i) rental services (including leasing of land and premises); (ii) research and development services and products (including technology licensing); (iii) the use of trademark license; and (iv) sharing of general administration and management support services but exclude any transactions contemplated under the Sales Agreement.

The miscellaneous products and services provided by the Tongfang Group to the Group mainly include (i) rental services (including leasing of land, premises, machinery and equipment); (ii) research and development services and products (including technology licensing); (iii) the use of trademark license; and (iv) sharing of general administration and management support services, other than the transactions contemplated under the four existing trademark license agreements all dated 28 May 2010 entered into between Technovator Beijing and THTF, as amended on 4 August 2011, and any transactions contemplated under the 2017 Purchase Agreement.

The prices at which the Group or the Tongfang Group provides such services will be based on the pricing mechanism as disclosed in the announcement of the Company dated 1 November 2017.

For the year ended 31 December 2017, the miscellaneous products and services provided by the Tongfang Group to the Group amounted to approximately RMB25.7 million, which was within the approved cap of RMB30.0 million.

The Group entered into the Master Agreement to accommodate the business needs of the Group's non-core businesses. Further details of the Master Agreement are set out in the announcement of the Company dated 1 November 2017.

# 4. The business arrangements with THTF with respect to the intelligent rail transit, building and urban heating network businesses

Pursuant to the business arrangement agreement dated 1 November 2017, THTF and Tongfang Technovator International (Beijing) Co., Ltd. and Tongfang Energy Saving Engineering Technology Co., Ltd., wholly-owned subsidiaries of the Company agreed to engage in certain business arrangements (the "2017 Business Arrangements' in relation to Intelligent rail transit, building and urban heating network businesses (the "Intelligent Businesses")), including (i) for the projects which THTF continues to use its name for entering into such contracts and/or projects of the Intelligent Businesses that the legal rights and obligations of which cannot be directly transferred to the Group (the "Nominee Projects"), THTF will assign, sub-contract, delegate or in any other way the parties may mutually agree so that the Group will assume these contracts. The Group will be responsible for performing the work required by the Nominee Projects and entitled to the income from the Nominee Projects. To the extent that the legal rights of THTF under the contracts in respect of any Nominee Projects have not been assigned to the Group, or for any other reasons THTF receives any payment from the customers of any Nominee Projects for any income generated, THTF is required to pay such amount to the Group no later than the balance sheet date of the month in which such amount is received without any additional compensation. THTF undertakes to assist the Group to take up the Nominee Projects without any additional compensation, including but not limited to providing any necessary information to the Group and handling the relevant project completion and settlement procedures as necessary; (ii) If debtors of the Nominee Projects settle debts by paying THTF, THTF is required to pay such amount to the Group no later than the balance sheet date of the month in which such amount is received without any additional compensation; (iii) THTF to act as the party to supply contracts to procure materials or services from third party suppliers for the Nominee Projects, THTF will procure the necessary materials and services from the relevant third party suppliers for the Group upon instruction by the Group, and the Group is required to reimburse THTF for the amount paid by THTF; (iv) THTF agrees that the debts which are part of the liabilities of the Nominee Projects that have not been assumed by the Group as the consent from the creditors has not been obtained, THTF will continue to satisfy such debts. In the event that THTF is required to settle such debt with the relevant third party creditors, the Group is required to reimburse THTF for such amount no later than the balance sheet date of the month in which such amount is paid by THTF; and (v) THTF will continue to support the Group on the continual development and expansion of the Intelligent Businesses. THTF agrees to provide support and cooperation for the Group for the Intelligent Businesses upon reasonable request from the Group including cooperating with the Group to develop new projects and business opportunities in respect of these businesses, being a party to the relevant agreements to facilitate the Group's conducting of the these businesses if necessary, and providing the required information and assistance to complete the relevant projects, in manners similar to the support to be provided by THTF as set out in paragraphs (i) to (iv) above. Such new sales, procurement or project contracts if to be signed by THTF, all of the terms shall be negotiated by the Group. By virtue of the arrangements as set out above, to the extent that any Nominee Projects are not capable to be assigned to the Group, THTF will continue to act as the party to such agreements, and will transfer any payments it receives from the relevant customers of the these businesses to the Group without any additional charges. As for new project or contracts that it is necessary or desirable for THTF to be a contracting party, THTF may cooperate with the Group in the performance of such contracts for the relevant customers, and transfer any payments it receives from the relevant customers of the Intelligent Businesses to the Group without any additional charges.

The prices for new sales contracts to which THTF will act as the party will be negotiated with third party customers based on the price range as indicated by the prices charged by the relevant Intelligent Business for at least two projects with scope of services undertaken and/or for past sale of products by the relevant Intelligent Business which most closely resembles the requirements of the new sales contract concerned within the past 12 months. The prices for the purchase of material and/or services to be procured under supply contracts subject to the 2017 Business Arrangements will be negotiated with third party suppliers based on the price range as indicated by the prices paid by the relevant Intelligent Business in at least two purchases for similar material and/or services within the past 12 months.

The annual caps of payments to be transferred by THTF to the Group pursuant to the 2017 Business Arrangements for each of the years ended 31 December 2017, 2018 and 2019 are RMB1,200.0 million, RMB1,500.0 million and RMB1,600.0 million, respectively. For the year ended 31 December 2017, the payments transferred by THTF to the Group pursuant to the 2017 Business Arrangements amounted to approximately RMB940.8 million, which was within the approved annual cap of RMB1,200.0 million.

#### REPORT OF THE DIRECTORS

The annual caps of payments to be transferred by the Group to THTF pursuant to the 2017 Business Arrangements for each of the years ending 31 December 2017, 2018 and 2019 are RMB1,000.0 million, RMB1,250.0 million and RMB1,300.0 million, respectively. For the year ended 31 December 2017, the payments transferred by the Group to THTF pursuant to the 2017 Business Arrangements amounted to approximately RMB796.6 million, which was within the approved annual cap of RMB1,000.0 million.

Please refer to the announcement of the Company dated 1 November 2017 and the circular of the Company dated 6 December 2017 for further details of the 2017 Business Arrangements.

The independent non-executive directors of the Company have reviewed these continuing connected transactions and confirmed that such transactions were:

- (i) entered into in the ordinary and usual course of business of the Group;
- (ii) conducted either on normal commercial terms or, if there are not sufficient comparable transactions to judge whether they are on normal commercial terms, on terms no less favourable to the Group than terms available to or from Independent Third Parties; and
- (iii) in accordance with the relevant agreement governing them on terms that are fair and reasonable and in the interests of the Shareholders as a whole.

The Company's auditor, KPMG, was engaged to report on the Group'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. The auditor, KPMG, has issued his unqualified letter containing his findings and conclusions in respect of the continuing connected transactions disclosed by the Group in this annual report in accordance with Rule 14A.56 of the Listing Rules. A copy of the auditor's letter has been provided by the Company to The Stock Exchange.

Details of the significant related party transactions undertaken in the normal course of business are provided under note 28 to the financial statements. None of these related party transactions constitute connected transaction or continuing connected transactions as defined under the Listing Rules that is required to be disclosed, except for those described in the sections headed "Connected Transaction" and "Continuing Connected Transactions" in this report, in respect of which the disclosure requirements in accordance with Chapter 14A of the Listing Rules have been complied with.

## CONTRACTS WITH CONTROLLING SHAREHOLDERS

Other than the continuing connected transactions set out above, no contract of significance has been entered into between the Company or any of its subsidiaries and the Controlling Shareholders during the year ended 31 December 2017.

## **NON-COMPETE UNDERTAKINGS**

Each of the Controlling Shareholders has confirmed to the Company of his/her compliance with the non-compete undertakings provided to the Company under the Deed of Non-compete (as defined in the prospectus of the Company dated 17 October 2011). The independent non-executive Directors of the Company have reviewed the status of compliance and confirmed that all the undertakings under the Deed of Non-compete have been complied with by the Controlling Shareholders.

## **DIRECTORS' INTEREST IN COMPETING BUSINESS**

None of the Directors is or was interested in any business apart from the Group's business, that competes or competed or is or was likely to compete, either directly or indirectly, with the Group's business at any time during the year ended 31 December 2017 and up to and including the date of this annual report.

## MANAGEMENT CONTRACTS

No contracts concerning the management and administration of the whole or any substantial part of the business of the Company were entered into or existed during the year.

## **PRE-EMPTIVE RIGHTS**

There are no provisions for pre-emptive rights under the Company's constitution (the "Constitution") or the laws of Singapore where the Company is incorporated applicable to the Company.

## **EMOLUMENT POLICY**

The Group's emolument policies are based on the merit, qualifications and competence of individual employees and are reviewed by the remuneration committee periodically.

The emoluments of the Directors are recommended by the remuneration committee of the Company and are decided by the Board, having regard to the Group's operating results, individual performance and comparable market statistics.

The Group has adopted the Share Option Scheme to motivate and reward its Directors and eligible employees. Further information on the Share Option Scheme these schemes are set out in the paragraph headed "Share Option Scheme" above and note 22 to the financial statements.

None of the Directors waived any emoluments during the year.

## **PENSION SCHEME**

The employees of the Group's subsidiaries which operate in China are required to participate in defined contribution central pension schemes operated by the local municipal government. The subsidiaries of the Group are required to contribute certain percentages of its payroll costs to the central pension schemes. The contributions are charged to the consolidated income statements as they become payable in accordance with the rules of the central pension scheme.

For the Group's subsidiaries in countries other than the PRC, the Group pays contributions to publicly or privately administered pension insurance plans on a mandatory, contractual or voluntary basis. The Group has no further payment obligations once the contributions have been paid. The contributions are recognised as employee benefit expenses when they are due. Prepaid contributions are recognised as an asset to the extent that a cash refund or a reduction in the future payments is available.

The Group has no other material obligation for the payment of pension benefits beyond the annual contributions described above.

## PERMITTED INDEMNITY PROVISION

Since 1 January 2017 up to and including 31 December 2017, the Company had taken out appropriate corporate liability insurance for its Directors. As of the date of this report, such corporate liability insurance remained effective.

#### **MAJOR CUSTOMERS AND SUPPLIERS**

Aggregate sales attributable to the Group's largest and five largest customers for the year ended 31 December 2017 were 16.1% (2016: 6.2%) and 34.7% (2016: 22.4%) of the Group's total sales respectively.

Aggregate purchases attributable to the Group's largest and five largest suppliers for the year ended 31 December 2017 were 5.5% (2016: 2.1%) and 11.8% (2016: 8.1%) of the Group's total purchases respectively.

At no time during the year ended 31 December 2017, did a Director, his/her close associate(s) or a Shareholder, which to the knowledge of the Director owns more than 5% of the Company's share capital, have an interest in any of the Group's five largest customers and suppliers.

#### **AUDITORS**

KPMG was the external auditor of the Company in Hong Kong and KPMG LLP was the registered auditor of the Company in Singapore during the year ended 31 December 2017, whose term will end at the conclusion of the forthcoming annual general meeting of the Company. During the three preceding financial years, there was no change in the external auditor in Hong Kong and the auditor in Singapore of the Company.

## SUFFICIENCY OF PUBLIC FLOAT

Based on information that is publicly available to the Company and within the knowledge of the Directors as at the date of this annual report, the Company has maintained the prescribed public float of not less than 25% of the Company's issued Shares as required under the Listing Rules for the year ended 31 December 2017.

## **BANK LOANS**

Details of bank loans of the Group as at 31 December 2017 are set out in note 21 to the financial statements.

## PRINCIPAL RISKS AND UNCERTAINTIES

A number of factors may affect the results and business operations of the Group, some of which are inherent to energy saving industry and some are from external sources. For further details, please refer to the section headed "Management Discussion and Analysis".

## RELATIONSHIPS WITH EMPLOYEES, SUPPLIERS AND CUSTOMERS

For details of relationship with the employees, customers and suppliers, please refer to the paragraphs headed "Emolument Policy" and "Major Suppliers and Customers" in this section.

## **ENVIRONMENTAL POLICIES AND PERFORMANCE**

Our Group is specialized in providing energy saving and environmentally-friendly products. The Group has obtained the ISO14001 Environmental Management System Certification of the China Quality Certification Centre, which is an international standard on the operation of an environmental management system. In addition, we are committed to building an environmentally-friendly corporation that pays close attention to conserving energy. We strive to operate in compliance with the relevant environmental regulations and rules. During the year ended 31 December 2017 and up to the date of this report, the Group does not have any violation of relevant environmental regulations and rules which gives rise to significant impact to the Group's development, performance and businesses.

See also the "Environmental Society and Governance Report - Environment" in this report for more information.

## **COMPLIANCE WITH LAWS AND REGULATIONS**

Our Group shall comply with relevant laws and regulations in the jurisdictions where the Group operates. The Group's operations are mainly carried out by the Company's subsidiaries in the PRC. Accordingly, our operations shall comply with relevant laws and regulations in the PRC. During the year ended 31 December 2017 and up to the date of this report, the Group does not have any violation of relevant laws and regulations which gives rise to significant impact to the Group's development, performance and businesses.

## **FIVE-YEAR SUMMARY**

A summary of the results and of the assets and liabilities of the Group for the last five financial years is set out on page 8 of this annual report.

On behalf of the Board

**Huang Yu** 

Chairman

16 March 2018

## CORPORATE GOVERNANCE REPORT

Good corporate governance is conducive to enhancing overall performance and accountability and is essential in modern corporate administration. The Board of Directors continuously observes the principles of good corporate governance in the interests of Shareholders and devotes considerable effort to identifying and formalizing best practice.

## COMPLIANCE WITH CORPORATE GOVERNANCE CODE

Throughout the year ended 31 December 2017, the Company complied with all code provisions and, where appropriate, adopted the recommended best practices as set out in the Corporate Governance Code in Appendix 14 to the Main Board Listing Rules (the "Corporate Governance Code").

Set out below is a detailed discussion of the corporate governance practices adopted and observed by our Company during the year.

## **MODEL CODE**

The Company has also adopted the Model Code set out in Appendix 10 of the Rules Governing the Listing of Securities on The Stock Exchange of Hong Kong Limited ("Listing Rules") effective since its adoption by the Company from 8 September 2011 and throughout the year ended 31 December 2017 as its code of conduct regarding securities transactions by the Directors. Having made specific enquiry with all Directors, all Directors confirmed that they have complied with the required standard set out in the Model Code and its code of conduct regarding directors' securities transactions during the year ended 31 December 2017.

## **BOARD OF DIRECTORS**

#### **Board Composition**

As at 31 December 2017 and the date of this annual report, the Board comprised two executive Directors, three non-executive Directors and three independent non-executive Directors:

### **Executive Directors**

Mr. Zhao Xiaobo (趙曉波)

Mr. Seah Han Leong (謝漢良) (resignation effective on 7 February 2018)

Mr. Qin Xuzhong (秦緒忠) (Chairman) (appointed as executive director on 7 February 2018 and as the chairman on 3 April 2018)

#### Non-executive Directors

Mr. Huang Yu (黃俞) (Chairman) (retired as a Chairman on 3 April 2018)

Mr. Liu Tianmin (劉天民)

Mr. Wang Yinghu (王映滸)

### **Independent Non-executive Directors**

Mr. Fan Ren Da Anthony (范仁達)

Mr. Chia Yew Boon (謝有文)

Ms. Chen Hua (陳華)

The Board takes overall responsibility to oversee all major matters of the Group, including the formulation and approval of all policy matters, overall strategic development of the Group, monitoring and controlling the Group's operation and financial performance, internal control and risk management systems. The Directors have to make decisions objectively in the interests of the Company.

The day-to-day management, administration and operation of the Group are delegated to the chief executive officer and the senior management of the Company. The delegated functions and work tasks are periodically reviewed. Approvals have to be obtained from the Board prior to any significant transactions entered into by the aforesaid officers.

The Board is well balanced with the Directors having sound industry knowledge, extensive corporate and strategic planning experience and/or expertise relevant to the business of the Group. The executive Directors and independent non-executive Directors bring a variety of experience and expertise to the Company. Biographical information of the Directors are set out in the section headed "Directors and Senior Management" of this annual report. To the best knowledge of the Company, there is no financial, business or family relationship among the members of the Board.

The Company has subscribed appropriate and sufficient insurance coverage on Directors' liabilities in respect of legal actions taken against Directors arising out of corporate activities.

Board meetings were held from time to time to discuss the business strategies of the Group; monitor financial and operational performance; approve the annual and interim results of the Group; and discuss the corporate governance functions of the Board.

#### CONTINUOUS PROFESSIONAL DEVELOPMENT FOR DIRECTORS

The Directors have been informed of the requirement under Code Provision A.6.5 of the Corporate Governance Code regarding continuous professional development. According to the records maintained by the Company, the current Directors received the following training by attending briefings, seminars, conferences or reading materials with an emphasis on the roles, functions and duties of a director of a listed company in compliance with the requirement of the Corporate Governance Code on continuous professional development during the year ended 31 December 2017:

	Corporate Governance/ Updates on Laws, Rules and Regulations Attended		Accounting/Financial/ Management or Other Professional Skills Attended	
Name of Director	Read materials	seminars briefings	Read materials	seminars briefings
Executive Directors				
Mr. Zhao Xiaobo	✓	✓	✓	✓
Mr. Seah Han Leong	✓	✓	✓	✓
Non-executive Directors				
Mr. Huang Yu	✓	✓	✓	✓
Mr. Liu Tianmin	✓	✓	✓	✓
Mr. Wang Yinghu	✓	✓	✓	✓
Independent non-executive Directors				
Mr. Fan Ren Da Anthony	✓	✓	✓	✓
Mr. Chia Yew Boon	✓	✓	1	✓
Ms. Chen Hua	✓	✓	✓	✓

## **CHAIRMAN AND CHIEF EXECUTIVE OFFICER**

The roles of chairman and the chief executive officer are segregated. Mr. Huang Yu is the chairman of the Company since 15 July 2016 and during the year ended 31 December 2017. Mr. Zhao Xiaobo is the chief executive officer of the Company. The chairman is responsible in leading the Board in forming the Group's strategies and policies and for organizing the business of the Board, ensuring its effectiveness and setting its agenda but not involved in the day-to-day business of the Group. The chief executive officer is directly in charge of the daily operations of the Group and is accountable to the Board for the financial and operational performance of the Group.

## **INDEPENDENT NON-EXECUTIVE DIRECTORS**

Independent non-executive Directors have played a significant role in the Board by bringing their independent judgment at the Board meetings and scrutinizing the Group's performance. Their views carry significant weight in the Board's decisions. In particular, they bring an impartial view to bear on issues of the Group's strategy, performance and control. All independent non-executive Directors possess extensive academic, professional and industry expertise and management experience and have provided their professional advice to the Board. The independent non-executive Directors provide independent advice on the Group's business strategy, results and management so that all interests of Shareholders can be taken into account, and the interests of the Company and its Shareholders can be protected.

The Board has three independent non-executive Directors with one of them, Mr. Fan Ren Da Anthony, possessing appropriate professional accounting qualifications and financial management expertise in compliance with the requirements set out in Rules 3.10(1) and (2) and 3.10A of the Listing Rules.

The Company has received annual confirmations of independence from each of the existing independent non-executive Directors in accordance with Rule 3.13 of the Listing Rules. Based on the content of such confirmations, the Company considers that all the independent non-executive Directors are independent in accordance with the Listing Rules.

## **BOARD DIVERSITY POLICY**

The Board adopted a board diversity policy (the "Board Diversity Policy") in August 2013. The Company recognises and embraces the benefits of diversity of Board members. While all Board appointments will continue to be made on a merit basis, the Company will ensure that the Board has a balance of skills, experience and diversity of perspectives appropriate to the needs of the Company's business. Selection of candidates will be based on a range of diversity perspectives, including but not limited to gender, age, cultural and educational background, experience (professional or otherwise), skills and knowledge.

#### **MEETINGS**

The Board meets regularly either in person or through electronic means of communications. The number of the Board meetings and general meetings held and the attendance of each Director at these meetings for the year ended 31 December 2017 are set out as follows:

	Board Meeting	General Meeting
No. of meetings held	5	2
No. of meetings attended		
Executive Directors Mr. Zhao Xiaobo Mr. Seah Han Leong	5 5	2 2
Non-executive Directors Mr. Huang Yu Mr. Liu Tianmin Mr. Wang Yinghu	5 5 5	1 0 0
Independent non-executive Directors Mr. Fan Ren Da Anthony Mr. Chia Yew Boon Ms. Chen Hua	5 5 5	0 1 1

All Directors are provided with relevant materials relating to the matters brought before the meetings. They have separate and independent access to the senior management and the joint company secretaries of the Company at all times and may seek independent professional advice at the Company's expense. All Directors have the opportunity to include matters in the agenda for Board meetings. Notices of at least 14 days of Board meetings are given to the Directors and Board procedures complied with the Constitution, as well as relevant rules and regulations.

## **JOINT COMPANY SECRETARIES**

For the year ended 31 December 2017, Mr. Leung Lok Wai and Mr. Teo Meng Keong were the joint company secretaries of the Company. The Joint Company Secretaries have been informed of the requirements under Rule 3.29 of the Listing Rules. Each of the Joint Company Secretaries has confirmed that he/she had attained no less than 15 hours of relevant professional training during the year ended 31 December 2017.

On 23 January 2018, Mr. Teo Meng Keong, one of joint company secretaries of the Company passed away. Mr. Leung Lok Wai, the remaining joint company secretary of the Company and who meets the requirements under Rules 3.28 and 8.17 of the Listing Rules, will continue to act as a company secretary of the Company. Pursuant to the Companies Act, a company secretary shall be appointed within six months of the office of secretary being vacant. The Board will seek a suitable candidate to fill the vacancy of the office of secretary as soon as practicable. Further details of the passing of Mr. Teo Meng Keung are set out in the announcement of the Company dated 24 January 2018.

## APPOINTMENTS, RE-ELECTION AND REMOVAL OF DIRECTORS

Each of the executive Directors, non-executive Directors and independent non-executive Directors of the Company has entered into a service contract with the Company for a specific term, and is subject to retirement by rotation and re-election at an annual general meeting at least once every three years in accordance with the Constitution. The Constitution provide that any Director appointed by the Board to fill a casual vacancy in the Board shall hold office until the first general meeting of the Company after his/her appointment and be subject to re-election at such meeting, and any Director appointed by the Board as an addition to the existing Board shall hold office only until the next following annual general meeting of the Company and shall then be eligible for re-election. For more details of the service contract of each of the Directors, please refer to the section headed "Report of the Directors" of this annual report.

#### TERM OF APPOINTMENT OF NON-EXECUTIVE DIRECTORS

Each of the non-executive Directors and independent non-executive Directors other than Mr. Huang Yu and Mr. Wang Yinghu had entered into a service contract with the Company for an initial term of one year commencing from 27 October 2011. Mr. Huang Yu has entered into a service contract with the Company for an initial term of one year commencing from 15 July 2016. Mr. Wang Yinghu has entered into a service contract with the Company for an initial term of one year commencing from 16 November 2015.

All the service contracts of non-executive Directors and independent non-executive Directors are automatically renewed upon expiration and may be terminated by either party upon a three-month prior written notice.

#### **BOARD COMMITTEES**

The Board has established (i) audit committee, (ii) remuneration committee; (iii) nomination committee; and (iv) risk management committee, with defined terms of reference. The terms of reference of the board committees which explain their respective roles and the authority delegated to them by the Board are available on the websites of the Company and the Stock Exchange. The Board committees are provided with sufficient resources to discharge their duties and, upon reasonable request, are able to seek independent professional advice and other assistance in appropriate circumstances, at the Company's expenses.

## **AUDIT COMMITTEE**

The Company established an audit committee pursuant to a resolution of the Directors passed on 8 September 2011 in compliance with Rule 3.21 and Rule 3.22 of the Listing Rules. The primary duties of the audit committee are to make recommendation to the Board on the appointment and removal of external auditors, review the financial statements and material advice in respect of financial reporting, and oversee the internal control procedures of the Company. The audit committee currently consists of three members, namely, Ms. Chen Hua, Mr. Fan Ren Da Anthony and Mr. Chia Yew Boon, all of whom are independent non-executive Directors. Ms. Chen Hua, who has appropriate professional qualifications and experience in accounting matters, is the chairman of the audit committee. None of the members of the Audit Committee is a former partner of the existing external auditors of the Company.

During the year ended 31 December 2017, the Audit Committee mainly performed following duties:

- reviewed the Group's unaudited interim results for the six months ended 30 June 2017 and the audited annual results for the year ended 31 December 2017, met with the external auditors to discuss such interim results and annual results (without the Company's management being present), and was of the opinion that the preparation of the relevant financial statements complied with the applicable accounting standards and requirements and that adequate disclosure has been made;
- reviewed the accounting principles and practices adopted by the Group, and recommended the appointment of the external auditors;
- reviewed the effectiveness of the Group's internal audit function;
- reviewed the effectiveness of the Group's internal control systems on all major operations of the Gorup, which was considered effective and adequate; and
- assisted the Board in meeting its responsibilities for maintaining an effective system of internal control.

During the year ended 31 December 2017, three meetings were held by the Audit Committee. The attendance record of each member of the Audit Committee at the meetings of the Audit Committee is set out below:

Name of Director	Attendance of Audit Committee Meetings
Ms. Chen Hua (Chairman) Mr. Fan Ren Da Anthony Mr. Chia Yew Boon	3 3 3

There had been no disagreement between the Board and the Audit Committee during the financial year ended 31 December 2017.

## **REMUNERATION COMMITTEE**

The Company established a remuneration committee on 8 September 2011 with written terms of reference. The primary duties of the remuneration committee are to make recommendation to the Board on the overall remuneration policy and structure relating to all Directors and senior management of the Company, review remuneration, and ensure none of the Directors determine their own remuneration. The remuneration committee currently consists of three members, namely, Mr. Chia Yew Boon and Mr. Fan Ren Da Anthony (both are independent non-executive Directors) and Mr. Seah Han Leong (an executive Director). Mr. Fan Ren Da Anthony is the chairman of the remuneration committee.

During the year ended 31 December 2017, the Remuneration Committee mainly performed following duties:

 reviewed the Group's remuneration policy and reviewed the remuneration package of the executive Directors and senior management for the year of 2017.

#### **CORPORATE GOVERNANCE REPORT**

During the year ended 31 December 2017, two meetings were held by the Remuneration Committee. The attendance record of each member of the Remuneration Committee at the meetings of the Remuneration Committee is set out below:

Name of Director	Attendance of Remuneration Committee Meeting
Mr. Fan Ren Da Anthony <i>(Chairman)</i> Mr. Chia Yew Boon Mr. Seah Han Leong	2 2 2

The remuneration of the members of the senior management by band for the year ended 31 December 2017 is set out below:

Remuneration bands (HKD'000)	Number of persons
500–1,000	2
1,000–1,500	2
1,500–2,000	1

Further particulars regarding Directors' remuneration and the five highest paid employees as required to be disclosed pursuant to Appendix 16 to the Listing Rules are set out in notes 8 and 9 to the financial statements.

#### NOMINATION COMMITTEE

The Company established a nomination committee on 8 September 2011 with written terms of reference. The primary duties of the nomination committee are to review the structure, size and composition of the Board on a regular basis and to recommend to the Board the suitable candidates for directors after consideration of the nominees' independence and quality in order to ensure the fairness and transparency of all nominations. The nomination committee will also give consideration to the Board Diversity Policy when identifying suitably qualified candidates to become members of the Board, and the Board will review the Board Diversity Policy, so as to develop and review measurable objectives for the implementing the Board Diversity Policy and to monitor the progress on achieving these objectives. The nomination committee currently consists of three members, namely, Mr. Fan Ren Da Anthony, and Mr. Chia Yew Boon (two independent non-executive Directors) and Mr. Huang Yu (a non-executive Director). Mr. Chia Yew Boon is the chairman of the nomination committee.

During the year ended 31 December 2017, the Nomination Committee mainly performed following duties:

- reviewed the annual confirmation of independence submitted by the independent non-executive Directors and assessing their independence;
- reviewed the structure, size and composition of the Board during the year; and
- selected and recommended candidates for directorship during the year.

During the year ended 31 December 2017, one meeting was held by the Nomination Committee. The attendance record of each member of the Nomination Committee at the meetings of the Nomination Committee is set out below:

Name of Director	Attendance of Nomination Committee Meeting
Mr. Chia Yew Boon <i>(Chairman)</i> Mr. Fan Ren Da Anthony Mr. Huang Yu	1 1 1

#### **RISK MANAGEMENT COMMITTEE**

The Company established a risk management committee on 29 March 2016 with written terms of reference. The primary duties of the risk management committee are to consider the risk management strategies of the Company, review the risk management system of the Group, assess the risks from major decisions and to consider solutions for significant risks, have periodic assessment on the Group's risk profile and risk management capabilities, make recommendations on the improvement of the Group's risk management systems, consider major investigations findings on risk management matters and management's response to these findings, oversee the Group's risk management systems on an ongoing basis, ensure that a review of the effectiveness of the risk management systems of the Group has been conducted at least annually and report to shareholders that it has done so in its Corporate Governance Report. The risk management committee currently consists of all the current Directors of the Board, namely, Mr. Zhao Xiaobo and Mr. Seah Han Leong (both are executive Directors), Mr. Huang Yu, Mr. Liu Tianmin and Mr. Wang Yinghu (all are non-executive Directors), Mr. Fan Ren Da Anthony, Mr. Chia Yew Boon and Ms. Chen Hua (all are independent non-executive Directors). Mr. Fan Ren Da Anthony is the chairman of the risk management committee.

During the year ended 31 December 2017, the Risk Management Committee mainly performed following duties:

- assess and review the effectiveness of the risk management system of the Group which was considered effective and adequate; and
- assisted the Board in meeting its responsibilities for maintaining an effective system of risk management.

During the year ended 31 December 2017, one meeting was held by the Risk Management Committee. The attendance record of each member of the Risk Management Committee at the meetings of the Risk Management Committee is set out below:

Name of Director	Risk Management Committee Meeting
Mr. Zhao Xiaobo	1
Mr. Seah Han Leong	1
Mr. Huang Yu	1
Mr. Liu Tianmin	1
Mr. Wang Yinghu	1
Mr. Fan Ren Da Anthony	1
Mr. Chia Yew Boon	1
Ms. Chen Hua	1

Attendance of

#### CORPORATE GOVERNANCE FUNCTION

The Company's corporate governance function is carried out by the Board pursuant to a set of written terms of reference adopted by the Board in compliance with Code Provision D.3.1 of the Corporate Governance Code, which include (a) to develop and review the Company's policies and practices on corporate governance and make recommendations to the board; (b) to review and monitor the training and continuous professional development of the Directors and senior management of the Group; (c) to review and monitor the Company's policies and practices on compliance with legal and regulatory requirements; (d) to develop, review and monitor the code of conduct and compliance manual (if any) applicable to employees of the Group and the Directors; and (e) to review the Company's compliance with the Corporate Governance Code and disclosure in the corporate governance report. The Board has held meetings from time to time to: (a) review the Company's policies and practices on corporate governance; (b) to review and monitor the training and continuous professional development of the Directors; and (c) to review the Company's compliance with the Corporate Governance Code and disclosure in the corporate governance report.

#### CONSTITUTION

There has been no significant change in the Company's constitutional documents during the year ended 31 December 2017.

#### FINANCIAL REPORTING

The Board, supported by the chief financial officer and the finance department, is responsible for the preparation of the financial statements of the Company and the Group for each financial year which shall give a true and fair view of the financial position, performance and cash flow of the Group for that period. The directors acknowledge their responsibilities for preparing the accounts of the Company. The Board is not aware of any material uncertainties relating to events or conditions that may cast significant doubt upon the Group's ability to continue as a going concern.

The responsibilities of KPMG, the Company's external auditors in Hong Kong, on the financial statements are set out in the section headed "Independent Auditor's Report" in this annual report.

## **EXTERNAL AUDITORS' REMUNERATION**

The Company has re-appointed KPMG as the external auditor in Hong Kong and appointed KPMG LLP as the Company's registered auditor in Singapore during the year ended 31 December 2017. The external auditors are refrained from engaging in non-audit services except for specific approved items. The Audit Committee reviews the external auditor's statutory audit scope and non-audit services and approves its fees. For the year ended 31 December 2017, the total fee paid/payable in respect of audit and non-audit services provided by the Company's external auditors is set out below:

RMB'000
1 1111111111111111111111111111111111111

Audit and audit-related services Non-audit services	2,197 303
	2,500

## INTERNAL CONTROLS AND RISK MANAGEMENT

The Board is responsible for ensuring the reliability and effectiveness of the Group's internal control systems on, among other things, financial, operational and compliance controls (including handing and dissemination of inside information), and the risk management system. In particular, regarding the controls for handling and dissemination of inside information, the employees, senior management and the Directors of the Company who possesses or handles inside information are reminded of the inside information requirements under the Listing Rules and the Securities and Futures Ordinance (Chapter 571 of the laws of Hong Kong). The Directors, with the assistance of Mr. Leung Lok Wai, a joint company secretary of the Company, and the internal audit department of the Company, are responsible to ensure the inside information, if any, is kept confidential and disseminated to the public to avoid a false market in the listed shares of the Company as and when necessary. The Company may also seek professional advice to consider the dissemination of inside information to be public as and when necessary to ensure the Company will comply with the requirements under Listing Rules and the Securities and Futures Ordinance (Chapter 571 of the laws of Hong Kong). The internal control and risk management systems are designed to provide reasonable, but not absolute assurance against misstatement or loss, and to manage risks of failure in the Group's operational systems. The Board together with the audit committee and the risk management committee have reviewed the effectiveness of the Group during the year under review.

The Group has an internal audit function carried out by the Group's internal audit department. The Group's internal control department has reported internal control fact findings to the Board and no major issues but areas for improvement have been identified. All of the recommendations from the Group's internal control department will be properly followed up by the Group to ensure that they are implemented within a reasonable period of time. Similar process has been carried out for the risk management systems. The Board and the audit committee considered that the key areas of the Group's internal control systems, including the adequacy of resources, qualifications and experience of our accounting and financial reporting staff, are reasonably implemented and effective and adequate. The Board and the risk management committee considered that the key areas of the risk management, including the identification, measuring and evaluation new risks, and the ongoing monitoring of existing business and operation risks identified to be effective and adequate. As such, the Board is of the view that the Group has fully complied with provisions of the Corporate Governance Code regarding internal control and risk management systems in general for the year ended 31 December 2017.

#### SHAREHOLDERS RIGHTS

## How Shareholders can convene an extraordinary general meeting and put forward proposals at Shareholders' meetings

Under the Constitution, Directors may in general, whenever they think fit, convene extraordinary general meetings. Under Section 176 of the Companies Act (Cap. 50) of Singapore (the "Singapore Companies Act"), however, directors of the Company must notwithstanding anything in its Constitution, on the requisition of shareholders holding not less than 10% of the total paid-up capital of a company at the date of the deposit of the requisition, immediately proceed to convene an extraordinary general meeting to be held as soon as practicable but in any case not later than 2 months after receipt by the company of the requisition. In addition to the said right of requisition, two or more shareholders holding not less than 10% of the total number of issued shares of a company (excluding treasury shares) may also call a meeting of the company.

## Procedures by which enquiries may be put to the Board

Shareholders may send their enquiries and concerns to the Board by addressing them to Mr. Leung Lok Wai, a Joint Company Secretary by mail at the Company's principal place of business in Hong Kong or by email at paddy\_leung@thtf.com.cn. Mr. Leung Lok Wai will forward communications relating to matters within the Board's direct responsibilities to the Board and communications relating to ordinary business matters, such as suggestions, inquiries and customer complaints, to the chief executive officer of the Company.

#### COMMUNICATIONS WITH SHAREHOLDERS

The management endeavours to maintain effective communications with the Shareholders and potential investors.

The Company meets the Shareholders at the annual general meeting, publish interim and annual reports on the websites of the Company and the Stock Exchange, and release press releases on the Company's website to keep the Shareholders and potential investors abreast of the Group's business and development.

## **ENVIRONMENT, SOCIETY AND GOVERNANCE REPORT**

We root our operations in Tsinghua and stem our businesses from THTF. As a pioneer of promoting urban development in energy saving, the Group focuses on urban energy management and smart energy-saving service. We have accomplished solutions for "intelligence + energy-saving" in many sub-sectors, aiming at helping users reduce energy consumption and lower the costs. Meanwhile, we attach great importance to issues related to the environment, society and governance to achieve the sustainability of corporate and social development.

Keeping in mind the business model as well as internal and external communication, the Group has identified material types of stakeholders which have mutual influence with corporate operations to determine the focus of environment, society and governance for the Group through analyzing the demands of the stakeholders. The major types of stakeholders of the Company include:

- Employees
- Shareholders
- Government
- Customers
- Community
- Suppliers
- Other business partners

In order to further identify the key areas of practices and information disclosure for corporate environment, society and governance, the Group has initiated the identification procedures of material issues on environment, society and governance, and judeged the relative priority of the issues according to the influence of corporate strategy, operations, finance and stakeholders, to determine the extent of information disclosure on environment, society and governance. The deciding factors mainly refer to:

- The Company's values, policies, strategies, operation management systems, long-term and short-term goals
- Relevant laws, regulations, international agreements or voluntary agreements with strategic value to the Company and its stakeholders
- The material judgment results of information disclosure on environment, society and governance between peers and competitors
- Demands and expectations clearly expressed by stakeholders
- The views of the Company's management and social responsibility management team

Through the identification process, the Group has identified the issues about environment, society and governance most related to the sustainable development of corporates, and has decided the materiality of each issue with the results as follows:

#### Impact on the sustainable development of stakholders Coping with climate changes Customer services Product quality Geography development Research and innovation Product quality Customer services Occupational health and safety Coping with climate changes ★ Community development Charity Research and Use of energy and resource innovation Employment Use of energy Emissions and waste management and resource Industry ★ Supply chain management Employee development development Supplier cooperation and mutual win Employment O Supplier cooperation and Employee development Emissions and wastes Occupational health and safety management Geography development Supply chain management 🚖 Industry development ★ Community development Charity

## **Material ESG Issues of Technovator**

Impact on the sustainable development of Technovator

According to the characteristics of the industry in which the business is placed, the Group has established an information management system covering the whole group against the environmental, social and governance issues identified and sorted out the statistics and processes of the relevant information. We will gradually improve the relevant management mechanism, and enrich the content of information disclosure on environment, society and governance.

The disclosure scope of this report includes all subsidiaries and branches of Technovator. The disclosure period for this report is from 1 January 2017 to 31 December 2017.

## **COPING WITH CLIMATE CHANGES**

Positioning as a leading urban energy intelligence energy saving service provider in the PRC, the Group's services cover urban energy-saving cloud services, smart transportation, smart building and complex, smart energy and urban security. The comprehensive "Cloud Service System" and "Internet thinking" provide us with insight into the current status of urban energy, and with the analysis of big data in energy, we can provide decision-making basis and recommendations for urban managers to achieve smart urban management and operation. In the field of urban building, the Group always adheres to the concept of "smart+energy-saving". For all types of buildings and complexes, Technovator can organically combine smart buildings with building energy conservation. In the complete life circle of a building, flexible deployment of relevant products and solutions can enhance building functions and quality continuously. We provide shelters for urban low-carbon development and cope with climate changes.

Under the guidance of the concept of Internet + Energy, Technovator has assisted in the establishment of the central E-Cloud Service Center for the Ministry of Housing and Construction, with which the energy-consumption data of the first batch of seven national pilot energy-saving cities has been gradually connected. In addition, Technovator has also established the provincial and municipal E-Cloud Service Center in the regions such as Hunan Province, Chongqing City, Wuhan City and Karamay City, which realized the connection between the central platform and the provincial and municipal platforms and created an integrated energy-conservation network monitoring platform, providing the green operation of cities with important technical support.

With the people's increasing attention on the smart system in healthcare architecture, the Group demonstrates that customers improve the level of smartness of hospitals by using the Techcon Control and Management System (Techcon 控制管理系统). It made energy-saving improvement to the air conditioning system of hospitals by building the energy consumption monitoring platform and using the Techcon EEC System (Techcon EEC節能專家控制系統). Based on the analysis and management of massive amounts of data, it established an operation program to enable the automated and efficient operation of equipment, ensuring the subsequent energy conservation. As of December 2017, the Company helped to develop smart medical solutions and create smart medical environment for several hospitals such as Chongqing Nanchuan New Town District Chinese Medicine Hospital (重慶南川新城區中醫院), Chongqing Jiangbei Chinese Medicine Hospital (重慶江北中醫院) and Chongqing Wulong County People's Hospital (重慶市武隆縣人民醫院). In addition, the Techcon Building Control Management System (Techcon樓控控制管理系統) of the Company has been also widely used in hotels, banks and universities so as to facilitate the green operation of various industries.

Currently, with the rapid development of urbanization in China and the continuous upgrades of government's policies and indicators on energy conservation and emission reduction, the demand for intensive and efficient utilization of urban energy has greatly increased. In 2017, through cooperation with four organizations including Research Center for Energy Conservation in Building, Tsinghua University (清華大學建築節能研究中心), the Group established the Heating Engineering Technology Center in Inner Mongolia Autonomous Region, with the aim of reduction of heating system energy consumption, cleaning and retrofitting of energy used for heating and solving the problem of urban and rural energy system, to fulfill its social responsibility as much as possible in rational utilization of energy and combating climate change in accordance with national provisions. The Group continuously provides Taiyuan Heat Power Company with overall heating network operation and management. Through creating the smart heating information service platform, it transferred the operation data of all heat power branch companies under Taiyuan Heat Power Company to the General Dispatch Center for the concentrated display of heating data, so as to achieve rational use of energy as planned, provide the basis for decisions on balancing the thermal load of heat supply network and minimize the unit energy consumption.

## **ENVIRONMENT**

#### **Environmental management**

The Group attaches particular importance to environmental management, which has established environment management system on the basis of compliance with relevant PRC laws and regulations and received certification to the ISO14001 Environmental Management System in 2007. According to the requirements of environmental management system, the Group has formulated management rules and systems for regulation and management, such as Rules Governing Identification of Environmental Factors and Determination of Important Factors, Rules Governing Environmental Targets, Indicators and Programs, Rules Governing Environmental Monitoring and Conformance Evaluation, Rules Governing Noncompliance and Rectification Measures on Environment, so as to strengthen environmental risk management and minimize the impacts of the Company's operations on environment.

We have extended the idea of environmental protection to the source of products and service. For the hazardous substance that may increase the environmental load in the development and service of products, we adopt alternative substance as far as possible, strongly boost the reduction plan for six hazardous substance of the electronic products, proactively develop the products that are beneficial to the environment and convert natural resources into usable resources to the largest extent, so as to mitigate the impacts on environment.

#### **Consumption of resources**

The product-producing process involved in this report refers to the processing and manufacturing of PCB, and its energy consumption is mainly electricity. The energy consumed in office area is mainly electricity and gasoline for vehicles for business purpose. The water consumed mainly represents water used during the manufacturing process and as daily water in office area, which all supplied by the municipal pipe network water and has no major impact on the water source. Compared with traditional manufacturing industries, the Group has a small scale of production, consumes less energy and water resources in the process, and we will gradually promote energy conservation and water conservation measures in the future to further reduce the consumption of resources.

The Company's consumption of resources during the current reporting period was as follows:

Types of resources	Consumption volume in 2017	Consumption volume in 2016
Electricity (kwh)	389,746	363,788
Gasoline (I)	28,721	17,300
Energy consumption per each RMB10,000 production value (kg standard coal)	0.40	0.35
Water (tons)	234	97
Water per each consumption RMB10,000 production value (kg)	1.18	0.54

#### Notes:

- 1. As the production process involved in the Group is not high energy consumption industry, energy consumption and water consumption in the manufacturing and office area are consolidated for statistics and disclosure purposes.
- 2. In 2017, we had made an adjustment to the statistical coverage of the environmental data, which was further extended to all subsidiaries of the Company from Tongfang Technovator Int. (Beijing) Co., Ltd. (同方泰德國際科技(北京)有限公司).

The packaging materials of the Group's products are mainly cardboard boxes, plastics, filling stuffs and so on. In addition, we also use recycled packaging materials wherever practicable to reduce the resources consumptions. The volumes of cardboard boxes, plastics, filling stuffs and recycled packaging materials were 3.5 tons, 0.027 ton, 0.02 ton and 0.1 ton respectively during the current reporting period.

#### **ENVIRONMENT, SOCIETY AND GOVERNANCE REPORT**

The Group actively promotes green office by using energy-saving lamps in the office area, encouraging power-off when leaving by posting such reminders in plain view and making energy-saving improvement to certain meeting rooms as well as reducing the usage of ink boxes and toner cartridges by using sharing printers. The volume of recycled paper used by the Group reached about 1.3 tons per year. The Group calls for saving water among employees through posters, education and other manners reduce energy consumption.

#### **Emission management**

The Group's greenhouse gas emissions mainly come from the indirect energy emission and direct emission from our official gasoline vehicles. However, there is no direct emission from boilers and other equipment powered by coals and gas.

**Emission volume** 

Types of greenhouse gas emissions	Emission sources Energy type (unit)	of carbon dioxide (tons) Current volume
Indirect energy emission	Electricity consumption in production and	
	office area (kwh)	283.45
Direct energy emission	Official gasoline vehicles (I)	38.63
Total		322.08
Emission volume of carbon dioxide each		
RMB10,000 production value (kg)		1.62

Note: According to the energy conversion data, emissions in Northern China is calculated by allocating 50% to EFgrid,OM,y and EFgrid,BM,y respectively for 1.0416 tons and 0.4780 tons of carbon dioxide produced from electricity consumption for each megawatt hour, emissions in Eastern China is calculated by allocating 50% to EFgrid,OM,y and EFgrid,BM,y respectively for 0.8112 ton and 0.5945 ton of carbon dioxide produced from electricity consumption for each megawatt hour, and emissions in Central China is calculated by allocating 50% to EFgrid,OM,y and EFgrid,BM,y respectively for 0.9515 ton and 0.3500 ton of carbon dioxide produced from electricity consumption for each megawatt hour. Carbon dioxide emissions volume for fossil fuel are calculated according to 2006 IPCC Guidelines for National Greenhouse Gas Inventories.

The Group attaches particular importance to waste management and complies with relevant requirements of laws and regulations strictly. The Group's production mainly engages in the processing and manufacturing of PCB, and the major wastes arising from which include dross spot, metal packages, wires and cardboard boxes, accompanying with waste gas and no spent liquor. The hazardous waste is delivered to and disposed by qualified third party while the other wastes are delivered to relevant departments for recycling. The Group engages external third party of qualified monitoring institution to monitor the exhaust gas and was examined by local environment protection administration to fit the demands of national and local environment relevant laws.

Compared with traditional manufacturing industries, the Group has a relatively small scale of production, produces fewer hazardous wastes, general wastes and emissions in the process, and has met the requirements of relevant national standards. We will gradually promote emission reduction measures and control raw materials in the future to further reduce waste generation.

Waste types		2016 (tons)	2017 (tons)
Hazardous waste	Dross spot	0.399	0.41
Non-hazardous waste	Metal packages	0.18	0.18
	Wires	0.1	0.12
	Cardboard boxes	0.7	0.75

## **EMPLOYEES**

#### Employees' remuneration and benefits

The Group strictly adheres to the Labour Law of the People's Republic of China, the Labour Contract Law, the Trade Union Law and other relevant laws and regulations in respect to social security, also formulation of Recruitment Management System on this basis, to regulate work process of employee recruitment. The Group conducted open society recruitment, adhered to employment policy, including gender equality, ethnic equality and same salary for same position while never allows child labour and forced labour. It requires candidates to submit the copies of ID card and produces original ID card for verification. During the reporting period, all employees employed by the Group had complied with the relevant PRC laws and regulations.

Employees are integral to the Company. We respect and safeguard their legitimate interests and developed management systems, including Welfare Management System, Internship Student Management System and Employee Complaint Management System, to regulate the implementation of work relating to, amongst others, employee welfare and benefits. The Group strictly implements the paid annual leave system in accordance with the requirements of PRC laws and regulations, maintains pension insurance, unemployment insurance, employment injury insurance, medical insurance, maternity insurance, housing fund and other social insurance for all Chinese employees who have signed the labour contracts with the Group. Meanwhile, on top of these, the Group also offers additional insurance, such as additional medical insurance, additional pension insurance, accident injury insurance for employees. In addition, the Group formulates and implements the Enterprise Annuity Management System to enhance the employee's benefit, and those employees who joined the Company for over one year and had participated in basic pension insurance are eligible for voluntary participation in the System.

The Company attaches great importance to caring employees. For employees whose families have temporary livelihood difficulties caused by sickness or other reasons, the Company proactive provides assistance and organizes visits to employees who are on sick leave. It also established Employee Care and Subsidy Management System, which formulated the standards and application procedures for subsidies, effectively offering help and care to employees to boost cohesion in the Company and enhancing the sense of belonging of employees.

During the current reporting period, there were 779 people in total, among which 776 employees entered into labour contract and 3 employees did not, and no temporary worker and employee was assigned by third parties. The contracting rate for employees with labour contract was 100% and social insurance coverage rate was 100%. Turnover for employees with contract was 12.37%.

Set out below is the distribution of employment types:

Types of employee	Number of employee (people)
Employee with labour contract Employee with labour agreement	776 3
Total number of employees	779

Set out below is the staff employment by age structure:

Age	Number of employees	Turnover rate
Under 30 years old (30 exclusive) 30-50 years old (50 exclusive) 50 years old and above	197 529 53	16.52% 10.64% 13.11%
Total	779	12.37%

#### **ENVIRONMENT, SOCIETY AND GOVERNANCE REPORT**

Set out below is the staff employment by gender:

Gender	Number of employees	Turnover rate
Male Female	543 236	12.41% 12.26%
Total	779	12.37%

Set out below is the staff employment by geographical region:

Region	Number of employees	Turnover rate
China Mainland	767	12.44%
Hong Kong, Macao and Taiwan	4	0
Oversees	8	11.11%

#### **Staff Development**

Employees are the foundation of development for an enterprise. Regarding career development of the staff as the basis of its own development, the Group strengthens educational training for all employees, broadens their career path and supports diversified development of employees. The internal positions of the Company are classified into five categories, namely management, management services, technology, market and operation, under the policies and related methods of the Company, such as the Performance Appraisal Management System. Detailed requirements are set for indicators and processes of each position appraisal assessment, providing clear career development path for staff. For newly recruited staff, the Company has specifically set up a tutor system for new staff to help them become more familiar with environment and plan their own career development.

Perfect training mechanism is a strong guarantee for achieving the development of employees. The Company formulated the Training Management System in order to standardize the organization and implementation of training and developed a training system featuring "Three Levels", "Four Types" and "Three Tiers" as shown in the chart below, comprehensively covering all training needs of the Company. For different training categories, it clearly specifies training projects, organization ways and main contents of training. In accordance with the annual strategy and operation scheme of the Company, the Human Resource Department of the Company analyzed and generalized the requirements of the training department to formulate the annual training scheme of the Company which ensures training is provided more scientifically and effectively.



According to work and position requirement, the Company training covers aspects including corporate culture, vocational training and working skills. Training methods consist of internal and external training. Internal training is provided by the Company and departments according to training scheme to design training programs and organize and conduct training. The Company encourages employees to participate in external training organized by the relevant industry organizations to improve their working skills. Employees can submit applications according to the Company's external training procedure. The Training Management System also provides training mechanism, training information feedback etc. to improve and refine employees' training work.

During the current reporting period, total employee training hours of the Company for the year were 24,211 hours. The employees' training hours per capita and percentage by gender are as follows:

Gender	Training hours per capita (hour)	Percentage of the employees trained
Male employee	31	100%
Female employee	30	100%

Note: Information and data on safety production and anti-corruption training are not included in the above statistics and will be disclosed separately hereof later.

The employees' training hours per capita and percentage by the class of employees are as follows:

Gender	Training hours per capita (hour)	Percentage of the employees trained
Senior Management	32	100%
Middle-level management	30	100%
Basic level management	31	100%

#### Employee health and safety management

Employee safety and health are necessary guarantee of corporate growth. The Group implements safety production responsibility system and adheres to the safety management policy of "safety first, prevention priority", and clearly defines the responsibilities of safe production and occupational disease prevention and control of various departments and positions. In order to reinforce risk control, the Company has established an occupational health and safety management system and passed the third-party certification, OHSAS18001 and formulated the systems such as Management System for Hazard Identification, Risk Assessment and Measure Implement, Management System for Objectives and Solutions of Occupational Health and Safety and Management System Occupational Health and Safety Performance Monitoring and Compliance Evaluation according to the requirements of the system, continue to pay attention to employee health and create a safe and healthy working environment for employees.

The Company developed work processes such as the Management System for Safe Use of Electricity, Protection Measures for Electricity Leakage of Equipment and Circuit, and Special Equipment and Operator Management System to standardize employee operations and improve the quality of the employees' safety. It also formulated and issued the Provision and Management System for Labour Protection Articles to regulate the types and periods of labour protection products for all positions and ensure the safety of employees. In addition, the Company enhanced the safety and occupational health awareness of the employees by carrying out safety production education training and hanging the safety production banners.

#### **ENVIRONMENT, SOCIETY AND GOVERNANCE REPORT**

The Group attaches great importance to safety accident prevention, reporting and investigation handling work. The Company ensured fire safety through developing the Fire Facilities Management System and carried out fire emergency exercises regularly. For the emergency preparation, drills and response requirements and capacity building for emergencies and events, QES Emergency Preparation and the Corresponding System, Production Safety Accident Emergency Rescue Plan of the Company had detailed guidance and requirements. It also issued the Management System for Event Investigation, the Inconformity of Corrective Measures, Written Information Management System and other systems to standardize the accident investigation and the documentation and records for accidents.

During the current reporting period, security training hours per capita of the Company were 25 hours. There was no safety accident occurred and the hours of work injury loss was 0.

## PRODUCT RESPONSIBILITY AND CUSTOMER SERVICE

The Group understands that quality is the guarantee of the Company and development, so it aims to create high-quality brand products and engineering, and carries the concept of "Quality Ranks First" throughout the work.

For quality management, in compliance with the relevant laws and regulations, the Group established quality management system and electrical appliance harmful substances management system according to ISO9001:2015 "Quality Management System Requirements", QC080000 (IECQ-HSPM) "Process Management System for Electronic and Electrical Originals and Products Hazardous Substances" and other requirements and the Company's actual situation, and passed the third party's system certification. The Group formulated a comprehensive quality management structure, clearly defined the responsibilities and authority of each department according to the requirements of quality management system. The Group ensures the stability and consistency in product quality of projects and hardware and devotes to realizing "Quality Ranks First" through the operation of the quality system and a series of work. For the circumstance of unqualified potential products and unqualified projects, it developed systems including QES Rectification Measures Management System, Management System for Consistency of Certified Products, Management System for Unqualified Products Output and Management System for Unqualified Projects Output to regulate processing procedures of unqualified products and projects.

Customer is the foundation for the survival and development of a company. The Group devotes to realizing "Customer First" by first class technology, management, products and service. In order to better strengthen communication with customers, the Company has set up Customer Service Officer to answer enquiries raised by customers and to handle complaints from customers, and formulated Customer Service Management System to regulate customers' complaint handling system. During the current reporting period, the Group received 60 complaints from customers, all of which have been properly resolved and recorded.

During the current reporting period, no product was recalled by reasons of safety and health. The Group's customer satisfaction is 100%. Due to the nature of the business, the Group does not directly provide products and services to individual customers, so it does not involve consumer personal data or privacy.

#### **PRODUCT R&D**

#### **PRODUCT R&D**

Since its inception, the Group has always insisting in scientific and technological innovation and independent smart production. It continuously innovated core technologies and products, and deeply integrated resources, striving for innovation, and providing the community with better products and technical services. The Group relies on research and development centers and production bases established in various cities at home and abroad to continuously conduct product R&D and innovation, and has formed a building control and energy management system with the Techcon building control management system, E-Cloud Energy Saving Cloud Service Center, EMS energy management system, and EEC energy conservation experts control system as the core. In the field of rail transit informatization, intelligence and metro energy conservation, the Group independently researched and developed a series of hardware and software products including Integrated Monitoring (ISCS), Subway Environment and Equipment Monitoring (BAS), Safety Doors, and Metro Energy Saving Expert Control System (EEC). In the field of smart energy, we developed a city heating monitoring system to achieve the goal of process operation adjustment through control measures, improve the intelligent management and control level of heating companies, so as to fundamentally solve the problem of maladjustment of heat network level, uneven heating and cooling, and drastically reduce heating and power consumption in heating operations.

Technology innovation depends on the cultivation of innovative talents. The Group continues to pay high attention to product research and development, and recruits international R&D personnel on the R&D platform established in Singapore to build up an international R&D team, achieve a complete R&D organization, and implement professional division on process, structure, test, purchase, production and quality inspection and regulate R&D management. Meanwhile, the Group awarded the inventors according to the relevant provisions of the Patent Law to encourage employees to innovate, applied patent actively and granted a one-off reward of RMB5,000 in cash to each invention patent, and RMB2,000 to practical new patent.

Intellectual Property is the core element for competition in modern business society, the Group developed and implemented Intellectual Property Management System standardized the procedures, requirements and the responsibility of relevant personnel of patent applications, patent maintenance, patent protection, patent licensing and transfer to improve the management, protection and application of intellectual property.

#### **Industry Development**

As a leading energy saving company in our country, the Group has courage of holding the strategic foresight as the industrial leader and actively participates in the communication and research established by government agencies, regulatory authorities, academic institutions and industrial organizations to jointly promote the industry development and technological advancement. In 2017, the Group has took part in several industrial conferences, such as the 18th China International Building Intelligence Summit (Beijing) (第十八屆中國國際建築智能化峰會(北京站)), the 19th China Hi-tech Fair (第十九屆 中國國際高新技術成果交易會), the 11th Thermal Power Industry Technology Conference (2017 Green and Clean Heating Summit) (第11屆熱電業節能技術交流會(2017熱電綠色&清潔供熱高峰論壇)), 2017 China International Intelligent Building Exhibition (2017年中國國際智能建築展覽會), in which strategies and strategic layout for energy saving of the Group in the area of urban energy intelligence energy saving service were shown in a comprehensive way, covering content including urban energy saving cloud services, smart transportation, smart building and complex, smart energy and urban security. At the conferences, industrial development experience and relevant real-life cases were shared while kick points faced by and opportunities existed in the industry were summarized to make suggestions for the industry development. Furthermore, the Group maintains good communications with a number of industry associations, and is executive member and member of the council of the Intelligent Building Branch of China Construction Industry Association, the Engineering Intelligent Design Branch of China Exploration and Design Association and Beijing Security and Protection Industry Association. During the current reporting period, the Company acquired the honour of "Top 30 National Data Center Computer Room Engineering Enterprises" and "2016 Energy Saving Industry Branded Enterprise".

In addition, the Group actively takes advantage of science and technology, make use of profound industry experience, participate in the formulation of national and industry standards, and make due contributions to the orderly and healthy development of the industry. In 2017, the Group compiled the standards, such as Study of Marketing Mechanism and Implementation Path for Energy-Saving Operation Services in Urban-City Buildings (《城市級建築群節能運營服務市場機制及實現路徑研究》) and Technical Specifications for Comprehensive Monitoring System Construction for Urban Rail Transit (《城市軌道交通綜合監控系統工程技術規範》),which were highly recognized by Technology Development Promotion Center of Ministry of Housing and Urban-Rural Development, first-class experts and scholars.

## **SUPPLY CHAIN MANAGEMENT**

Effective supply chain management is a requisite for a corporate to continue its stable operation. The suppliers with whom the Group has business connections include raw material suppliers, ancillary material suppliers and subcontracting suppliers, as well as service providers in terms of logistics and trading. In order to ensure that the process and procedure of procurement are clear, the rights and obligation of each department are unequivocal and the process of procurement is legally compliant, the Company has formulated the Supplier Management and Control Procedure according to its own condition and based on relevant laws and regulations. It specifies the obligations of procurement related departments such as procurement department, quality management department and warehousing and distribution department, and provides the basic requirements and workflow for the selection, assessment and management of suppliers. The Group has also prepared the Record Table of Comments on Suppliers and Table of Information and Comments on Suppliers for supplier assessment. In addition, as compliance with the RoHS standards and WEEE directive is required due to export of most of its products to Europe, the Group has formulated the Procedures for Control on Product Procurement Process for stricter assessment, selection and management of RoHS raw material suppliers and ancillary material suppliers in pursuance of the requirements of Environmental Management Systems – Requirements with Guidance for Use (ISO14001:2004) and Standards and Requirements for the Hazardous Substance Process Management System of Electronic and Electrical Components and Products (QC080000).

In terms of procurement of raw materials, ancillary materials and suppliers, the Group generally chooses to cooperate with internationally renowned enterprises for their higher management level of the inter-company environment and social risks, which accordingly enables the Group to control the environmental and social risks of the supply chain. In terms of procurement of RoHS raw materials, ancillary materials and suppliers, the suppliers are required to provide not only the necessary business information but also relevant supporting materials such as quality management/environment management system proofs, agreements regarding non-use of environmental management substances, and RoHS test report. For finished product suppliers, the Group conducts a stringent check and assessment on such suppliers' business qualifications and product quality, and various departments act in concert in monitoring of and strictly controlling over risks from the suppliers. Meanwhile, the Group gives priority to suppliers with relevant qualifications including those passing the accreditation of Environment Management System (ISO14001) and Occupational Health and Safety Management System (OHSAS18001), and conducts a site examination as necessary on the manufacturers admitted to the suppliers list of the Group for the first time for a strict control over the risk.

During the current reporting period, the Group has 40 finished product suppliers in total, of which 3 suppliers being assessed, and 101 suppliers of raw materials and ancillary materials in total, and the number of suppliers being reviewed on site during the year is 3, the distribution of which is set out in the table below.

The geographical distribution of the suppliers is as follows:

Region	Number of Suppliers
PRC	23
Other Asian Countries	13
Europe	7
North America	58

## **ANTI-CORRUPTION**

The Group is firmly against corruption in whatever form and committed to create a healthy, fair and transparent business environment by way of standardizing management processes, constraining suppliers' behaviors and enhancing employees' awareness of anti-corruption through trainings. During the current reporting period, a total of 389 employees attended the anti-corruption trainings with 587 hours for the anti-corruption trainings time, and there were no cases of anti-corruption or corruption litigation.

## **COMMUNITY**

#### Community participation

The development of enterprises cannot separate from the harmony and stability. We are pursuing our own development while enthusiastic about social welfare establishments, actively participating in the public welfare activities such as supporting to run schools in mountain areas, running schools with joint efforts of the schools and enterprises and etc. so as to make our own contributions to society and strive to become an excellent corporate citizen.

Caring kids from the remote area, providing them with a favorable environment for learning, living and feeling the power of science and technology and knowledge has long been one of the welfare establishments of the Group. In 2017, at Yangjiagou Primary School (楊家溝小學) and Haijialing Primary School (海家嶺小學) in Qilihe District, Lanzhou City, Gansu Province, we participated in the material donation events organized by the intelligent building industry in the PRC and made our own contributions to improve the study environment of the mountain area and the teaching conditions of teachers and students.

#### **Intelligent City**

With the high-speed development of technologies such as the Internet, cloud computing and big data etc., cities have entered the digital age. It has become an irreversible trend of history to realize the intelligent management and operation of cities in virtue of managing and controlling on the clouds. The Group looks to the future, keeps listening to the needs from customers and takes the lead in going deep into the research on the field of city control on the clouds to constitute a solid basis for construct intelligent cities and commit itself to create a more intelligent and comfortable, safer and quality living environment for people.

Techcon FAS, the fire-fighting remote monitoring system entirely researched and developed by the Group, is capable of offering high quality cloud platform of intelligent fire-fighting and operating maintenance services to cities and its ancillary facilities, and building up the city-level networks of fire-fighting to achieve the automatic, networking, visual and intelligent management for fire-fighting facilities. As of the end of 2017, this system has been dispersed to more than 60 provinces, cities and districts all over the country such as Ningbo, Chengde, Ezhou, Chongqing, Harbin, Shenyang, Zhenjiang etc., and applied to the projects including Ningxia University, Beijing Banknote Printing Co., Ltd. (比京印鈔廠), Taiyuan Iron & Steel Company (太原鋼鐵公司), the China Aviation Industry Airport in Shenyang (中航工業瀋陽飛機場), Yanshan Petrochemical (燕山石化), China Aviation Liming Engine Company (中航黎明發動機公司) and escorts for fire-fighting.

The Techcon series of building-oriented automatic control products is one of core product systems of the Group which, according to the operating time and environmental characteristics of the projects, performs a unified remote monitoring management for various sub-systems including air conditioning units, new air handling units, power monitoring unit, water supply and drainage system power distribution system etc. in the buildings in order to create a high comfort environment for users. This system has successfully served a number of domestic clients including Chongqing Ying Li International Real Estate Limited (重慶英利國際金融中心), Guiyang Poly International Plaza (貴陽保利國際廣場), Sichuan Tour International Building in Chengdu (成都川旅國際大廈) and is well received, making contributions to the construction of intelligent cities.

## INDEPENDENT AUDITOR'S REPORT



Independent auditor's report to the shareholders of Technovator International Limited (Incorporated in Singapore with limited liability)

## **OPINION**

We have audited the consolidated financial statements of Technovator International Limited ("the Company") and its subsidiaries ("the Group") set out on pages 65 to 136, which comprise the consolidated statement of financial position as at 31 December 2017, the consolidated income statement, the consolidated income statement and other comprehensive income, the consolidated statement of changes in equity and the consolidated cash flow statement 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 2017 and of its consolidated financial performance and its consolidated cash flows for the year then ended in accordance with Hong Kong Financial Reporting Standards ("HKFRSs") issued by the Hong Kong Institute of Certified Public Accountants ("HKICPA") 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 Hong Kong Standards on Auditing ("HKSAs") issued by the HKICPA. 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 the HKICPA's Code of Ethics for Professional Accountants ("the Code") together with any ethical requirements that are relevant to our audit of the consolidated financial statements in Singapore, and we have fulfilled our other ethical responsibilities in accordance with these requirements and the 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** (Continued)

#### Accounting for construction contracts

Refer to note 3 to the consolidated financial statements and the accounting policies on page 85.

#### The Key Audit Matter

#### How the matter was addressed in our audit

The Group's revenue for the year ended 31 December 2017 from construction contracts totalled RMB1,510 million, which accounted for 76% of the total revenue for the year. The construction contracts entered into by the Group are primarily energy saving projects relating to transportation, building and industrial businesses.

Revenue from construction contracts is recognised in proportion to the stage of completion of the contract, measured by comparing the costs incurred up to the reporting date to the total forecast costs at completion of the contract.

Based on the nature of construction activities, revenue and profit or loss recognised on a contract in progress at the reporting date is highly dependent on management's estimation of the total costs required to complete the contract and the percentage of work completed at the reporting date.

We identified accounting for construction contracts as a key audit matter because a significant degree of management judgement is required to be exercised, based on the latest progress of each contract, particularly in estimating the future costs to complete a contract which could be subject to management bias.

Our audit procedures to assess accounting for construction contracts included the following:

- obtaining an understanding of and assessing the design, implementation and operating effectiveness of management's key internal controls in relation to accounting for construction contracts;
- reading contracts on a sample basis to obtain an understanding of the key terms and risks associated with individual contracts and the accounting implications thereof;
- recalculating management's calculations of the percentage of completion for each contract at the reporting date by comparing the key inputs in the calculations, including total contract revenue, costs incurred to date and amounts invoiced to date, with contract terms, invoices issued and vendor invoices, on a sample basis;
- examining written documentation from customers indicating their acceptance of the work performed to date on contracts, with reference to related third party engineers' certification of work completed, if any, on a sample basis;
- challenging management's estimations of the expected future costs required to complete individual contracts by comparing costs to be incurred with signed subcontractor contracts and by benchmarking with similar estimations for comparable contracts, on a sample basis, and assessing if there was any indication of management bias in the estimations;
- assessing the accuracy of management's historical forecasts by comparing the actual costs for contracts completed during the current year to forecasts made at the prior year end and enquiring of management for reasons for any material differences between the estimations and the actual outcome; and
- identifying possible onerous contracts by comparing the latest budgeted costs, taking into consideration the actual costs incurred up to 31 December 2017, with the contract revenue for individual contracts, on a sample basis, and assessing if any provision for foreseeable losses was required when the budgeted costs exceeded the contact revenue.

## **KEY AUDIT MATTERS** (Continued)

#### Recoverability of trade receivables

Refer to note 17 to the consolidated financial statements and the accounting policies on page 80.

#### The Key Audit Matter

## How the matter was addressed in our audit

At 31 December 2017, the Group's gross trade receivables totalled RMB1,222 million, which accounted for 29% of the Group's total assets as at that date.

The Group's allowance for doubtful debts includes a specific element based on individually significant debtors and a collective element for groups of debtors sharing similar risk characteristics, taking into account the credit history of the Group's customers and current market and customer-specific conditions, which included assessing whether the customers are in financial difficulties and whether the industries in which the customers operate are facing recession. All of the above require the exercise of significant management judgement based on past experience and knowledge of the Group's customers and the industries in which they operate.

At 31 December 2017, the Group recorded an allowance for doubtful debts of RMB79 million.

We identified the recoverability of trade receivables as a key audit matter because of the significance of the trade receivables balance and because the assessment of the allowance for doubtful debts involves a significant degree of management judgement. Our audit procedures to assess the recoverability of trade receivables included the following:

- obtaining an understanding of and assessing the design, implementation and operating effectiveness of management's key internal controls relating to credit control, debt collection and making allowances for doubtful debts;
- assessing the classification of individual balances in the trade receivables ageing report by comparing the details in the trade receivable ageing report with relevant underlying documents, including goods delivery notes, completion reports for construction services and payment terms as set out in the contracts with customers, on a sample basis;
- challenging the basis of management's judgement about the recoverability of balances assessed individually and evaluating the allowance for doubtful debts made by management for these individual balances with reference to the industry in which the debtors are operating, the ageing of overdue balances, historical and post year-end payment records and recent correspondence with these customers;
- recalculating the collective allowance for doubtful debts based on the parameters as set out in the Group's policy for making collective allowances for doubtful debts:
- assessing the historical accuracy of the estimates made by the management for the allowance for doubtful debts by comparing the level of allowances at 31 December 2016 with the actual new provisions, write offs and recoveries in respect of trade receivables as at 31 December 2016 during the current year; and
- comparing cash receipts from debtors subsequent to the financial year end relating to trade receivables at 31 December 2017 with bank statements and other relevant underlying documentation, on a sample basis.

# 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 HKFRSs issued by the HKICPA 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 intend to liquidate the Group or to cease operations, or have 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 HKSAs 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.

As part of an audit in accordance with HKSAs, 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.

# AUDITOR'S RESPONSIBILITIES FOR THE AUDIT OF THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)

- 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.

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 Choi Chung Chuen.

#### **KPMG**

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

16 March 2018

# **CONSOLIDATED INCOME STATEMENT**For the year ended 31 December 2017

(Expressed in Renminbi ("RMB"))

Note	2017 RMB'000	2016 RMB'000
Revenue 3, 4	1,979,970	1,786,341
Cost of sales	(1,485,861)	(1,357,747)
Gross profit	494,109	428,594
Other revenue 5(a) Other net gain 5(b) Selling and distribution costs Administrative and other operating expenses	38,329 2,822 (81,949) (133,432)	40,162 27,999 (66,183) (131,647)
Profit from operations	319,879	298,925
Finance costs 6(a)	(13,500)	(30,897)
Profit before taxation	306,379	268,028
Income tax 7(a)	(43,488)	(36,303)
Profit for the year	262,891	231,725
Profit attributable to:		
Equity shareholders of the Company	259,358	234,127
Non-controlling interests	3,533	(2,402)
Profit for the year	262,891	231,725
Earnings per share 10		
<ul><li>Basic (RMB)</li><li>Diluted (RMB)</li></ul>	0.3269 0.3269	0.2935 0.2870

## CONSOLIDATED INCOME STATEMENT AND OTHER COMPREHENSIVE INCOME

For the year ended 31 December 2017 (Expressed in Renminbi ("RMB"))

	2017 RMB'000	2016 RMB'000
Profit for the year	262,891	231,725
Other comprehensive income for the year		
Items that may be reclassified subsequently to profit or loss:  Exchange differences on translation of financial statements	(0.775)	0E 700
of overseas subsidiaries, net of nil tax	(9,775)	25,728
Total comprehensive income for the year	253,116	257,453
Attributable to:		
Equity shareholders of the Company Non-controlling interests	249,583 3,533	259,855 (2,402)
Total comprehensive income for the year	253,116	257,453

## **CONSOLIDATED STATEMENT OF FINANCIAL POSITION**

At 31 December 2017 (Expressed in Renminbi ("RMB"))

	31 December	31 December
Not	2017 RMB'000	2016 RMB'000
NOU	HIVID COO	T IIVID 000
Non-current assets		
Property, plant and equipment 1	284,644	232,556
Lease prepayment	2,848	2,958
Intangible assets	<b>271,957</b>	263,616
Other financial assets	,	320,307
Deferred tax assets 23	<b>17,604</b>	13,504
	991,381	832,941
Current assets		
Tuesling acquities	_	F 000
Trading securities 15 Inventories 11		5,896 302,950
Trade and other receivables	•	1,345,417
Gross amounts due from customers for contract work		676,584
Cash and cash equivalents		665,822
	3,234,312	2,996,669
Current liabilities		
Tuesda and other parallela	4 540 600	1 000 000
Trade and other payables  Gross amounts due to customers for contract work  2	, , , , , , ,	1,292,923 6,138
Loans and borrowings 21(b		290,354
Obligations under finance leases	169	178
Income tax payable	30,613	18,293
	1,801,227	1,607,886
Net current assets	1,433,085	1,388,783
Total assets less current liabilities	2,424,466	2,221,724

## **CONSOLIDATED STATEMENT OF FINANCIAL POSITION**

At 31 December 2017 (Expressed in Renminbi ("RMB"))

	Note	31 December 2017 RMB'000	31 December 2016 RMB'000
Non-current liabilities			
Obligations under finance leases Deferred tax liabilities Deferred income	23 24	22,863 11,339	180 15,133 12,293
		34,202	27,606
NET ASSETS		2,390,264	2,194,118
CAPITAL AND RESERVES			
Share capital Reserves	25	1,191,209 1,180,931	1,254,909 933,518
Total equity attributable to equity shareholders of the Company		2,372,140	2,188,427
Non-controlling interests		18,124	5,691
TOTAL EQUITY		2,390,264	2,194,118

Approved and authorised for issue by the board of directors on 16 March 2018.

	)	
Zhao Xiaobo	)	
Qin Xuzhong	)	Directors
	)	
	)	

## **CONSOLIDATED STATEMENT OF CHANGES IN EQUITY**

For the year ended 31 December 2017 (Expressed in Renminbi ("RMB"))

	Attributable to equity shareholders of the Company									
	Share capital RMB'000 Note 25(c)	Treasury shares RMB'000 Note 25(d)	Statutory reserves RMB'000 Note 25(e)(i)	Translation reserve RMB'000 Note 25(e)(ii)	Share-based compensation reserve RMB'000 Note 25(e)(iii)	Other reserves RMB'000 Note 25(e)(iv)	Retained profits RMB'000	Total RMB'000	Non- controlling interests RMB'000	Total equity RMB'000
Balance at 1 January 2016	1,246,989	-	69,354	24,330	23,391	(537,048)	1,171,694	1,998,710	8,086	2,006,796
Changes in equity for 2016:										
Profit/(loss) for the year Other comprehensive income	-	-	-	- 25,728	-	-	234,127	234,127 25,728	(2,402)	231,725 25,728
Total comprehensive income for the year	-	-	-	25,728	-	-	234,127	259,855	(2,402)	257,453
Purchase of own shares Dividends to equity shareholders of the Company Forfeiture of share options Appropriation to reserves Capital contribution from a non-controlling	- - - -	(581) - - -	- - - 21,583	- - - -	- - (1,100) -	- - - -	(79,712) 1,100 (21,583)	(581) (79,712) –	- - -	(581) (79,712) –
shareholder Equity settled share-based transactions Shares issued upon exercise of share options	- - 7,920	- - -	- - -	- - -	- 3,363 (1,128)	- - -	- - -	- 3,363 6,792	7 - -	7 3,363 6,792
Balance at 31 December 2016	1,254,909	(581)	90,937	50,058	24,526	(537,048)	1,305,626	2,188,427	5,691	2,194,118
			Attributa	ble to equity sh	areholders of the	e Company				
	Share capital RMB'000 Note 25(c)	Treasury shares RMB'000 Note 25(d)	Statutory reserves RMB'000 Note 25(e)(i)	Translation reserve RMB'000 Note 25(e)(ii)	Share-based compensation reserve RMB'000 Note 25(e)(iii)	Other reserves RMB'000 Note 25(e)(iv)	Retained profits RMB'000	Total RMB'000	Non- controlling interests RMB'000	Total equity RMB'000
Balance at 1 January 2017	1,254,909	(581)	90,937	50,058	24,526	(537,048)	1,305,626	2,188,427	5,691	2,194,118
Changes in equity for 2017:										
Profit for the year Other comprehensive income	-	-	-	- (9,775)	-	-	259,358 -	259,358 (9,775)	3,533 -	262,891 (9,775)
Total comprehensive income for the year	-	-	-	(9,775)	-	-	259,358	249,583	3,533	253,116
Purchase of own shares Cancellation of treasury shares Appropriation to reserves	(82,685) -	(82,597) 82,685	- - 29,728	-	-	- - -	- - (29,728)	(82,597) - -	-	(82,597) - -

(1,200)

(2,258)

21,068

(537,048)

The accompanying notes form part of these financial statements.

18,985

1,191,209

(493)

120,665

40,283

Capital contribution from non-controlling

Shares issued upon exercise of share options

shareholders

Forfeiture of share options

Balance at 31 December 2017

1,200

1,536,456

16,727

2,372,140

8,900

18,124

8,900

16,727

2,390,264

## **CONSOLIDATED CASH FLOW STATEMENT**

For the year ended 31 December 2017 (Expressed in Renminbi ("RMB"))

	Note	2017 RMB'000	2016 RMB'000
Operating activities			
Profit for the year		262,891	231,725
Adjustments for:			
Income tax		43,488	36,303
Depreciation	6(c)	34,152	31,876
Amortisation of intangible assets and lease prepayment	6(c)	62,996	47,706
Impairment losses on trade and other receivables	6(c)	25,886	19,934
Finance costs Interest income	5(0)	13,500	30,897 (24,068)
Net loss on disposal of property, plant and equipment	5(a)	(31,317) 672	2,610
Fair value change on trading securities		260	315
Equity-settled share-based payment expenses	6(b)	_	3,363
Foreign exchange gain, net	- (-)	(1,798)	(32,307)
		410,730	348,354
(Increase)/decrease in inventories		(72,575)	248
Increase in trade and other receivables		(209,138)	(265,048)
Increase in trade and other payables		218,412	312,002
Changes in gross amounts due from/to customers for contract work		(213,371)	(249,290)
Decrease in deferred income		(954)	(15,280)
Cash generated from operations		133,104	130,986
Income tax paid		(27,537)	(30,709)
Net cash generated from operating activities		105,567	100,277

## **CONSOLIDATED CASH FLOW STATEMENT**

For the year ended 31 December 2017 (Expressed in Renminbi ("RMB"))

	Note	2017 RMB'000	2016 RMB'000
Investing activities			
Payments for the purchase of property, plant and equipment Expenditure on purchase of intangible assets Repayment from Karamay construction contract Interest received Proceeds from sale of trading securities Payments for business combination under common control		(85,708) (71,227) - 26,812 5,636	(12,963) (59,170) 36,000 21,267 - (494,595)
Net cash used in investing activities		(124,487)	(509,461)
Financing activities			
Proceeds from issuance of shares Proceeds from loans and borrowings Purchase of own shares Repayment of loans and borrowings Other borrowing costs paid Dividend to equity shareholder of the company Decrease in restricted deposit Contribution from non-controlling shareholders		16,727 175,730 (82,597) (227,021) (10,446) - 3,974 7,180	6,792 217,020 (581) (376,702) (9,829) (79,712)
Net cash used in financing activities		(116,453)	(243,012)
Net decrease in cash and cash equivalents		(135,373)	(652,196)
Cash and cash equivalents at the beginning of the year		661,415	1,257,474
Effect of foreign exchange rate changes		(5,188)	56,137
Cash and cash equivalents at the end of the year	18	520,854	661,415

For the year ended 31 December 2017 (Expressed in RMB unless otherwise indicated)

# 1 GENERAL INFORMATION

Technovator International Limited (the "Company") was incorporated in Singapore on 25 May 2005 under the name of "Technovator Int Private Ltd." as an exempted company with limited liability under the Singapore Companies Act (Chapter 50). The name of the Company was changed to Technovator International Limited on 8 September 2011. The Company and its subsidiaries hereinafter are collectively referred to as the "Group". Technovator is principally engaged in integrated and comprehensive urban smart energy saving services. Its business covers three major segments including smart transportation, smart buildings and complex and smart energy, providing the customers with smart energy management products, solutions and integrated services throughout their full life cycles. The details of the subsidiaries directly or indirectly owned by the Company are set out in note 14.

# 2 SIGNIFICANT ACCOUNTING POLICIES

# (a) Statement of compliance

These financial statements have been prepared in accordance with all applicable Hong Kong Financial Reporting Standards (HKFRSs), which collective term includes all applicable individual Hong Kong Financial Reporting Standards, Hong Kong Accounting Standards (HKASs) and Interpretations issued by the Hong Kong Institute of Certified Public Accountants (HKICPA), accounting principles generally accepted in Hong Kong 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. Significant accounting policies adopted by the Group are disclosed below.

The HKICPA has issued certain new and revised HKFRSs that are first effective or available for early adoption for the current accounting period of the Group and the Company. Note 2(c) provides information on any changes in accounting policies resulting from initial application of these developments to the extent that they are relevant to the Group for the current and prior accounting periods reflected in these financial statements.

### (b) Basis of preparation of the financial statements

The consolidated financial statements for the year ended 31 December 2017 comprise the Company and its subsidiaries.

The measurement basis used in the preparation of the financial statements is the historical cost basis except that the following assets are stated at their fair value as explained in the accounting policies set out below:

- Financial instruments classified as trading securities (see note 2(e))

The preparation of financial statements in conformity with HKFRSs requires management to make judgements, estimates and assumptions that affect the application of policies and reported amounts of assets, liabilities, income and expenses. The estimates and associated assumptions are based on historical experience and various other factors that are believed to be reasonable under the circumstances, the results of which form the basis of making the judgements about carrying values of assets and liabilities that are not readily apparent from other sources. Actual results may differ from these estimates.

The estimates and underlying assumptions are reviewed on an ongoing basis. Revisions to accounting estimates are recognised in the period in which the estimate is revised if the revision affects only that period, or in the period of the revision and future periods if the revision affects both current and future periods.

Judgements made by management in the application of HKFRSs that have significant effect on the financial statements and major sources of estimation uncertainty are discussed in note 30.

For the year ended 31 December 2017 (Expressed in RMB unless otherwise indicated)

# 2 SIGNIFICANT ACCOUNTING POLICIES (Continued)

# (c) Changes in accounting policies

The HKICPA has issued several amendments to HKFRSs that are first effective for the current accounting period of the Group. None of these impact on the accounting policies of the Group. However, additional disclosure has been included in note 18(b) to satisfy the new disclosure requirements introduced by the amendments to HKAS 7, Statement of cash flows: Disclosure initiative, which require entities to provide disclosures that enable users of financial statements to evaluate changes in liabilities arising from financing activities, including both changes arising from cash flows and non-cash changes.

The Group has not applied any new standard or interpretation that is not yet effective for the current accounting period.

# (d) Subsidiaries and non-controlling interests

Subsidiaries are entities controlled by the Group. The Group controls an entity when it is exposed, or has rights, to variable returns from its involvement with the entity and has the ability to affect those returns through its power over the entity. When assessing whether the Group has power, only substantive rights (held by the Group and other parties) are considered.

An investment in a subsidiary is consolidated into the consolidated financial statements from the date that control commences until the date that control ceases. Intra-group balances and transactions and cash flows and any unrealised profits arising from intra-group transactions are eliminated in full in preparing the consolidated financial statements. Unrealised losses resulting from intra-group transactions are eliminated in the same way as unrealised gains but only to the extent that there is no evidence of impairment.

Non-controlling interests represent the equity in a subsidiary not attributable directly or indirectly to the Company, and in respect of which the Group has not agreed any additional terms with the holders of those interests which would result in the Group as a whole having a contractual obligation in respect of those interests that meets the definition of a financial liability. For each business combination, the Group can elect to measure any non-controlling interests either at fair value or at the non-controlling interests' proportionate share of the subsidiary's net identifiable assets.

Non-controlling interests are presented in the consolidated statement of financial position within equity, separately from equity attributable to the equity shareholders of the Company. Non-controlling interests in the results of the Group are presented on the face of the consolidated income statement and the consolidated income statement and other comprehensive income as an allocation of the total profit or loss and total comprehensive income for the year between non-controlling interests and the equity shareholders of the Company. Loans from holders of non-controlling interests and other contractual obligations towards these holders are presented as financial liabilities in the consolidated statement of financial position in accordance with notes 2(n) and 2(o), depending on the nature of liability.

Changes in the Group's interests in a subsidiary that do not result in a loss of control are accounted for as equity transactions, whereby adjustments are made to the amounts of controlling and non-controlling interests within consolidated equity to reflect the change in relative interests, but no adjustments are made to goodwill and no gain or loss is recognised.

When the Group loses control of a subsidiary, it is accounted for as a disposal of the entire interest in that subsidiary, with a resulting gain or loss being recognised in profit or loss. Any interest retained in that former subsidiary at the date when control is lost is recognised at fair value and this amount is regarded as the fair value on initial recognition of a financial asset (see note 2(e)) or, when appropriate, the cost on initial recognition of an investment in an associate or joint venture.

In the Company's statement of financial position, an investment in a subsidiary is stated at cost less impairment losses (see note 2(j)).

For the year ended 31 December 2017 (Expressed in RMB unless otherwise indicated)

# 2 SIGNIFICANT ACCOUNTING POLICIES (Continued)

### (e) Other investments in debt and equity securities

The Group's and the Company's policies for investments in debt and equity securities, other than investments in subsidiaries, associates and joint ventures, are as follows:

Investments in debt and equity securities are initially stated at fair value, which is their transaction price unless it is determined that the fair value at initial recognition differs from the transaction price and that fair value is evidenced by a quoted price in an active market for an identical asset or liability or based on a valuation technique that uses only data from observable markets. Cost includes attributable transaction costs, except where indicated otherwise below. These investments are subsequently accounted for as follows, depending on their classification:

Investments in securities held for trading are classified as current assets. Any attributable transaction costs are recognised in the income statement as incurred. At the end of each reporting period the fair value is remeasured, with any resultant gain or loss being recognised in the income statement. The net gain or loss recognised in the income statement does not include any dividends or interest earned on these investments as these are recognised in accordance with the policies set out in notes 2(t)(iv) and (t)(v).

Dated debt securities that the Group and/or the Company have the positive ability and intention to hold to maturity are classified as held-to-maturity securities. Held-to-maturity securities are stated at amortised cost less impairment losses (see note 2(j)).

Investments in securities which do not fall into any of the above categories are classified as available-forsale securities. At the end of the reporting period the fair value is remeasured, with any resultant gain or loss being recognised in other comprehensive income and accumulated separately in equity in the fair value reserve. As an exception to this, investments in equity securities that do not have a quoted price in an active market for an identical instrument and whose fair value cannot otherwise be reliably measured are recognised in the statement of financial position at cost less impairment losses (see note 2(j)). Dividend income from equity securities and interest income from debt securities calculated using the effective interest method are recognised in the income statement in accordance with the policies set out in notes 2(t)(iv) and 2(t)(v), respectively. Foreign exchange gains and losses resulting from changes in the amortised cost of debt securities are also recognised in the income statement.

When the investments are derecognised or impaired (see note 2(j)), the cumulative gain or loss recognised in equity is reclassified to the income statement. Investments are recognised/derecognised on the date the Group commits to purchase/sell the investments or they expire.

# (f) Derivative financial instruments

Derivative financial instruments are recognised initially at fair value. At the end of each reporting period the fair value is remeasured. The gain or loss on remeasurement to fair value is recognised immediately in the income statement.

For the year ended 31 December 2017 (Expressed in RMB unless otherwise indicated)

# 2 SIGNIFICANT ACCOUNTING POLICIES (Continued)

### (g) Property, plant and equipment

Items of property, plant and equipment are stated at cost less accumulated depreciation and impairment losses (see note 2(i)).

The cost of self-constructed items of property, plant and equipment includes the cost of materials, direct labour, the initial estimate, where relevant, of the costs of dismantling and removing the items and restoring the site on which they are located, and an appropriate proportion of production overheads and borrowing costs (see note 2(v)).

Gains or losses arising from the retirement or disposal of an item of property, plant and equipment are determined as the difference between the net disposal proceeds and the carrying amount of the item and are recognised in the income statement on the date of retirement or disposal.

Depreciation is calculated to write off the cost or valuation of items of property, plant and equipment, less their estimated residual value, if any, using the straight line method over their estimated useful lives as follows:

-	Leasehold improvements	The shorter of the remaining term of the lease or 5 years
-	Furniture and fittings	5 to 10 years
_	Computers and office equipment	3 to 10 years
_	Plant and machinery	5 to 12 years
_	Motor vehicles	5 to 10 years

When 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. Both the useful life of an asset and its residual value, if any, are reviewed annually.

### (h) Intangible assets (other than goodwill)

Expenditure on an internal research and development projects is distinguished between the expenditures during the research phase and expenditures during the development phase. Research activities involve original and planned investigation undertaken with the prospect of gaining new scientific or technical knowledge and understanding. Development activities involve a plan or design for the production of new or substantially improved materials, devices, products or processes before the start of commercial production or use.

Expenditure on research activities is recognised as an expense in the period in which it is incurred. Expenditure on development activities is capitalised if the product or process is technically and commercially feasible and the Group has sufficient resources and the intention to complete development. The expenditure capitalised includes the costs of materials, direct labour, and an appropriate proportion of overheads and borrowing costs, where applicable (see note 2(v)). Capitalised development costs are stated at cost less accumulated amortisation and impairment losses (see note 2(j)). Other development expenditure is recognised as an expense in the period in which it is incurred.

Other intangible assets that are acquired by the Group are stated at cost less accumulated amortisation (where the estimated useful life is finite) and impairment losses (see note 2(j)). Expenditure on internally generated goodwill and brands is recognised as an expense in the period in which it is incurred.

For the year ended 31 December 2017 (Expressed in RMB unless otherwise indicated)

#### 2 **SIGNIFICANT ACCOUNTING POLICIES** (Continued)

#### (h) Intangible assets (other than goodwill) (Continued)

Amortisation of intangible assets with finite useful lives is charged to profit or loss on a straight-line basis over the assets' estimated useful lives. Other than certain trade name which has indefinite useful life, the following intangible assets with finite useful lives are amortised from the date they are available for use and their estimated useful lives are as follows:

Patents and technology know-how

5 years

Trade name

5 years

Both the period and method of amortisation are reviewed annually.

Intangible assets are not amortised while their useful lives are assessed to be indefinite. Any conclusion that the useful life of an intangible asset is indefinite is reviewed annually to determine whether events and circumstances continue to support the indefinite useful life assessment for that asset. If they do not, the change in the useful life assessment from indefinite to finite is accounted for prospectively from the date of change and in accordance with the policy for amortisation of intangible assets with finite lives as set out above.

#### (i) Leased assets

An arrangement, comprising a transaction or a series of transactions, is or contains a lease if the Group determines that the arrangement conveys a right to use a specific asset or assets for an agreed period of time in return for a payment or a series of payments. Such a determination is made based on an evaluation of the substance of the arrangement and is regardless of whether the arrangement takes the legal form of a lease.

#### (i) Classification of assets leased to the Group

Assets that are held by Group under leases which transfer to the Group substantially all the risks and rewards of ownership are classified as being held under finance leases. Leases which do not transfer substantially all the risks and rewards of ownership to the Group are classified as operating leases.

#### (ii) Assets acquired under finance leases

Where the Group acquires 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 recognised as property, plant and equipment 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 Group will obtain ownership of the asset, the life of the asset, as set out in note 2(g). 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 the income statement 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 the income statement in the accounting period in which they are incurred.

For the year ended 31 December 2017 (Expressed in RMB unless otherwise indicated)

# 2 SIGNIFICANT ACCOUNTING POLICIES (Continued)

### (i) Leased assets (Continued)

# (iii) Operating lease charges

Where the Group has the use of assets held under operating leases, payments made under the leases are charged to the income statement in equal instalments over the accounting periods covered by the lease term, except where an alternative basis is more representative of the pattern of benefits to be derived from the leased asset. Lease incentives received are recognised in the income statement as an integral part of the aggregate net lease payments made. Contingent rentals are charged to the income statement in the accounting period in which they are incurred.

# (j) Impairment of assets

### (i) Impairment of investments in debt and equity securities, and other receivables

Investments in debt and equity securities, and other current and non-current receivables that are stated at cost or amortised cost are reviewed at the end of each reporting period to determine whether there is objective evidence of impairment. Objective evidence of impairment includes observable data that comes to the attention of the Group about one or more of the following loss events:

- significant financial difficulty of the debtor;
- a breach of contract, such as a default or delinquency in interest or principal payments;
- it becoming probable that the debtor will enter bankruptcy or other financial reorganisation;
- significant changes in the technological, market, economic or legal environment that have an adverse effect on the debtor; and
- a significant or prolonged decline in the fair value of an investment in an equity instrument below its cost.

If any such evidence exists, any impairment loss is determined and recognised as follows:

For trade and other current receivables and other financial assets carried at amortised cost, the impairment loss is measured as the difference between the asset's carrying amount and the present value of estimated future cash flows, discounted at the financial asset's original effective interest rate (i.e. the effective interest rate computed at initial recognition of these assets), where the effect of discounting is material. This assessment is made collectively where these financial assets share similar risk characteristics, such as similar past due status, and have not been individually assessed as impaired. Future cash flows for financial assets which are assessed for impairment collectively are based on historical loss experience for assets with credit risk characteristics similar to the collective group.

For the year ended 31 December 2017 (Expressed in RMB unless otherwise indicated)

# 2 SIGNIFICANT ACCOUNTING POLICIES (Continued)

### (j) Impairment of assets (Continued)

# (i) Impairment of investments in debt and equity securities, and other receivables (Continued)

If in a subsequent period the amount of an impairment loss decreases and the decrease can be linked objectively to an event occurring after the impairment loss was recognised, the impairment loss is reversed through the income statement. A reversal of an impairment loss shall not result in the asset's carrying amount exceeding that which would have been determined had no impairment loss been recognised in prior years.

Impairment losses are written off against the corresponding assets directly, except for impairment losses recognised in respect of trade debtors and bills receivable included within trade and other receivables, whose recovery is considered doubtful but not remote. In this case, the impairment losses for doubtful debts are recorded using an allowance account. When the Group is satisfied that recovery is remote, the amount considered irrecoverable is written off against trade debtors and bills receivable directly and any amounts held in the allowance account relating to that debt are reversed. Subsequent recoveries of amounts previously charged to the allowance account are reversed against the allowance account. Other changes in the allowance account and subsequent recoveries of amounts previously written off directly are recognised in the income statement.

#### (ii) Impairment of other assets

Internal and external sources of information are reviewed at the end of each reporting period to identify indications that the following assets may be impaired or, except in the case of goodwill, an impairment loss previously recognised no longer exists or may have decreased:

- property, plant and equipment;
- intangible assets; and
- investments in subsidiaries in the Company's statement of financial position.

If any such indication exists, the asset's recoverable amount is estimated. In addition, for goodwill, intangible assets that are not yet available for use and intangible assets that have indefinite useful lives, the recoverable amount is estimated annually whether or not there is any indication of impairment.

### Calculation of recoverable amount

The recoverable amount of an asset is the greater of its fair value less costs of disposal and value in use. In assessing value in use, the estimated future cash flows are discounted to their present value using a pre-tax discount rate that reflects current market assessments of time value of money and the risks specific to the asset. Where an asset does not generate cash inflows largely independent of those from other assets, the recoverable amount is determined for the smallest group of assets that generates cash inflows independently (i.e. a cash-generating unit).

For the year ended 31 December 2017 (Expressed in RMB unless otherwise indicated)

# 2 SIGNIFICANT ACCOUNTING POLICIES (Continued)

### (j) Impairment of assets (Continued)

### (ii) Impairment of other assets (Continued)

Recognition of impairment losses

An impairment loss is recognised in the income statement if the carrying amount of an asset, or the cash-generating unit to which it belongs, exceeds its recoverable amount. Impairment losses recognised in respect of cash-generating units are allocated to reduce the carrying amount of the other assets in the unit (or group of units) 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).

Reversals of impairment losses

An impairment loss is reversed if there has been a favourable change in the estimates used to determine the recoverable amount.

A reversal of an impairment loss is limited to the asset's carrying amount that would have been determined had no impairment loss been recognised in prior years. Reversals of impairment losses are credited to the income statement in the year in which the reversals are recognised.

#### (k) Inventories

Inventories are carried at the lower of cost and net realisable value.

Cost is calculated using the weighted average cost formula and comprises all cost of purchase and other costs incurred in bringing the inventories to their present location and condition.

Net realisable value is the estimated selling price in the ordinary course of business less the estimated costs of completion and the estimated costs necessary to make the sale.

When inventories are sold, the carrying amount of those inventories is recognised as an expense in the period in which the related revenue is recognised. The amount of any write-down of inventories to net realisable value and all losses of inventories are recognised as an expense in the period the write-down or loss occurs. The amount of any reversal of any write-down of inventories is recognised as a reduction in the amount of inventories recognised as an expense in the period in which the reversal occurs.

Construction contracts are contracts specifically negotiated with a customer for the construction of an asset or a group of assets, where the customer is able to specify the major structural elements of the design. The accounting policy for contract revenue is set out in note 2(t)(iii). When the outcome of a construction contract can be estimated reliably, contract costs are recognised as an expense by reference to the stage of completion of the contract at the end of the reporting period. When it is probable that total contract costs will exceed total contract revenue, the expected loss is recognised as an expense immediately. When the outcome of a construction contract cannot be estimated reliably, contract costs are recognised as an expense in the period in which they are incurred.

For the year ended 31 December 2017 (Expressed in RMB unless otherwise indicated)

# 2 SIGNIFICANT ACCOUNTING POLICIES (Continued)

# (I) Construction contracts

Construction contracts in progress at the end of the reporting period are recorded in the statement of financial position at the net amount of costs incurred plus recognised profit less recognised losses and progress billings, and are presented in the statement of financial position as the "Gross amounts due from customers for contract work" (as an asset) or the "Gross amounts due to customers for contract work" (as a liability), as applicable. Progress billings not yet paid by the customer are included in the statement of financial position under "Trade and other receivables".

### (m) Trade and other receivables

Trade and other receivables are initially recognised at fair value and thereafter stated at amortised cost using the effective interest method, less allowance for impairment of doubtful debts (see note 2(j)), except where the receivables are interest-free loans made to related parties without any fixed repayment terms or the effect of discounting would be immaterial. In such cases, the receivables are stated at cost less allowance for impairment of doubtful debts.

# (n) Interest-bearing borrowings

Interest-bearing borrowings are recognised initially at fair value less attributable transaction costs. Subsequent to initial recognition, interest-bearing borrowings are stated at amortised cost with any difference between the amount initially recognised and redemption value being recognised in the income statement over the period of the borrowings, together with any interest and fees payable, using an effective interest method.

# (o) Trade and other payables

Trade and other payables are initially recognised at fair value. Except for financial guarantee liabilities measured in accordance with note 2(s)(i), trade and other payables are subsequently stated at amortised costs unless the effect of discounting would be immaterial, in which case they are stated at cost.

# (p) Cash and cash equivalents

Cash and cash equivalents comprise cash at bank and on hand, demand deposits with banks and other financial institutions, and short-term, highly liquid investments that are readily convertible into known amounts of cash and which are subject to an insignificant risk of changes in value, having been within three months of maturity at acquisition. Bank overdrafts that are repayable on demand and form an integral part of the Group's cash management are also included as a component of cash and cash equivalents for the purpose of the consolidated cash flow statement.

For the year ended 31 December 2017 (Expressed in RMB unless otherwise indicated)

# 2 SIGNIFICANT ACCOUNTING POLICIES (Continued)

# (q) Employee benefits

(i) Short-term employee benefits and contributions to defined contribution retirement plans
Salaries, annual bonuses, paid annual leave, contributions to defined contribution retirement plans

and the cost of non-monetary benefits are accrued in the year in which the associated services are rendered by employees. Where payment or settlement is deferred and the effect would be material, these amounts are stated at their present values.

### (ii) Share-based payments

The fair value of share options granted to employees is recognised as an employee cost with a corresponding increase in the share-based compensation reserve within equity. The fair value is measured at grant date using the binomial option pricing model and/or Black-Scholes option pricing model, taking into account the terms and conditions upon which the options were granted. Where the employees have to meet vesting conditions before becoming unconditionally entitled to the options, the total estimated fair value of the options is spread over the vesting period, taking into account the probability that the options will vest.

During the vesting period, the number of share options that is expected to vest is reviewed. Any resulting adjustment to the cumulative fair value recognised in prior years is charged/credited to the income statement for the year of the review, unless the original employee expenses qualify for recognition as an asset, with a corresponding adjustment to the share-based compensation reserve. On vesting date, the amount recognised as an expense is adjusted to reflect the actual number of options that vest (with a corresponding adjustment to the share-based compensation reserve) except where forfeiture is only due to not achieving vesting conditions that relate to the market price of the Company's shares. The equity amount is recognised in the share-based compensation reserve until either the option is exercised (when it is transferred to the share capital) or the option expires (when it is released directly to retained profits).

### (iii) Termination benefits

Termination benefits are recognised at the earlier of when the Group can no longer withdraw the offer of those benefits and when it recognises restructuring costs involving the payment of termination benefits.

For the year ended 31 December 2017 (Expressed in RMB unless otherwise indicated)

# 2 SIGNIFICANT ACCOUNTING POLICIES (Continued)

# (r) Income tax

Income tax for the year comprises current tax and movements in deferred tax assets and liabilities. Current tax and movements in deferred tax assets and liabilities are recognised in the income statement except to the extent that they relate to a business combination or items recognised in other comprehensive income or directly in equity, in which case the relevant amounts of tax are recognised in other comprehensive income or directly in equity, respectively.

Current tax is the expected tax payable on the taxable income for the year, using tax rates enacted or substantially enacted at the end of the reporting period, and any adjustment to tax payable in respect of previous years.

Deferred tax assets and liabilities arise from deductible and taxable temporary differences respectively, being the differences between the carrying amounts of assets and liabilities for financial reporting purposes and their tax bases. Deferred tax assets also arise from unused tax losses and unused tax credits.

Apart from certain limited exceptions, all deferred tax liabilities, and all deferred tax assets to the extent that it is probable that future taxable profits will be available against which the asset can be utilised, are recognised. Future taxable profits that may support the recognition of deferred tax assets arising from deductible temporary differences include those that will arise from the reversal of existing taxable temporary differences, provided those differences relate to the same taxation authority and the same taxable entity, and are expected to reverse either in the same period as the expected reversal of the deductible temporary difference or in periods into which a tax loss arising from the deferred tax asset can be carried back or forward. The same criteria are adopted when determining whether existing taxable temporary differences support the recognition of deferred tax assets arising from unused tax losses and credits, that is, those differences are taken into account if they relate to the same taxation authority and the same taxable entity, and are expected to reverse in a period, or periods, in which the tax loss or credit can be utilised.

The limited exceptions to recognition of deferred tax assets and liabilities are those temporary differences arising from goodwill not deductible for tax purposes, the initial recognition of assets or liabilities that affect neither accounting nor taxable profit (provided that they are not part of a business combination), and temporary differences relating to investments in subsidiaries to the extent that, in the case of taxable differences, the Group controls the timing of 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 amount of deferred tax recognised is measured based on the expected manner of realisation or settlement of the carrying amount of the assets and liabilities, using tax rates enacted or substantively enacted at the end of the reporting period. Deferred tax assets and liabilities are not discounted.

For the year ended 31 December 2017 (Expressed in RMB unless otherwise indicated)

# 2 SIGNIFICANT ACCOUNTING POLICIES (Continued)

# (r) Income tax (Continued)

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.

Current tax balances and deferred tax balances, and movements therein, are presented separately from each other and are not offset. Current tax assets are offset against current tax liabilities, and deferred tax assets against deferred tax liabilities, if the Company or the Group has the legally enforceable right to set off current tax assets against current tax liabilities and the following additional conditions are met:

- in the case of current tax assets and liabilities, the Company or the Group intends either to settle on a
  net basis, or to realise the asset and settle the liability simultaneously; or
- in the case of deferred tax assets and liabilities, if they relate to income taxes levied by the same taxation authority on either:
  - the same taxable entity; or
  - different taxable entities, which, in each future period in which significant amounts of deferred tax liabilities or assets are expected to be settled or recovered, intend to realise the current tax assets and settle the current tax liabilities on a net basis or realise and settle simultaneously.

#### (s) Provisions and contingent liabilities

# (i) Financial guarantees issued

Financial guarantees are contracts that require the issuer (i.e. the guarantor) to make specified payments to reimburse the beneficiary of the guarantee (the "holder") for a loss the holder incurs because a specified debtor fails to make payment when due in accordance with the terms of a debt instrument.

Where the Group issues a financial guarantee, the fair value of the guarantee is initially recognised as deferred income within trade and other payables. The fair value of financial guarantees is 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 recognised in accordance with the Group's policies applicable to that category of asset. Where no such consideration is received or receivable, an immediate expense is recognised in profit or loss on initial recognition of any deferred income.

The amount of the guarantee initially recognised as deferred income is amortised in profit or loss over the term of the guarantee as income from financial guarantees issued. In addition, provisions are recognised in accordance with note 2(s)(iii) if and when (i) it becomes probable that the holder of the guarantee will call upon the Group under the guarantee, and (ii) the amount of that claim on the Group is expected to exceed the amount currently carried in trade and other payables in respect of that guarantee i.e. the amount initially recognised, less accumulated amortisation.

For the year ended 31 December 2017 (Expressed in RMB unless otherwise indicated)

# 2 SIGNIFICANT ACCOUNTING POLICIES (Continued)

### (s) Provisions and contingent liabilities (Continued)

### (ii) Contingent liabilities assumed in business combinations

Contingent liabilities assumed in a business combination which are present obligations at the date of acquisition are initially recognised at fair value, provided the fair value can be reliably measured. After their initial recognition at fair value, such contingent liabilities are recognised at the higher of the amount initially recognised, less accumulated amortisation where appropriate, and the amount that would be determined in accordance with note 2(s)(iii). Contingent liabilities assumed in a business combination that cannot be reliably fair valued or were not present obligations at the date of acquisition are disclosed in accordance with note 2(s)(iii).

### (iii) Other provisions and contingent liabilities

Provisions are recognised for other liabilities of uncertain timing or amount when the Group has a legal or constructive obligation arising as a result of a past event, it is probable that an outflow of economic benefits will be required to settle the obligation and a reliable estimate can be made. Where the time value of money is material, provisions are stated at the present value of the expenditure expected to settle the obligation.

Where it is not probable that an outflow of economic benefits will be required, or the amount cannot be estimated reliably, the obligation is disclosed as a contingent liability, unless the probability of outflow of economic benefits is remote. Possible obligations, whose existence will only be confirmed by the occurrence or non-occurrence of one or more future events are also disclosed as contingent liabilities unless the probability of outflow of economic benefits is remote.

### (t) Revenue recognition

Revenue is measured at the fair value of the consideration received or receivable. Provided it is probable that the economic benefits will flow to the Group and the revenue and costs, if applicable, can be measured reliably, revenue is recognised in the income statement as follows:

### (i) Sale of goods

Revenue from the sale of goods is measured at the fair value of the consideration received or receivable, net of returns and allowances, trade discounts and volume rebates and excluding value added tax or other sales taxes. Revenue is recognised when the significant risks and rewards of ownership have been transferred to the buyer which is taken to be the point in time when the final testing of goods is completed at the customers' premises and there is no continuing management involvement with the goods.

### (ii) Service fee income

Service fee income is recognised when services are rendered to customers. For consulting service, the service fee income is recognised on a straight-line basis over the service period. For after-sales services, service fee income is deferred over the warranty period or when services are rendered to customers if the after-sales services are not covered by the warranty period.

For the year ended 31 December 2017 (Expressed in RMB unless otherwise indicated)

# 2 SIGNIFICANT ACCOUNTING POLICIES (Continued)

# (t) Revenue recognition (Continued)

### (iii) Construction contract revenue

When the outcome of a construction contract can be estimated reliably, revenue from a fixed price contract is recognised using the percentage of completion method, measured by reference to the percentage of contract costs incurred to date to estimate total contract costs for the contract.

When the outcome of a construction contract cannot be estimated reliably, revenue is recognised only to the extent of contract costs incurred that it is probable will be recoverable.

### (iv) Dividends

Dividend income from unlisted investments is recognised when the shareholder's right to receive payment is established.

# (v) Interest income

Interest income from bank deposits is recognised as it accrues using the effective interest method.

### (vi) Government grants

Government grants are recognised in the statement of financial position initially when there is reasonable assurance that they will be received and that the Group will comply with the conditions attaching to them. Grants that compensate the Group for expenses incurred are recognised as income in profit or loss on a systematic basis in the same periods in which the expenses are incurred. Grants that compensate the Group for the cost of an asset are deducted from the carrying amount of the asset and consequently are effectively recognised in profit or loss over the useful life of the asset by way of reduced depreciation expense.

# (u) Translation of foreign currency transactions

Foreign currency transactions during the year are translated at the foreign exchange rates ruling at the transaction dates. Monetary assets and liabilities denominated in foreign currencies are translated at the foreign exchange rates ruling at the end of the reporting period. Exchange gains and losses are recognised in the income statement.

Non-monetary assets and liabilities that are measured in terms of historical cost in a foreign currency are translated using the foreign exchange rates ruling at the transaction dates. Non-monetary assets and liabilities denominated in foreign currencies that are stated at fair value are translated using the foreign exchange rates ruling at the dates the fair value was measured.

The results of foreign operations are translated into RMB at the exchange rates approximating the foreign exchange rates ruling at the dates of transactions. Statement of financial position items are translated into RMB at the closing foreign exchange rates at the end of the reporting period. The resulting exchange differences are recognised in other comprehensive income and presented separately in equity in the exchange reserves.

On disposal of a foreign operation, the cumulative amount of the exchange differences relating to that foreign operation is reclassified from equity to profit or loss when the profit or loss on disposal is recognised.

For the year ended 31 December 2017 (Expressed in RMB unless otherwise indicated)

# 2 SIGNIFICANT ACCOUNTING POLICIES (Continued)

### (v) Borrowing costs

Borrowing costs that are directly attributable to the acquisition, construction or production of an asset which necessarily takes a substantial period of time to get ready for its intended use or sale are capitalised as part of the cost of that asset. Other borrowing costs are expensed in the period in which they are incurred.

The capitalisation 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. Capitalisation 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.

### (w) Related parties

For the purposes of these financial statements, (a related party is a person or entity that is related to the Group.

- (i) A person, or a close member of that person's family, is related to the Group if:
  - (a) that person has control or joint control over the Group;
  - (b) that person has significant influence over the Group; or
  - (c) that person is a member of the key management personnel of the Group or of a parent of the Group.
- (ii) An entity is related to the Group if any of the following conditions applies:
  - (a) the entity and the Group are members of the same group;
  - (b) the entity is an associate or joint venture of the Group or an associate or joint venture of a member of a group of which the entity is a member;
  - (c) both entities are joint ventures of the same third party;
  - (d) the entity is a joint venture of a third entity and the Group is an associate of the same third entity, or vice versa;
  - (e) the entity is a post-employment plan for the benefit of employees of either the Group or an entity related to the Group;
  - (f) the entity is controlled or jointly-controlled by a person identified in (i);
  - (g) a person identified in (i)(a) has significant influence over the entity or is a member of the key management personnel of the entity (or of a parent of the entity); or
  - (h) The entity, or any member of a group of which it is a part, provides key management personnel services to the Group or to the Group's parent.

Close members of the family of a person are those family members who may be expected to influence, or be influenced by, that individual in their dealings with the entity.

For the year ended 31 December 2017 (Expressed in RMB unless otherwise indicated)

# 2 SIGNIFICANT ACCOUNTING POLICIES (Continued)

# (x) Segment reporting

Operating segments, and the amounts of each segment item reported in the financial statements, are identified from the financial information provided regularly to the Group's most senior executive management for the purposes of allocating resources to, and assessing the performance of, the Group's various lines of business and geographical locations.

Individually material operating segments are not aggregated for financial reporting purposes unless the segments have similar economic characteristics and are similar in respect of the nature of products and services, the nature of production processes, the type or class of customers, the methods used to distribute the products or provide the services, and the nature of the regulatory environment. Operating segments which are not individually material may be aggregated if they share a majority of these criteria.

### 3 REVENUE

The Group are principally engaged in integrated and comprehensive urban smart energy saving services. Its business covers three major segments including smart transportation, smart building and complex and smart energy, providing the customers with smart energy management products, solutions and integrated services throughout their full life cycles.

Revenue represents the sales value of goods sold to customers, income from provision of services and revenue from construction contracts. The amounts of each significant category of revenue recognised during the years ended 31 December 2017 and 2016 are as follows:

	2017 RMB'000	2016 RMB'000
Sales of goods Provision of services Contract revenue	377,202 92,933 1,509,835	588,908 78,782 1,118,651
	1,979,970	1,786,341

For the year ended 31 December 2017 (Expressed in RMB unless otherwise indicated)

# 4 SEGMENT REPORTING

The Group manages its businesses by divisions. In a manner consistent with the way in which information is reported internally to the Group's most senior executive management for the purposes of resource allocation and performance assessment, the Group has presented the following three reportable segments. No operating segments have been aggregated to form the following reportable segments:

Smart transportation business ("STB"): It comprises a series of proprietary software and hardware products and systems for rail transit such as Integrated Supervision and Control System (ISCS), Building Automation System (BAS) for rail transit and safety door system, providing integrated solutions with full life cycles ranging from planning, procurement, installation and commissioning to aftersales service.

Smart building and complex business ("SBB"): It provides integrated intelligence solutions and efficiency management services, namely integrated energy consumption monitoring, energy-saving consultation and reformation services and integration and product supply of intelligence system for buildings, aimed at different building and complex and rendering full life-cycle services of which reduces energy consumption and operating costs of buildings.

Smart energy business ("SEB"): It comprised a series of leading technologies such as regional energy planning, integrated utilization of industrial waste heat recovery technology, heat pump technology, independent temperature and humidity control technology and variable air rate technology applied in the energy cascade utilization as well as optimization and transformation of energy system. The Group possess self-owned core leading technologies (in the field of urban heating network) such as heating network & heating source monitoring and optimal regulation, distributed variable frequency heating technology, cooling and heating network balancing technology, combined multi-heat sources heating technology.

For the year ended 31 December 2017 (Expressed in RMB unless otherwise indicated)

# 4 SEGMENT REPORTING (Continued)

### (a) Information about reportable segments

For the purposes of assessing segment performance and allocating resources between segments, the Group's senior executive management monitors the results attributable to each reportable segment on the following bases:

Revenue and expenses are allocated to the reportable segments with reference to sales generated by those segments and the expenses incurred by those segments or which otherwise arise from the depreciation or amortisation of assets attributable to those segments. However, other than reporting inter-segment sales of products, assistance provided by one segment to another, including sharing of assets and technical knowhow, is not measured.

The measure used for reporting segment results is profit or loss before income tax adjusted for items not specifically attributed to individual segments, such as finance cost, depreciation and amortisation, and certain allocated head office and corporate expenses/(gains). Segment profit or loss is used to measure performance as management believes that such information is the most relevant in evaluating the results of certain segments relative to other entities that operate within these industries.

In addition to receiving segment information concerning segment results, management is provided with segment information concerning revenue (including inter-segment sales), interest income and impairment losses. Inter-segment pricing is determined on a consistent basis using market benchmarks.

Segment assets and liabilities are not regularly reported to the Group's senior executive management and therefore information of reportable segment assets and liabilities are not presented in the consolidated financial statements.

Information regarding the Group's reportable segments as provided to the Group's most senior executive management for the purposes of resource allocation and assessment of segment performance for the years ended 31 December 2017 and 2016 is set out below:

	STB		SE	SBB		SEB		Total	
	2017 RMB'000	2016 RMB'000	2017 RMB'000	2016 RMB'000	2017 RMB'000	2016 RMB'000	2017 RMB'000	2016 RMB'000	
	NIVID UUU	NIVID UUU	NIVID UUU	UINID 000	NIVID UUU	UIND 000	NIVID 000	NIVID UUU	
Reportable segment revenue	534,792	677,632	918,161	633,308	527,017	475,401	1,979,970	1,786,341	
Reportable segment profit	131,166	142,372	117,744	87,784	180,036	146,938	428,946	377,094	
Interest income Impairment losses	5,304 7,873	4,438 7,243	6,739 11,057	11,411 7,610	19,274 6,956	8,219 5,081	31,317 25,886	24,068 19,934	

For the year ended 31 December 2017 (Expressed in RMB unless otherwise indicated)

# 4 SEGMENT REPORTING (Continued)

# (b) Reconciliations of reportable segment profit or loss

	2017 RMB'000	2016 RMB'000
Profit Reportable segment profit Depreciation and amortisation Finance costs Unallocated head office and corporate (expenses)/gains	428,946 (97,148) (13,500) (11,919)	377,094 (79,582) (30,897) 1,413
Consolidated profit before taxation	306,379	268,028

# (c) Geographic information

For the year ended 31 December 2017, as the Group does not have material operations outside the PRC, no geographic segment information is presented.

# 5 OTHER REVENUE AND OTHER NET GAIN

# (a) Other revenue

	2017 RMB'000	2016 RMB'000
Government grants Interest income Others	6,204 31,317 808	15,650 24,068 444
	38,329	40,162

# (b) Other net gain

	2017 RMB'000	2016 RMB'000
Net foreign exchanges gain Others	4,564 (1,742)	31,871 (3,872)
	2,822	27,999

For the year ended 31 December 2017 (Expressed in RMB unless otherwise indicated)

# 6 PROFIT BEFORE TAXATION

Profit before taxation is arrived at after charging:

### (a) Finance costs

(b)

	2017 RMB'000	2016 RMB'000
Interest on loans and borrowings	13,500	30,897
Staff costs		
	2017 RMB'000	2016 RMB'000
Salaries and other benefits  Contributions to defined contribution retirement schemes  Equity settled share-based payment expenses (note 22)	116,045 12,368 -	110,397 11,478 3,363
	128,413	125,238

Staff costs include directors' and senior management's remuneration (notes 8 and 28(d)).

Pursuant to the relevant labour rules and regulations in the PRC, the Group's PRC subsidiaries participate in a defined contribution retirement scheme (the "Scheme") organised by the local authorities whereby the subsidiaries are required to make contributions to the Scheme at 19% of the eligible employees' salaries for year ended 31 December 2017 (2016: 20% to 19%). Contributions to the Scheme vest immediately.

For the Group's subsidiaries in countries other than the PRC, the Group pays contributions to publicly or privately administered pension insurance plans on a mandatory, contractual or voluntary basis. The Group has no further payment obligations once the contributions have been paid. The contributions are recognised as employee benefit expenses when they are due. Prepaid contributions are recognised as an asset to the extent that a cash refund or a reduction in the future payments is available.

Save for the above, the Group has no other material obligation for payment of retirement benefits beyond the contributions described above.

For the year ended 31 December 2017 (Expressed in RMB unless otherwise indicated)

# 6 PROFIT BEFORE TAXATION (Continued)

# (c) Other items

	2017 RMB'000	2016 RMB'000
Cost of inventories (note 16(b))	1,347,694	1,264,058
Research and development expenses	5,544	6,157
Amortisation of intangible assets and lease prepayment	62,996	47,706
Depreciation	34,152	31,876
Impairment losses		
- trade and other receivables	25,886	19,934
Operating lease charges	14,299	12,315
Auditors' remuneration	2,500	2,410
- audit services	2,197	2,410
– non-audit services	303	-

# 7 INCOME TAX

# (a) Income tax in the consolidated income statement represents:

	2017 RMB'000	2016 RMB'000
Current tax Provision for the year Under provision in respect of prior years	37,830 2,028	31,859 28
Deformed to	39,858	31,887
<b>Deferred tax</b> Origination of temporary differences (note 23(a))	3,630	4,416
	43,488	36,303

For the year ended 31 December 2017 (Expressed in RMB unless otherwise indicated)

# 7 INCOME TAX (Continued)

# (b) Reconciliation between income tax expense and profit before taxation at applicable tax rates:

	Note	2017 RMB'000	2016 RMB'000
Profit before taxation		306,379	268,028
Expected tax calculated at the respective tax rates	(i)/(ii)	77,565	66,894
Tax effect on non-deductible expenses		554	494
Effect of tax concession	(iii)	(38,649)	(32,394)
Tax effect of non-taxable income		(974)	(4,517)
Tax effect of unused tax losses not recognised		3,082	5,808
Tax effect of utilisation of tax losses not recognised			
in prior years		(118)	(10)
Under provision in prior years		2,028	28
Actual income tax expense		43,488	36,303

#### Notes:

- (i) The Company is subject to Singapore corporate income tax at 17% for the years ended 31 December 2017 and 2016. No provision for Singapore income tax was made because the Company sustained tax losses for the years ended 31 December 2016 and 2017.
- (ii) The subsidiaries of the Group established in the PRC are subject to PRC Corporate Income Tax rate of 25% for the years ended 31 December 2016 and 2017.

The subsidiary of the Group established in the Cayman Islands is not subject to any income tax pursuant to the rules and regulations of the Cayman Islands.

The subsidiary of the Group established in Hong Kong is subject to Hong Kong Profits Tax rate of 16.5% for the years ended 31 December 2016 and 2017.

(iii) Technovator Beijing is recognised as a high and new technology enterprise and is eligible to enjoy a preferential tax rate of 15% until December 2020.

Tongfang Energy Saving is recognised as a high and new technology enterprise and is eligible to enjoy a preferential tax rate of 15% until December 2019.

For the year ended 31 December 2017 (Expressed in RMB unless otherwise indicated)

#### 8 **DIRECTORS' REMUNERATION**

Directors' remuneration disclosed pursuant to section 383(1) of the new Hong Kong Companies Ordinance and Part 2 of the Companies (Disclosure of Information about Benefits of Directors) Regulation are as follows:

	Year ended 31 December 2016						
	Directors' fees RMB'000	Salaries, allowances and benefits in-kind RMB'000	Discretionary bonuses RMB'000	Retirement scheme contributions RMB'000	Sub-total RMB'000	Share- based payments (note (ii)) RMB'000	Total RMB'000
Executive directors							
Zhao Xiaobo Seah Han Leong	-	600 279	2,166 2,166	- 83	2,766 2,528	33 33	2,799 2,561
Non-executive directors							
Huang Yu (note (i))	-	_	-	-	-	-	-
Fan Xin (note (ii))	-	-	-	_	_	_	_
Ng Koon Siong (note (iii))	14	-	998	-	1,012	_	1,012
Liu Tianmin	189	_	_	_	189	_	189
Wang Yinghu	189	_	_	_	189	-	189
Independent non- executive directors							
Fan Ren Da Anthony	309	_	_	_	309	_	309
Chia Yew Boon	309	_	-	-	309	_	309
Chen Hua	240	_	_	-	240	_	240
	1,250	879	5,330	83	7,542	66	7,608

# 8 DIRECTORS' REMUNERATION (Continued)

	Year ended 31 December 2017						
	Directors' fees RMB'000	Salaries, allowances and benefits in-kind RMB'000	Discretionary bonuses RMB'000	Retirement scheme contributions RMB'000	Sub-total RMB'000	Share- based payments (note (ii)) RMB'000	Total RMB'000
Executive directors							
Zhao Xiaobo Seah Han Leong	-	600 285	700 -	- 48	1,300 333	-	1,300 333
Non-executive directors							
Huang Yu	-	-	-	-	-	-	-
Liu Tianmin Wang Yinghu	190 190	-	_	-	190 190	_	190 190
Independent non- executive directors							
Fan Ren Da Anthony	311	_	_	-	311	_	311
Chia Yew Boon	311	-	-	-	311	-	311
Chen Hua	242				242		242
	1,244	885	700	48	2,877	-	2,877

# Notes:

- (i) The non-executive director was appointed on 15 July 2016.
- (ii) The non-executive director resigned on 15 July 2016.
- (iii) The non-executive director resigned on 22 January 2016.
- (iv) These represent the estimated value of share options granted to the directors under the Company's share option scheme. The value of these share options is measured according to the Group's accounting policies for share-based payment transactions as set out in note 2(q)(ii) and, in accordance with that policy, includes adjustments to reverse amounts accrued in previous years where grants of equity instruments are forfeited prior to vesting. The details of these benefits in kind, including the principal terms and number of options granted, are disclosed under the paragraph "Share option scheme" in the directors' report and note 22.

During 2016 and 2017, there were no amounts paid or payable by the Group to the directors or any of the highest paid individuals set out in note 9 below as an inducement to join or upon joining the Group or as compensation for loss of office.

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# 9 INDIVIDUALS WITH HIGHEST EMOLUMENTS

Of the five individuals with the highest emoluments, one (2016: three) are directors whose emoluments are disclosed in note 8. The aggregate of the emoluments in respect of the other individuals are as follows:

	2017 RMB'000	2016 RMB'000
Salaries and other benefits Discretionary bonuses Share-based payments	2,344 950 -	1,532 779 20
	3,294	2,331

The emoluments of the four (2016: two) individual with the highest emoluments are within the following bands:

	2017 Number of Individuals	2016 Number of Individuals
HKD 500,001 – HKD 1,000,000 HKD 1,000,001 – HKD 1,500,000	2 2	1 –
HKD 1,500,001 – HKD 2,000,000 HKD 2,000,001 – HKD 2,500,000	-	_ 1

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# 10 EARNINGS PER SHARE

The calculation of the basic and diluted earnings per share is based on the following data:

### (a) Basic earnings per share

The calculation of basic earnings per share is based on the profit attributable to ordinary equity shareholders of the Company of RMB259,358,000 (2016: RMB234,127,000) and the weighted average number of ordinary shares of 793,409,427 (2016: 797,698,020) in issue during the year, calculated as follows:

Weighted average number of ordinary shares:

	2017 Number of shares	2016 Number of shares
Issued ordinary shares at 1 January Effect of purchase of own shares Effect of exercise of share option schemes	801,652,189 (19,416,307) 11,173,545	795,272,189 (5,350) 2,431,181
Weighted average number of ordinary shares at 31 December	793,409,427	797,698,020

# (b) Diluted earnings per share

The calculation of diluted earnings per share is based on the profit attributable to equity shareholders of the Company of RMB259,358,000 (2016: RMB234,127,000) and the weighted average number of ordinary shares of 793,409,427 (2016: 815,748,131) in issue during the year, calculated as follows:

Weighted average number of ordinary shares (diluted):

	2017 Number of shares	2016 Number of shares
Weighted average number of ordinary shares at 31 December Effect of deemed issue of ordinary shares under the Company's option	793,409,427	797,698,020
scheme for nil consideration (note 22)	-	18,050,111
Weighted average number of ordinary shares (diluted) at 31 December	793,409,427	815,748,131

The computation of diluted earnings per share does not assume the exercise of certain share options because they are antidilutive for the year ended 31 December 2017.

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# 11 PROPERTY, PLANT AND EQUIPMENT

	Leasehold improvements	Furniture and fittings	Computers and office equipment	Plant and machinery	Motor vehicles	Construction in progress	Total
	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000
Cost:							
At 1 January 2016	18,433	1,401	8,354	338,309	6,905	19,117	392,519
Additions	308	168	1,028	13	-	18,052	19,569
Transfer out	_	-	-	(22,967)	-	(3,743)	(26,710)
Disposals	-	(15)	(186)	-	-	(2,534)	(2,735)
Exchange adjustments	67	44	48	-	67	(133)	93
At 31 December 2016	18,808	1,598	9,244	315,355	6,972	30,759	382,736
At 1 January 2017	18,808	1,598	9,244	315,355	6,972	30,759	382,736
Additions	1,738	679	1,310	4,365	338	117,610	126,040
Transfer out	_	-	-	_	-	(39,035)	(39,035)
Disposals	(840)	(610)	(1,598)	_	(255)	-	(3,303)
Exchange adjustments	(68)	(37)	(34)	-	(79)	-	(218)
At 31 December 2017	19,638	1,630	8,922	319,720	6,976	109,334	466,220
Accumulated depreciation and impairment:							
At 1 January 2016	2,776	683	5,778	112,884	3,454	_	125,575
Charge for the year	1,352	180	822	28,816	706	_	31,876
Transfer out	-	-	-	(7,274)	-	-	(7,274)
Written back on disposals	-	(6)	(119)	-	-	-	(125)
Exchange adjustments	26	23	41	_	38	_	128
At 31 December 2016	4,154	880	6,522	134,426	4,198	_	150,180
At 1 January 2017	4,154	880	6,522	134,426	4,198	_	150,180
Charge for the year	1,648	201	832	30,786	685	-	34,152
Written back on disposals	(535)	(456)	(1,504)	_	(136)	_	(2,631)
Exchange adjustments	(22)	(19)	(23)	_	(61)	-	(125)
At 31 December 2017	5,245	606	5,827	165,212	4,686	_	181,576
Net book value: At 31 December 2016	14,654	718	2,722	180,929	2,774	30,759	232,556
At 31 December 2017	14,393	1,024	3,095	154,508	2,290	109,334	284,644

During the year ended 31 December 2016, certain plant and machinery and construction in progress with carrying amount of RMB19,436,000 were transferred to inventories or cost of sales when they ceased to be used in EMC projects. During the year ended 31 December 2017, certain construction in progress with carrying amount of RMB34,711,000 were transferred to cost of sales when the construction completed and operation began.

#### 12 **INTANGIBLE ASSETS**

		Patents and technology	
	Trade name	know-how	Total
	RMB'000	RMB'000	RMB'000
Cost:			
At 1 January 2016	4	392,411	392,415
Additions through internal development	_	54,770	54,770
Disposals	_	(15,535)	(15,535)
At 31 December 2016	4	431,646	431,650
At 1 January 2017	4	431,646	431,650
Additions through internal development	_	71,227	71,227
Disposals	_	(104,944)	(104,944)
At 31 December 2017	4	397,929	397,933
Accumulated amortisation:			
At 1 January 2016	_	135,973	135,973
Charge for the year	-	47,596	47,596
Written back on disposals	_	(15,535)	(15,535)
At 31 December 2016	-	168,034	168,034
At 1 January 2017	_	168,034	168,034
Charge for the year	_	62,886	62,886
Written back on disposals	_	(104,944)	(104,944)
At 31 December 2017	_	125,976	125,976
Net book value:			
At 31 December 2016	4	263,612	263,616
At 31 December 2017	4	271,953	271,957

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#### 13 **OTHER FINANCIAL ASSETS**

	2017 RMB'000	2016 RMB'000
Long-term receivables Less: current portion of long-term receivables	516,083 (101,755)	375,547 (55,240)
	414,328	320,307

At 31 December 2017, long-term receivables included receivables of Karamay construction contract of RMB65,611,000 (2016: RMB65,611,000). Karamay construction contract ("Karamay contract") is a construction contract entered into among Karamay Construction Management Co., Ltd. ("Karamay Construction"), THTF and Technovator Beijing in 2013. Pursuant to Karamay contract, Karamay Construction engaged THTF as the contractor to carry out the construction contract with the finance and major equipment supply provided by Technovator Beijing. The estimated total financing provided by Technovator Beijing is approximately RMB180 million. Karamay Construction should repay Technovator Beijing by five annual instalments, with an investment return charged at 140% of the then prevailing lending interest rate in respect of loans for the same term as quoted by the People's Bank of China. Karamay Construction didn't grant any security to Technovator Beijing.

The remaining balance of long-term receivables represent trade receivables of certain construction contracts which are repayable by instalments over a 2 to 8 years period.

#### 14 **INVESTMENTS IN SUBSIDIARIES**

The following list contains the particulars of the Company's principal subsidiaries at 31 December 2017.

			Proportio	n of ownership		
Name of company	Place and date of incorporation/ establishment	Particulars of issued and fully paid up share/ registered capital	Group's effective interest	Held by the Company	Held by a subsidiary	Principal activity
Technovator Beijing	Beijing, PRC 7 August 2006	USD83,000,000	100%	100%	-	Design, manufacturing and marketing of building automation solutions
Tongfang Energy Saving	Beijing, PRC 21 June 2002	RMB231,812,167	100%	-	100%	Energy management services, marketing of heating power equipment
Software Beijing	Beijing, PRC 22 November 2013	RMB10,000,000	100%	-	100%	Software development, technology development, marketing, service and consulting

#### 15 TRADING SECURITIES

The trading securities as at 31 December 2016 were equity securities at fair value listed in Hong Kong. All the trading securities were disposed during 2017.

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#### 16 **INVENTORIES**

#### Inventories in the statement of financial position comprise: (a)

	2017 RMB'000	2016 RMB'000
Raw materials Work in progress Finished goods	80,966 2,320 292,239	40,836 3,393 258,721
	375,525	302,950

#### The analysis of the amount of inventories recognised as an expense and included in profit or loss is (b) as follows:

	2017 RMB'000	2016 RMB'000
Carrying amount of inventories sold	1,347,694	1,264,058

#### 17 TRADE AND OTHER RECEIVABLES

	2017 RMB'000	2016 RMB'000
Trade debtors due from related parties Other trade debtors and bills receivable Less: Allowance for doubtful debts (note 17(b))	46,327 1,175,476 (78,860)	33,064 1,127,108 (53,933)
Other receivables  - amounts due from related parties  - amounts due from third parties  Less: Allowance for doubtful debts (note 17(b))	1,142,943 32,875 138,239 (3,581)	1,106,239 21,473 111,658 (2,622)
Loans and receivables	1,310,476	1,236,748
Deposits and prepayments	127,725	108,669
	1,438,201	1,345,417

All of the trade and other receivables are expected to be recovered or recognised as expense within one year.

For the year ended 31 December 2017 (Expressed in RMB unless otherwise indicated)

#### TRADE AND OTHER RECEIVABLES (Continued) 17

#### (a) Ageing analysis

Included in trade and other receivables are external trade debtors and bills receivable (net of allowance for doubtful debts) with the following ageing analysis as of the end of the reporting period:

	2017 RMB'000	2016 RMB'000
Current	727,979	783,151
Less than 1 month past due  More than 1 month but less than 3 months past due  More than 3 months but less than 12 months past due  More than 12 months past due	3,080 93,943 133,040 184,901	19,798 20,953 109,716 172,621
	414,964	323,088
	1,142,943	1,106,239

Trade debtors and bills receivable are due within 0-180 days from the date of billing. Further details of the Group's credit policy are set out in note 26(a).

#### Impairment of trade and other receivables (b)

Impairment losses in respect of trade and other receivables are recorded using an allowance account unless the Group is satisfied that recovery of the amount is remote, in which case the impairment loss is written off against trade and other receivables directly (see note 2(j)).

The movement in the allowance for doubtful debts during the year, including both specific and collective loss components, is as follows:

	2017 RMB'000	2016 RMB'000
At 1 January Impairment loss recognised	56,555 <b>25</b> ,886	36,621 19,934
At 31 December	82,441	56,555

#### Trade and other receivables that are not impaired (c)

Receivables that were neither past due nor impaired (disclosed as current in the table given in note 17(a)) relate to a wide range of customers for whom there was no recent history of default.

Receivables that were past due but not impaired relate to a number of independent customers that have a good track record with the Group. 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. The Group does not hold any collateral over these balances.

#### 18 **CASH AND CASH EQUIVALENTS**

#### (a) Cash and cash equivalents comprise:

	2017 RMB'000	2016 RMB'000
Deposit with banks and other financial institutions Cash at bank and in hand	408 520,854	4,407 661,415
Cash and cash equivalents in the statement of financial position	521,262	665,822
Restricted deposit	(408)	(4,407)
Cash and cash equivalents in the consolidated cash flow statement	520,854	661,415

#### (b) Reconciliation of liabilities arising from financing activities

	Loans and borrowings RMB'000 (Note 21)	Finance leases RMB'000	<b>Total</b> RMB'000
At 1 January 2017	290,354	358	290,712
Changes from financing cash flows:			
Proceeds from new bank loans Repayment of bank loans Other borrowing costs paid	175,730 (227,021) (10,237)	- - (209)	175,730 (227,021) (10,446)
Total changes from financing cash flows	(61,528)	(209)	(61,737)
Other changes:			
Finance charges on obligations under finance leases Interest expenses	- 13,480	20 -	20 13,480
Total other changes	13,480	20	13,500
At 31 December 2017	242,306	169	242,475

Note: Loans and borrowings consist of bank loans and loans from related parties as disclosed in note 21(a).

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#### **TRADE AND OTHER PAYABLES** 19

	2017 RMB'000	2016 RMB'000
Trade payables due to related parties Other trade and bills payables	114,939 1,167,200	58,992 995,163
Other payables and accruals  – amounts due to related parties  – amounts due to third parties	1,282,139 31,383 115,255	1,054,155 48,385 48,984
Financial liabilities measured at amortised cost	1,428,777	1,151,524
Receipts in advance	83,855	141,399
	1,512,632	1,292,923

All of the above balances are expected to be settled within one year. Included in trade and other payables are trade and bills payables with the following ageing analysis as of the end of reporting period:

	2017 RMB'000	2016 RMB'000
By date of invoice:		
Within 3 months More than 3 months but within 6 months More than 6 months but within 12 months More than 12 months	906,842 44,006 109,479 221,812	741,993 58,014 78,648 175,500
	1,282,139	1,054,155

#### GROSS AMOUNTS DUE FROM/TO CUSTOMERS FOR CONTRACT WORK 20

	2017 RMB'000	2016 RMB'000
Direct costs incurred to date on contract plus attributable profits less recognised losses Less: Progress payments billed	4,226,772 (3,327,448)	2,743,991 (2,067,407)
Gross amounts due from customers for contract work	899,324	676,584
Direct costs incurred to date on contract plus attributable profits less recognised losses Less: Progress payments billed	154,404 (169,911)	15,670 (21,808)
Gross amounts due to customers for contract work	(15,507)	(6,138)

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#### 21 **LOANS AND BORROWINGS**

#### (a) The analysis of carrying amount of loans and borrowings is as follows:

	2017 RMB'000	2016 RMB'000
Bank loans  - Guaranteed by related parties  - Unsecured and unguaranteed	- 175,730	27,000 190,020
Loans from related parties (note 28(c))	175,730 66,576	217,020 73,334
	242,306	290,354

#### (b) At the end of reporting period, loans and borrowings were repayable as follows:

	2017 RMB'000	2016 RMB'000
Within 1 year or on demand	242,306	290,354

#### (c) The amounts of banking facilities and the utilisation at the end of reporting period are set out as follows:

	2017 RMB'000	2016 RMB'000
Unsecured Banking facilities	470,000	520,000

At 31 December 2017, the facilities were utilised to the extent of RMB175,730,000 (2016: RMB217,020,000).

At 31 December 2017, none of the Group's banking facilities are subject to the fulfilment of covenants.

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#### 22 **EQUITY SETTLED SHARE-BASED TRANSACTIONS**

#### (a) **Share Option Scheme 2012**

The Company has a share option scheme ("Share Option Scheme 2012") which was adopted on 23 July 2012 ("the date of grant") whereby the directors of the Company are authorised, at their discretion, to invite employees of the Group, including directors of the Company, to take up options to subscribe for a total of 48,500,000 ordinary shares in the share capital of the Company, upon exercise of such option at an exercise price of HK\$1.15 per share, which represents (1) the closing price of HK\$1.15 per share as stated in the daily quotation sheets issued by the Stock Exchange on the date of grant; and (2) the average closing price of HK\$1.15 per share as stated in the daily quotation sheet issued by the Stock Exchange for the five business days immediately preceding the date of grant. Under Share Option Scheme 2012, the options granted shall have an exercisable period of 5 years from the date of grant and 50% of the total number of options granted will be vested after the second anniversary of the date of grant conditional upon the Company meeting its profit target for the year 2012 and the remaining 50% will be vested after the third anniversary of the date of grant conditional upon the Company meeting its profit target for the year 2013.

#### (i) The terms and conditions of the grants are as follows:

	Number of options	Vesting conditions	Contractual life of options
Options granted to directors and chief executives:			
– on 23 July 2012	8,700,000	2 years service and meeting 2012 profit target	5 years
– on 23 July 2012	8,700,000	3 years service and meeting 2013 profit target	5 years
Options granted to employees:			
– on 23 July 2012	15,550,000	2 years service and meeting 2012 profit target	5 years
– on 23 July 2012	15,550,000	3 years service and meeting 2013 profit target	5 years
Total share options granted	48,500,000		

#### 22 **EQUITY SETTLED SHARE-BASED TRANSACTIONS** (Continued)

#### **Share Option Scheme 2012** (Continued) (a)

### The number and weighted average exercise prices of share options are as follows:

	201 Weighted	17	201 Weighted	6
	average exercise price	Number of options	average exercise price	Number of options
Outstanding at the beginning of the year Exercised during the year Forfeited during the year	HK\$1.15 HK\$1.15 -	16,720,000 (16,720,000) –	HK\$1.15 HK\$1.15 HK\$1.15	23,350,000 (6,080,000) (550,000)
Outstanding at the end of the year	-	-	HK\$1.15	16,720,000
Exercisable at the end of the year		-		16,720,000

The options outstanding at 31 December 2016 had an exercise price of HK\$1.15 and weighted average remaining contractual life of 0.56. All options have been exercised during 2017.

#### Fair value of share options and assumptions (iii)

The fair value of services received in return for share options granted is measured by reference to the fair value of share options granted. The estimate of the fair value of the share options granted is measured based on a Black-Scholes model. The contractual life of the share option is used as an input into this model. Expectations of early exercise are incorporated into the Black-Scholes model.

# Fair value of share options and assumptions

Fair value at measurement date	HK\$0.21
Share price	HK\$1.15
Exercise price	HK\$1.15
Expected volatility	42.54%
Option life	5 years
Expected dividends	0%
Risk-free interest rate	0.53%

The expected volatility is based on the historical volatility of the share prices of the Company. Expected dividends are based on historical dividends. Changes in the subjective input assumptions could materially affect the fair value estimate.

Share options were granted under a service and non-market performance condition. The condition has not been taken into account in the grant date fair value measurement of the services received. There was no market conditions associated with the share option grants.

For the year ended 31 December 2017 (Expressed in RMB unless otherwise indicated)

#### 22 **EQUITY SETTLED SHARE-BASED TRANSACTIONS** (Continued)

#### (b) **Share Option Scheme 2013**

The Company has a share option scheme ("Share Option Scheme 2013") which was adopted on 5 September 2013 ("the date of grant") whereby the directors of the Company are authorised, at their discretion, to invite directors and employees of the Group, suppliers and other individuals, to take up options to subscribe for a total of 52,100,000 ordinary shares in the share capital of the Company, upon exercise of such option at an exercise price of HK\$3.06 per share, which represents the higher of (1) the closing price of HK\$3.06 per share as stated in the daily quotation sheets issued by the Stock Exchange on the date of grant; and (2) the average closing price of HK\$2.91 per share as stated in the daily quotation sheet issued by the Stock Exchange for the five business days immediately preceding the date of grant.

Under Share Option Scheme 2013, the options granted to directors, employees and other individuals shall have an exercisable period of 5 years from the date of grant and 50% of the total number of options granted will be vested after the second anniversary of the date of grant conditional upon the Company meeting its profit target for the year 2014 and the remaining 50% will be vested after the third anniversary of the date of grant conditional upon the Company meeting its profit target for the year 2015. The options granted to the suppliers of goods or services shall have an exercisable period of 5 years from the date of grant and 100% of the total number of options granted will be vested after the second anniversary of the date of grant conditional upon the price per share equal to or exceeding 150% of the exercise price.

#### (i) The terms and conditions of the grants are as follows:

	Number of options	Vesting conditions	Contractual life of options
Options granted to directors			
- on 5 September 2013	3,500,000	2 years service and meeting 2014 profit target	5 years
<ul><li>on 5 September 2013</li><li>Options granted to management and employees</li></ul>	3,500,000	3 years service and meeting 2015 profit target	5 years
- on 5 September 2013	5,200,000	2 years service and meeting 2014 profit target	5 years
- on 5 September 2013	5,200,000	3 years service and meeting 2015 profit target	5 years

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#### **EQUITY SETTLED SHARE-BASED TRANSACTIONS** (Continued) 22

#### (b) **Share Option Scheme 2013** (Continued)

The terms and conditions of the grants are as follows: (Continued)

	Number of options	Vesting conditions	Contractual life of options
Options granted to suppliers of goods or services			
– on 5 September 2013	1,800,000	2 years and meeting the price per share equal to or exceeding 150% of the exercise price	5 years
Options granted to other individuals			
– on 5 September 2013	16,450,000	2 years service and meeting 2014 profit target	5 years
– on 5 September 2013	16,450,000	3 years service and meeting 2015 profit target	5 years
Total share options granted	52,100,000		

#### (ii) The number and weighted average exercise prices of share options are as follows:

	201 Weighted	17	201 Weighted	6
	average exercise price	Number of options	average exercise price	Number of options
Outstanding at the beginning of the year Exercised during the year Forfeited during the year	HK\$3.06 - HK\$3.06	48,150,000 - (3,750,000)	HK\$3.06 HK\$3.06 HK\$3.06	52,100,000 (300,000) (3,650,000)
Outstanding at the end of the year	HK\$3.06	44,400,000	HK\$3.06	48,150,000
Exercisable at the end of the year		44,400,000		48,150,000

The options outstanding at 31 December 2017 had an exercise price of HK\$3.06 (2016: HK\$3.06) and weighted average remaining contractual life of 0.68 years (2016: 1.68 years).

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#### **EQUITY SETTLED SHARE-BASED TRANSACTIONS** (Continued) 22

#### (b) Share Option Scheme 2013 (Continued)

### Fair value of share options and assumptions

The fair value of services received in return for share options granted is measured by reference to the fair value of share options granted. The estimate of the fair value of the share options granted is measured based on a Black-Scholes model. The contractual life of the share option is used as an input into this model. Expectations of early exercise are incorporated into the Black-Scholes model.

### Fair value of share options and assumptions

Fair value at measurement date	
- Options granted to directors, employees and other individuals	HK\$0.32
<ul> <li>Options granted to suppliers of goods or services</li> </ul>	HK\$1.04
Share price	HK\$3.06
Exercise price	HK\$3.06
Expected volatility	45.30%
Option life	5 years
Expected dividends	0%
Risk-free interest rate	1.043%

The expected volatility is based on the historical volatility of the share prices of the Company. Expected dividends are based on historical dividends. Changes in the subjective input assumptions could materially affect the fair value estimate.

Share options granted to directors, employees and other individuals were under a service and nonmarket performance condition. The condition has not been taken into account in the grant date fair value measurement of the services received. Share options granted to suppliers of goods or services were under market condition. The condition has been taken into account in the grant date fair value measurement of the services received.

#### (c) **Share Option Scheme 2014**

The Company has a share option scheme ("Share Option Scheme 2014") which was adopted during 2014, including options granted in August 2014 and options granted in October 2014, respectively.

# **Options granted in August 2014**

Under Share Option Scheme 2014, on 15 August 2014 ("the date of grant") the directors of the Company are authorised, at their discretion, to invite directors and employees of the Group, to take up options to subscribe for a total of 7,300,000 ordinary shares in the share capital of the Company, upon exercise of such option at an exercise price of HK\$3.83 per share, which represents the higher of (1) the closing price of HK\$3.83 per share as stated in the daily quotation sheets issued by the Stock Exchange on the date of grant; and (2) the average closing price of HK\$3.73 per share as stated in the daily quotation sheets issued by the Stock Exchange for the five business days immediately preceding the date of grant.

In August 2014, the options granted shall have an exercisable period of 5 years from the date of grant. The total number of options granted to directors will be vested immediately. And the total number of options granted to management and employees will be vested after the second anniversary of the date of grant.

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#### 22 **EQUITY SETTLED SHARE-BASED TRANSACTIONS** (Continued)

#### **Share Option Scheme 2014** (Continued) (c)

# **Options granted in October 2014**

Under Share Option Scheme 2014, on 17 October 2014 ("the date of grant") the directors of the Company are authorised, at their discretion, to invite certain management and employees of the Group, suppliers and other individuals, to take up options to subscribe for a total of 7,000,000 ordinary shares in the share capital of the Company, upon exercise of such option at an exercise price of HK\$3.444 per share, which represents the higher of (1) the closing price of HK\$3.34 per share as stated in the daily quotation sheets issued by the Stock Exchange on the date of grant; and (2) the average price of HK\$3.444 per share as stated in the daily quotation sheets issued by the Stock Exchange for the five business days immediately preceding the date of grant.

In October 2014, the options granted shall have an exercisable period of 5 years from the date of grant and 50% of the total number of options granted will be vested after the first anniversary of the date of grant conditional upon the Company meeting its profit target for the year 2014 and the remaining 50% will be vested after the second anniversary of the date of grant conditional upon the Company meeting its profit target for the year 2015.

#### (i) The terms and conditions of the grants are as follows:

	Number of options	Vesting conditions	Contractual life of options
Options granted to directors			
- on 15 August 2014	3,000,000	At grant	5 years
Options granted to management and employees			
- on 15 August 2014	4,300,000	2 years service	5 years
- on 17 October 2014	3,500,000	1 years service and meeting 2014 profit target	5 years
- on 17 October 2014	3,500,000	2 years service and meeting 2015 profit target	5 years
Total share options granted	14,300,000		

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#### 22 **EQUITY SETTLED SHARE-BASED TRANSACTIONS** (Continued)

#### (c) Share Option Scheme 2014 (Continued)

The number and weighted average exercise prices of share options are as follows:

	Weighted average exercise price	Number of options	201 Weighted average exercise price	6 Number of options
Outstanding at the beginning and the end of the year Forfeited during the year	HK\$3.64 HK\$3.64	14,300,000 (500,000)	HK\$3.64 -	14,300,000
Outstanding at the end of the year	HK\$3.64	13,800,000	HK\$3.64	14,300,000
Exercisable at the end of the year		13,800,000		14,300,000

The options granted in 2014 outstanding at 31 December 2017 had a weighted average exercise price of HK\$3.64 (2016: HK\$3.64) and weighted average remaining contractual life of 1.71 years (2016: 2.71

#### (iii) Fair value of share options and assumptions

The fair value of services received in return for share options granted is measured by reference to the fair value of share options granted. The estimate of the fair value of the share options granted is measured based on a Black-Scholes model. The contractual life of the share option is used as an input into this model. Expectations of early exercise are incorporated into the Black-Scholes model.

	Granted in August 2014	Granted in October 2014
Fair value of share options and assumptions		
Fair value at measurement date		
<ul> <li>Options granted to directors</li> </ul>	HK\$0.97	NIL
<ul> <li>Options granted to management and employees with 1 year service</li> </ul>	NIL	HK\$0.92
<ul> <li>Options granted to management and employees with 2 year service</li> </ul>	HK\$1.18	HK\$1.00
Share price	HK\$3.83	HK\$3.444
Exercise price	HK\$3.83	HK\$3.444
Expected volatility	38.60% - 40.09%	40.44%
Option life	5 years	5 years
Expected dividends	0%	0%
Risk-free interest rate	1.288%	1.050%-1.198%

The expected volatility is based on the historical volatility of the share prices of the Company. Expected dividends are based on historical dividends. Changes in the subjective input assumptions could materially affect the fair value estimate.

Share options were granted under a service and non-market performance condition. The condition has not been taken into account in the grant date fair value measurement of the services received. There was no market conditions associated with the share option grants.

#### 23 **INCOME TAX IN THE STATEMENT OF FINANCIAL POSITION**

#### (a) Deferred tax assets and liabilities recognised

The components of deferred tax (assets)/liabilities recognised in the consolidated statement of financial position and movements during the year are as follows:

	Impairment and provision RMB'000	Unrealised profit for inventories RMB'000	Receipts by Instalment RMB'000	<b>Total</b> RMB'000
At 1 January 2016 Charged/(Credited) to the consolidated	(9,704)	(78)	6,995	(2,787)
income statement (note 7(a))	(3,800)	78	8,138	4,416
At 31 December 2016	(13,504)	-	15,133	1,629
At 1 January 2017 Charged/(Credited) to the consolidated	(13,504)	_	15,133	1,629
income statement (note 7(a))	(4,100)	_	7,730	3,630
At 31 December 2017	(17,604)	-	22,863	5,259
			2017 RMB'000	2016 RMB'000
Represented by:				
Deferred tax assets Deferred tax liabilities			(17,604) 22,863	(13,504) 15,133
			5,259	1,629

For the year ended 31 December 2017 (Expressed in RMB unless otherwise indicated)

#### INCOME TAX IN THE STATEMENT OF FINANCIAL POSITION (Continued) 23

#### (b) Deferred tax assets not recognised

At 31 December 2017, in accordance with the accounting policy set out in note 2(r), the Company did not recognise deferred tax assets in respect of unused tax losses of RMB142,148,000 (2016: RMB131,000,000) and the Group did not recognise deferred tax assets in respect of unused tax losses of RMB158,723,000 (2016: RMB140,502,000), as it is not probable that future taxable profits against which the losses can be utilised will be available to the relevant tax entities. The tax losses of the Company do not expire under tax legislation. The remaining unrecognised tax losses of RMB10,206,000 will not expire until after 2018.

#### (c) Deferred tax liabilities not recognised

At 31 December 2017, no deferred tax liability was recognised on the taxable temporary differences in respect of the tax that would be payable on the distribution of the undistributed profits of certain subsidiaries of the Company amounting RMB1,125,781,000 (2016: RMB833,880,000), as the Group controls the dividend policy of these subsidiaries and it has been determined that it is probable that such profits will not be distributed in the foreseeable future.

According to the CIT Law and its implementation rules, non-PRC-resident enterprises are levied withholding tax at 10%, subject to any double tax treaty relief, on dividends from their PRC-resident investees for earnings accumulated beginning on 1 January 2008. According to the double tax treaty between the PRC and Singapore, the dividend withholding tax rate could be reduced to 5% provided that a Singapore parent company is the "beneficial owner" and holds directly at least 25% of the equity interest of a PRC company. Distributions of earnings generated prior to 1 January 2008 are exempt from such withholding tax.

#### 24 **DEFERRED INCOME**

Deferred income of the Group mainly represents subsidies relating to the construction of property, plant and equipment, which would be recognised in other income on a straight-line basis over the expected useful life of the relevant assets.

#### **CAPITAL, RESERVES AND DIVIDENDS** 25

#### (a) Movements in components of equity

The reconciliation between the opening and closing balances of each component of the Group's consolidated equity is set out in the consolidated statement of changes in equity.

Details of the changes in the Company's individual components of equity between the beginning and the end of the year are set out below:

	Share capital RMB'000 Note 25(c)	Treasury shares RMB'000 Note 25(d)	Share-based compensation reserve RMB'000 Note 25(e)(iii)	Translation reserve RMB'000 Note 25(e)(ii)	Retained profits RMB'000	Total equity RMB'000
At 1 January 2016 Purchase of own shares Equity settled share-	1,246,989 –	– (581)	23,391	56,121 -	528,840 -	1,855,341 (581)
based transactions Dividends to equity shareholders of	-	-	3,363	-	-	3,363
the Company Shares issued upon exercise of share	-	-	-	-	(79,712)	(79,712)
options	7,920	-	(1,128)	-	-	6,792
Forfeiture of share option	_	-	(1,100)	-	1,100	-
Profit for the year	_	-	_	_	1,413	1,413
Other comprehensive income	_	-	_	122,096	_	122,096
At 31 December 2016	1,254,909	(581)	24,526	178,217	451,641	1,908,712
At 1 January 2017 Purchase of own shares Cancellation of treasury	1,254,909 –	(581) (82,597)	24,526 -	178,217 -	451,641 -	1,908,712 (82,597)
shares Shares issued upon exercise of share	(82,685)	82,685	-	-	-	-
options	18,985	-	(2,258)	-	-	16,727
Forfeiture of share option	-	-	(1,200)	-	1,200	-
Loss for the year	-	-	-	-	(11,791)	(11,791)
Other comprehensive income	_	-	-	(108,433)	_	(108,433)
At 31 December 2017	1,191,209	(493)	21,068	69,784	441,050	1,722,618

For the year ended 31 December 2017 (Expressed in RMB unless otherwise indicated)

#### 25 CAPITAL, RESERVES AND DIVIDENDS (Continued)

#### (b) **Dividends**

Dividends payable to equity shareholders attributable to the previous financial year, approved and paid during 2017 and 2016:

	2017 RMB'000	2016 RMB'000
Special dividend in respect of the previous financial year, no dividend approved and paid during 2017 (2016: RMB0.10)	-	79,712

#### (c) Share capital

	201 Number of shares	Amounts RMB'000	20 <sup>-</sup> Number of shares	Amounts RMB'000
Ordinary shares issued and fully paid: At 1 January Shares repurchased and cancelled Shares issued upon exercise of	801,652,189 (35,530,000)	1,254,909 (82,685)	795,272,189 –	1,246,989 -
share options	16,720,000	18,985	6,380,000	7,920
At 31 December	782,842,189	1,191,209	801,652,189	1,254,909

The holders of ordinary shares are entitled to receive dividends as declared from time to time and are entitled to one vote per share at meetings of the Company. All ordinary shares rank equally with regard to the Company's residual assets.

(i) During 2017, a total of 16,720,000 (2016: 6,380,000) shares were issued by the Company upon the exercise of shares options by certain grantees pursuant to the share option schemes at a consideration of HK\$19,228,000 (RMB16,727,000 equivalent) (2016: HK\$7,910,000 (RMB6,792,000 equivalent)) which was credited to share capital and HK\$2,592,150 (RMB2,258,000 equivalent) (2016: HK\$1,340,000 (RMB1,128,000 equivalent)) has been transferred from the share based compensation reserve to the share capital in accordance with policy set out in note 2(q)(ii).

For the year ended 31 December 2017 (Expressed in RMB unless otherwise indicated)

#### CAPITAL, RESERVES AND DIVIDENDS (Continued) 25

#### (c) Share capital (Continued)

Terms of unexpired and unexercised share options under the Share Option Scheme 2012, 2013 and 2014 at the end of reporting periods are as follows:

	20	17	2016		
	Exercise	Number of	Exercise	Number of	
Exercise period	price	options	price	options	
23 July 2014 to 22 July 2017	_	_	HK\$1.15	600,000	
23 July 2015 to 22 July 2017	_	_	HK\$1.15	16,120,000	
5 September 2015 to					
4 September 2018	HK\$3.06	21,100,000	HK\$3.06	24,850,000	
5 September 2016 to					
4 September 2018	HK\$3.06	23,300,000	HK\$3.06	23,300,000	
15 August 2014 to 14 August 2019	HK\$3.83	3,000,000	HK\$3.83	3,000,000	
15 August 2016 to 14 August 2019	HK\$3.83	4,300,000	HK\$3.83	4,300,000	
17 October 2015 to					
16 October 2019	HK\$3.444	3,000,000	HK\$3.444	3,500,000	
17 October 2016 to					
16 October 2019	HK\$3.444	3,500,000	HK\$3.444	3,500,000	
		58,200,000		79,170,000	

Each option entitles the holder to subscribe for one ordinary share in the Company. Further details of these options are set out in note 22.

#### (d) **Treasury shares**

	2017 Number of shares Amount RMB'00	
Treasury shares		
At 1 January Shares repurchased to be cancelled Cancellation of treasury shares	234,000 35,546,000 (35,530,000)	581 82,597 (82,685)
At 31 December	250,000	493

For the year ended 31 December 2017 (Expressed in RMB unless otherwise indicated)

#### 25 CAPITAL, RESERVES AND DIVIDENDS (Continued)

#### (d) Treasury shares (Continued)

During 2017, the Company repurchased its own ordinary shares on The Stock Exchange of Hong Kong Limited as follows:

Month/year	Number of shares repurchased	Highest price paid per share HK\$	Lowest price paid per share HK\$	Aggregate price paid HK\$'000
Jan 2017	100,000	2.90	2.88	289
Mar 2017	282,000	2.99	2.96	838
Apr 2017	5,094,000	2.99	2.93	15,088
May 2017	9,682,000	2.95	2.74	27,760
Jun 2017	10,724,000	2.85	2.50	28,602
Jul 2017	5,914,000	2.56	2.34	14,392
Sep 2017	1,800,000	2.41	2.34	4,289
Dec 2017	1,950,000	2.37	1.91	4,130
				95,388

The total amount paid on the repurchased shares of HK\$95,388,000 (approximately RMB82,597,000 equivalent) was paid wholly out of capital.

#### (e) Nature and purpose of reserves

# Statutory reserves

Transfers from retained profits to statutory reserves are made in accordance with the relevant PRC rules and regulations and the articles of association of the Company's PRC subsidiaries and were approved by the respective board of directors.

The subsidiaries in the PRC are required to appropriate 10% of its after-tax profit, as determined in accordance with the PRC accounting rules and regulations, to the general reserve fund until the statutory reserve balance reaches 50% of the registered capital. The transfer to this reserve must be made before distribution of a dividend to equity owners.

The statutory reserve can be utilised to offset prior year's losses or converted into capital of the subsidiary.

#### Translation reserve (ii)

The translation reserve comprises all foreign exchange differences arising from the translation of the financial statements of foreign operations. The reserve is dealt with in accordance with the accounting policies set out in note 2(u).

For the year ended 31 December 2017 (Expressed in RMB unless otherwise indicated)

#### 25 CAPITAL, RESERVES AND DIVIDENDS (Continued)

#### (e) Nature and purpose of reserves (Continued)

### Share-based compensation reserve

Share-based compensation reserve represents the fair value of the share options granted to employees of the Group in accordance with the accounting policy adopted for share-based payments in note 2(q)(ii).

#### (iv) Other reserves

Other reserves are resulted from transactions with equity holders in their capacity as equity holders. The balance comprises capital reserve movements arising from difference between fair value of consideration paid and the net assets acquired in a business combination under common control or the amount by which the non-controlling interests are adjusted to reflect the changes in its interests in the subsidiary.

#### (v) Distributable reserves

At 31 December 2017, the aggregate amount of reserves available for distribution to equity shareholders of the Company was RMB441,050,000 (2016: RMB451,641,000).

#### (f) Capital management

The Group's objectives in the aspect of managing capital are to safeguard the Group's ability to continue 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 defines "capital" as including all components of equity and short-term and long-term loans. On this basis, at 31 December 2017, the amount of capital employed was RMB2,632,570,000 (2016: RMB2,484,472,000).

The Group actively and regularly reviews and manages its capital structure to maintain a balance between the higher shareholders returns that might be possible with higher levels of borrowings and the advantages and security afforded by a sound capital position, and makes adjustments to the capital structure in light of changes in economic conditions. In order to maintain or adjust the capital structure, the Group may adjust the amount of dividends paid to shareholders, issue new shares or dispose of assets to reduce debt.

Neither the Company nor any of its subsidiaries are subjected to externally imposed capital requirements.

For the year ended 31 December 2017 (Expressed in RMB unless otherwise indicated)

#### FINANCIAL RISK MANAGEMENT AND FAIR VALUES 26

Exposure to credit, liquidity, interest rate and currency risks arises in the normal course of the Group's business. The Group's exposure to these risks and the financial risk management policies and practices used by the Group to manage these risks are described below.

#### (a) Credit risk

The Group's credit risk is primarily attributable to trade and other receivables. Management has a credit policy in place and the exposure to credit risk is monitored on an ongoing basis. Credit evaluations are performed on all customers requiring credit over a certain amount. The Group does not require collateral in respect of financial assets.

In respect of trade and other receivables, individual credit evaluations are performed on all customers requiring credit over a certain amount. These evaluations focus on the customer's past history of making payments when due and current ability to pay, and may take into account information specific to the customer as well as pertaining to the economic environment in which the customer operates. The Group requires certain customers to pay deposits upfront and the remaining trade receivables are due within 0-180 days from the date of billing. Normally, the Group does not obtain collateral from customers.

The Group's exposure to credit risk is influenced mainly by the individual characteristics of each customer rather than the industry or country in which the customers operate and therefore significant concentrations of credit risk primarily arise when the Group has significant exposure to individual customers. At 31 December 2017, 10.4% (2016: 6.6%) and 17.1% (2016: 10.4%) of the total trade and other receivables was due from the Group's largest customer and the five largest customers respectively.

The maximum exposure to credit risk without taking account of any collateral held is represented by the carrying amount of each financial asset in the consolidated statement of financial position after deducting any impairment allowance.

Further quantitative disclosures in respect of the Group's exposure to credit risk arising from trade and other receivables are set out in note 17.

#### 26 FINANCIAL RISK MANAGEMENT AND FAIR VALUES (Continued)

#### (b) Liquidity risk

The Group's policy is to regularly monitor its liquidity requirements and its compliance with lending covenants of each company, to ensure that it maintains sufficient reserves of cash and adequate committed lines of funding from major financial institutions to meet its liquidity requirements in the short and longer term.

The following table details the remaining contractual maturities at the end of reporting periods of the Group's non-derivative financial liabilities, which are based on contractual undiscounted cash flows (including interest payments computed using contractual rates or, if floating, based on rates current at the end of reporting period) and the earliest date the Group can be required to pay:

2017				
Contractual undiscounted cash flow				

	Within 1 year or on demand RMB'000	More than 1 year but less than 2 years RMB'000	Total RMB'000	Balance sheet carrying amount RMB'000	
Trade and other payables measured at amortised costs Loans and borrowings Obligations under finance leases	1,428,777 249,408 169	- - -	1,428,777 249,408 169	1,428,777 242,306 169	
	1,678,354	-	1,678,354	1,671,252	
		2016			

# Contractual undiscounted cash flow

	Within 1 year or on demand RMB'000	More than 1 year but less than 2 years RMB'000	Total RMB'000	Balance sheet carrying amount RMB'000
Trade and other payables measured at amortised costs Loans and borrowings Obligations under finance leases	1,151,524 300,337 178	- - 180	1,151,524 300,337 358	1,151,524 290,354 358
	1,452,039	180	1,452,219	1,442,236

For the year ended 31 December 2017 (Expressed in RMB unless otherwise indicated)

#### 26 FINANCIAL RISK MANAGEMENT AND FAIR VALUES (Continued)

#### (c) Interest rate risk

The Group's interest rate risk arises primarily from interest bearing long-term receivables, obligations under finance leases, loans and borrowings and other payables at variable rates that expose the Group to cash flow interest rate risk and fixed rates that expose the Group to fair value interest rate risk. The Group's interest rate profile as monitored by management is set out in (i) below.

#### (i) Interest rate profile

The following table details the interest rate profile of the Group's total borrowings at the end of reporting period:

	2017		2016	
	Effective		Effective	
	interest rate	Amounts	interest rate	Amounts
	%	RMB'000	%	RMB'000
Fixed rate instruments:				
Loans and borrowings	4.95	93,230	4.44	217,020
Obligations under finance leases	3.57	169	3.57	358
		93,399		217,378
Variable rate instruments:				
Loans and borrowings Less: interest bearing long-term	4.52	149,076	4.35	73,334
receivables	6.86	(65,751)	6.65	(65,611)
		83,325		7,723
Total net borrowings		176,724		225,101
Fixed rate borrowings as a percentage				
of total net borrowings		52.9%		96.6%

#### Sensitivity analysis (ii)

At 31 December 2017, it is estimated that a general increase/decrease of 100 basis points in interest rates, with all other variables held constant, would have decreased/increased the Group's profit after tax and retained profits by approximately RMB708,000 (2016: RMB66,000).

The sensitivity analysis above relates to the exposure to cash flow interest rate risk arising from floating rate non-derivative instruments held by the Group at the end of the reporting period, and the impact on the Group's profit after tax (and retained profits) is estimated as an annualised impact on interest exposure or income of such a change in interest rates. The analysis is performed on the same basis for 2016.

For the year ended 31 December 2017 (Expressed in RMB unless otherwise indicated)

#### 26 FINANCIAL RISK MANAGEMENT AND FAIR VALUES (Continued)

#### (d) **Currency risk**

The Group is exposed to currency risk primarily through sales and purchases which give rise to receivables, payables and cash balances that are denominated in a foreign currency, i.e. a currency other than the functional currency of the operations to which the transactions related. The currencies giving rise to this risk are primarily Singapore Dollars, Hong Kong Dollars, Canadian Dollars and United States Dollars.

#### (i) Exposure to currency risk

The following table details the Group's exposure at the end of the reporting period to currency risk arising from recognised assets or liabilities denominated in a currency other than the functional currency of the entity to which they relate. For presentation purposes, the amounts of the exposure are shown in RMB translated using the spot rate at the year end date. Differences resulting from the translation of the financial statements of foreign operations into the Group's presentation currency are excluded.

2017 **Exposure to foreign currencies** (expressed in RMB)

	Singapore	Canadian	United States	Hong Kong
	Dollars	Dollars	Dollars	Dollars
	RMB'000	RMB'000	RMB'000	RMB'000
Trade and other receivables Cash and cash equivalents Trade and other payables	588	75,988	4,160	-
	4,824	-	3,204	3,926
	(396)	-	-	-
Net exposure arising from recognised assets and liabilities	5,016	75,988	7,364	3,926

2016 Exposure to foreign currencies (expressed in RMB)

	Singapore	Canadian	United States	Hong Kong
	Dollars	Dollars	Dollars	Dollars
	RMB'000	RMB'000	RMB'000	RMB'000
Trade and other receivables Cash and cash equivalents Trade and other payables	351	82,273	4,416	413
	21,791	21,951	18,053	3,266
	(415)	–	-	(1,136)
Net exposure arising from recognised assets and liabilities	21,727	104,224	22,469	2,543

For the year ended 31 December 2017 (Expressed in RMB unless otherwise indicated)

#### 26 FINANCIAL RISK MANAGEMENT AND FAIR VALUES (Continued)

#### (d) Currency risk (Continued)

### Sensitivity analysis

The following table indicates the instantaneous change in the Group's profit after tax (and retained profits) that would arise if foreign exchange rates to which the Group has significant exposure at the end of reporting period had changed at that date, assuming all other risk variables remained constant.

	201	7	20	16
	Increase/ (decrease) in foreign exchange rates	Effect on profit after tax and retained profits RMB'000	Increase/ (decrease) in foreign exchange rates	Effect on profit after tax and retained profits RMB'000
Singapore Dollars	5%	192	5%	902
	(5)%	(192)	(5)%	(902)
Canadian Dollars	5%	3,153	5%	4,325
	(5)%	(3,153)	(5)%	(4,325)
United States Dollars	5%	326	5%	968
	(5)%	(326)	(5)%	(968)
Hong Kong Dollars	5%	167	5%	106
	(5)%	(167)	(5)%	(106)

Results of the analysis as presented in the above table represent an aggregation of the instantaneous effects on each of the Group's entities' profit after tax and retained profits measured in the respective functional currencies, translated into RMB at the exchange rate ruling at the end of reporting period for presentation purposes.

The sensitivity analysis assumes that the change in foreign exchange rates had been applied to remeasure those financial instruments held by the Group which expose the Group to foreign currency risk at the end of reporting period, including inter-company payables and receivables within the Group which are denominated in a currency other than the functional currencies of the lender or the borrower. The analysis excludes differences that would result from the translation of the financial statements of foreign operations into the Group's presentation currency. The analysis is performed on the same basis for 2016.

For the year ended 31 December 2017 (Expressed in RMB unless otherwise indicated)

#### FINANCIAL RISK MANAGEMENT AND FAIR VALUES (Continued) 26

#### Fair values (e)

### Financial assets and liabilities measured at fair value

Fair value hierarchy

The following table presents the fair value of financial instruments measured at the end of reporting periods on a recurring basis, categorised into the three level fair value hierarchy as defined in IFRS 13, Fair value measurement. The level into which a fair value measurement is classified is determined with reference to the observability and significance of the inputs used in the valuation technique as follows:

- Level 1 valuations: Fair value measured using only Level 1 inputs i.e. unadjusted quoted prices in active markets for identical assets or liabilities at the measurement date;
- Level 2 valuations: Fair value measured using Level 2 inputs i.e. observable inputs which fail to meet Level 1, and not using significant unobservable inputs. Unobservable inputs are inputs for which market data are not available;
- Level 3 valuations: Fair value measured using significant unobservable inputs.

	Fair value at	Fair value measurements		
	31 December	at 31 Decem	ber 2016 categori	sed into
	2016	Level 1 Level 2 Lev		
	RMB'000	RMB'000	RMB'000	RMB'000
The Group				
Recurring fair value				

Recurring fair value measurements Assets: Trading securities

#### Fair values of financial instruments carried at other than fair value (ii)

The carrying amounts of the Group's financial instruments carried at cost or amortised cost are not materially different from their fair value at 31 December 2017.

5,896

5,896

For the year ended 31 December 2017 (Expressed in RMB unless otherwise indicated)

#### **27 COMMITMENTS**

#### (a) **Capital commitments**

Capital commitments outstanding at 31 December 2017 not provided for in the financial statements were as follows:

	2017 RMB'000	2016 RMB'000
Contracted for	131,121	188,641

#### (b) Operating lease commitments

At 31 December 2017, the total future minimum lease payments under non-cancellable operating leases were payable as follows:

	2017 RMB'000	2016 RMB'000
Within 1 year After 1 year but within 5 years	15,758 8,327	11,883 5,730
	24,085	17,613

The Group leases a number of properties under operating leases. The leases typically run for an initial period of one to five years, at the end of which period all terms are negotiated. None of the leases includes contingent rentals at 31 December 2016 and 2017.

For the year ended 31 December 2017 (Expressed in RMB unless otherwise indicated)

#### 28 MATERIAL RELATED PARTY TRANSACTIONS

#### Name and relationship with related parties (a)

During the years ended 31 December 2016 and 2017, transactions with the following parties are considered as related party transactions:

# Name of parties

THTF \* (同方股份有限公司)

Tsinghua Tongfang Artificial Environment Co., Ltd. \* ("Tongfang Artificial") (同方人工環境有限公司)

Liaoning Tongfang Security Technology Co., Ltd.\* (遼寧同方安全技術有限公司)

Beijing Tongfang Property Management Co., Ltd.\* (北京同方物業管理有限公司)

NUCTECH Co., Ltd.\* (同方威視技術股份有限公司)

Tongfang Energy-saving Equipment Co., Ltd.\* (同方節能裝備有限公司)

Tongfang Technology Park Co., Ltd.\* (同方科技園有限公司)

The official name of these entities is in Chinese. The English translation of the name is for reference only.

THTF is the controlling shareholder of the Company, incorporated in the PRC and produces financial statements available for public use. Other related parties listed above are subsidiaries of THTF.

For the year ended 31 December 2017 (Expressed in RMB unless otherwise indicated)

#### 28 MATERIAL RELATED PARTY TRANSACTIONS (Continued)

#### (b) Significant related party transactions

Particulars of significant related party transactions during the years ended 31 December 2017 and 2016 are as follows:

	2017 RMB'000	2016 RMB'000
Sales to THTF and its subsidiaries	113,340	47,124
Purchases from THTF and its subsidiaries	132,998	11,854
Payment for miscellaneous products and services from		
THTF and its subsidiaries	25,705	6,722
Proceeds from loans from Tongfang Artificial	3,242	4,635
Repayment of loans to Tongfang Artificial	10,000	100,000
Payments transferred by THTF to the Group	940,824	771,496
Payments transferred by the Group to THTF	796,649	531,960

Other than the above related party transactions, certain trademarks are used by the Group in the PRC licensed by THTF at nil consideration.

#### Amounts due from/(to) related parties (c)

At 31 December 2017 and 2016, the Group had the following balances with THTF and its subsidiaries:

	2017 RMB'000	2016 RMB'000
Trade and other receivables Trade and other payables Loans from related parties	79,202 (146,322) (66,576)	54,537 (107,377) (73,334)

The loans from related parties bear interest at loan interest rate stipulated by People's bank of China for the corresponding period, and are unsecured.

For the year ended 31 December 2017 (Expressed in RMB unless otherwise indicated)

#### MATERIAL RELATED PARTY TRANSACTIONS (Continued) 28

#### (d) Key management personnel remuneration

Remuneration for key management personnel of the Group, including amounts paid to the Company's executive directors as disclosed in note 8 and certain of the highest paid employees as disclosed in note 9, is as

	2017 RMB'000	2016 RMB'000
Short term employee benefits Post-employment benefits Share-based payments	2,539 48 -	5,558 83 86
	2,587	5,727

Total remuneration was included in "staff costs" (see note 6(b)).

(e) The related party transactions in respect of sales, purchases, payments transferred by THTF to the Group, payments transferred by the Group to THTF, and receipts of miscellaneous products and services above constitute continuing connected transactions as defined in Chapter 14A of the Listing Rules. The disclosures required by Chapter 14A of the Listing Rules are provided in the reports of the directors. The related party transaction in respect of financial assistance received from THTF constitutes a continuing connected transaction as defined in Chapter 14A of the Listing Rules, however, they are exempt from the disclosure requirements in Chapter 14A of the Listing Rules.

#### (f) Transactions with other state-controlled entities in the PRC

The controlling shareholder of the Company, THTF, is a state-controlled enterprise controlled by the PRC government. Apart from transactions with THTF and its subsidiaries and associate which were disclosed in Note 28(a) above, the Group also has transactions with other state-controlled entities, included but not limited to the following:

- sales of products and provision of services;
- purchase of materials; and
- bank deposits and borrowings.

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#### **COMPANY-LEVEL STATEMENT OF FINANCIAL POSITION** 29

	31 December 2017	31 December 2016
Note	RMB'000	RMB'000
Non-current assets		
Property, plant and equipment	1,626	1,302
Intangible assets Investments in subsidiaries	4 1,624,078	4 1,724,195
	1,625,708	1,725,501
Current assets		
Trading securities Trade and other receivables	- 89,504	5,896 79,870
Cash and cash equivalents	21,938	107,632
	111,442	193,398
Current liabilities		
Trade and other payables Obligations under finance leases	14,364 169	9,829 178
	14,533	10,007
Net current assets	96,909	183,391
Total assets less current liabilities	1,722,617	1,908,892
Non-current liability		
Obligations under finance leases	-	180
NET ASSETS	1,722,617	1,908,712
CAPITAL AND RESERVES 25		
Share capital Reserves	1,191,209 531,408	1,254,909 653,803
TOTAL EQUITY	1,722,617	1,908,712

Approved and authorised for issue by the board of directors on 16 March 2018.

Zhao Xiaobo	)	Directors
Qin Xuzhong	)	DIFECTORS

For the year ended 31 December 2017 (Expressed in RMB unless otherwise indicated)

#### 30 **ACCOUNTING ESTIMATES AND JUDGEMENTS**

### Key sources of estimation uncertainty

The Group believes the following critical accounting policies involve the significant judgements and estimates used in the preparation of the financial statements.

Information about assumptions and estimation uncertainties that may have a significant risk of resulting in a material adjustment in the year ending 31 December 2018 are included in the following notes:

#### (i) **Construction contracts**

As explained in policy notes 2(I) and 2(t)(iii), revenue and profit recognition on an uncompleted project is dependent on estimating the total outcome of the construction contract, as well as the work done to date. Based on the Group's recent experience and the nature of the construction activity undertaken by the Group, the Group makes estimates of the point at which it considers the work is sufficiently advanced such that the costs to complete and revenue can be reliably estimated. As a result, until this point is reached the amounts due from/to customers for contract work as disclosed in note 20 will not include profit which the Group may eventually realise from the work done to date. In addition, actual outcomes in terms of total cost or revenue may be higher or lower than estimated at the end of the reporting period, which would affect the revenue and profit recognised in future years as an adjustment to the amounts recorded to date.

#### (ii) Impairment of trade receivables

The management determines the impairment of trade receivables on a regular basis. This estimate is based on the credit history of its customers and current market conditions. If the financial conditions of the customers were to deteriorate, actual write-off would be higher than estimated. Management reassesses the impairment of trade receivables at the end of the reporting period.

Information about other judgements made and estimates applied are included in the following notes:

- Net realisable value of inventories (i)
  - Net realisable value of inventories is the estimated selling price in the ordinary course of business, less estimated costs of completion and distribution expenses. These estimates are based on the current market condition and historical experience of selling products of similar nature. It could change significantly as a result of competitor actions in response to changes in market conditions. Management reassesses these estimations at the end of the reporting period to ensure inventory is shown at the lower of cost and net realisable value.
- (ii) Impairment losses of non-current assets
  - In considering the impairment losses that may be required for certain of the Group's assets which include property, plant and equipment, lease prepayments and intangible assets, recoverable amount of the asset needs to be determined. The recoverable amount is the greater of the fair value less costs to sell and the value in use. It is difficult to precisely estimate selling price because quoted market prices for these assets may not be readily available. In determining the value in use, expected cash flow generated by the asset are discounted to their present value, which requires significant judgment relating to items such as level of revenue and amount of operating costs. The Group uses all readily available information in determining an amount that is reasonable approximation of recoverable amount, including estimates based on reasonable and supportable assumptions and projections of items such as revenue and amount of operating costs.

For the year ended 31 December 2017 (Expressed in RMB unless otherwise indicated)

#### 30 **ACCOUNTING ESTIMATES AND JUDGEMENTS** (Continued)

### **Key sources of estimation uncertainty** (Continued)

### **Depreciation**

Items of property, plant and equipment are depreciated on a straight-line basis over the estimated useful lives of the assets, after taking into account the estimated residual value. The management reviews the estimated useful lives of the assets regularly in order to determine the amount of depreciation expense to be recorded during any reporting period. The useful lives are based on the Group's historical experience with similar assets and taking into account anticipated technological changes. The depreciation expense for future periods is adjusted if there are significant changes from previous estimates.

#### (iv) Income tax

Determining income tax provisions involves judgement on the future tax treatment of certain transactions. The management carefully evaluates tax implications of transactions and tax provisions are set up accordingly. The tax treatment of these transactions is reconsidered periodically to take into account all changes in tax legislations. Deferred tax assets are recognised for deductible temporary differences and unused tax losses. As those deferred tax assets can only be recognised to the extent that it is probable that future taxable profit will be available against which they can be utilised, management's judgement is required to assess the probability of future taxable profits. Management's assessment is constantly reviewed and additional deferred tax assets are recognised if it becomes probable that future taxable profits will allow the deferred tax assets to be recovered.

Deferred tax liability was not recognised in respect of the withholding income tax that would be payable on the distribution of retained profits of the Company's subsidiaries as the Company considers that it is probable that such profits will not be distributed in the foreseeable future. Any changes in dividend policy may result in the recognition of the related deferred tax liabilities.

#### (v) **Development costs**

Critical judgement by the Group's management is applied when deciding whether the recognition requirements for development costs have been met. This is necessary as the economic success of any product development is uncertain and may be subject to future technical problems at the time of recognition. Judgements are based on the best information available at the end of the reporting period. In addition, all internal activities related to the research and development of new products is continuously monitored by the Group management.

#### (vi) Fair value of financial instruments

For financial liabilities designated at fair value through profit or loss, the Group determines fair values using valuation techniques which include discounted cash flow models, as well as other types of valuation model. Assumptions and inputs used in valuation techniques include risk-free and benchmark interest rates, maturities credit spreads and historical volatilities. Where discounted cash flow techniques are used, estimated cash flows are based on management's best estimates and the discount rate used is estimated based on the risk free interest rate plus credit spread of comparable bonds with similar credit rating, coupons and maturities. Where other pricing models are used, inputs are based on observable market data at each end of reporting period.

The objective of valuation techniques is to arrive at a fair value determination that reflects the price of the financial instrument at the end of reporting period that would have been determined by market participants acting at arm's length.

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### POSSIBLE IMPACT OF AMENDMENTS, NEW STANDARDS AND 31 INTERPRETATIONS ISSUED BUT NOT YET EFFECTIVE DURING THE YEAR **ENDED 31 DECEMBER 2017**

Up to the date of issue of these financial statements, the HKICPA has issued a number of amendments and new standards which are not yet effective for the year ended 31 December 2017 and which have not been adopted in these financial statements. These include the following which may be relevant to the Group.

> Effective for accounting periods beginning on or after

HKFRS 9, Financial instruments	1 January 2018
HKFRS 15, Revenue from contracts with customers	1 January 2018
Amendments to HKFRS 2, Share-based payment: Classification and measurement of share-based payment transactions	1 January 2018
HK(IFRIC) 22, Foreign currency transactions and advance consideration	1 January 2018
HKFRS 16, Leases	1 January 2019
HK(IFRIC) 23, Uncertainty over income tax treatments	1 January 2019

The Group is in the process of making an assessment of what the impact of these amendments, new standards and interpretations is expected to be in the period of initial application. So far the Group has identified some aspects of the new standards which may have a significant impact on the consolidated financial statements. Further details of the expected impacts are discussed below. While the assessment has been substantially completed for HKFRS 9 and HKFRS 15, the actual impacts upon the initial adoption of the standards may differ as the assessment completed to date is based on the information currently available to the Group, and further impacts may be identified before the standards are initially applied in the Group's interim financial report for the six months ending 30 June 2018. The Group may also change its accounting policy elections, including the transition options, until the standards are initially applied in that financial report.

For the year ended 31 December 2017 (Expressed in RMB unless otherwise indicated)

# 31 POSSIBLE IMPACT OF AMENDMENTS, NEW STANDARDS AND INTERPRETATIONS ISSUED BUT NOT YET EFFECTIVE DURING THE YEAR ENDED 31 DECEMBER 2017 (Continued)

### **HKFRS 9, Financial instruments**

HKFRS 9 will replace the current standard on accounting for financial instruments, HKAS 39, Financial instruments: Recognition and measurement. HKFRS 9 introduces new requirements for classification and measurement of financial assets, including the measurement of impairment for financial assets and hedge accounting. On the other hand, HKFRS 9 incorporates without substantive changes the requirements of HKAS 39 for recognition and derecognition of financial instruments and the classification and measurement of financial liabilities.

HKFRS 9 is effective for annual periods beginning on or after 1 January 2018 on a retrospective basis. The Group plans to use the exemption from restating comparative information and will recognise any transition adjustments against the opening balance of equity at 1 January 2018.

Expected impacts of the new requirements on the Group's financial statements are as follows:

#### (a) Classification and measurement

HKFRS 9 contains three principal classification categories for financial assets: measured at (1) amortised cost, (2) fair value through profit or loss (FVTPL) and (3) fair value through other comprehensive income (FVTOCI) as follows:

- The classification for debt instruments is determined based on the entity's business model for managing the financial assets and the contractual cash flow characteristics of the asset. If a debt instrument is classified as FVTOCI then effective interest, impairments and gains/losses on disposal will be recognised in profit or loss.
- For equity securities, the classification is FVTPL regardless of the entity's business model. The only exception is if the equity security is not held for trading and the entity irrevocably elects to designate that security as FVTOCI. If an equity security is designated as FVTOCI then only dividend income on that security will be recognised in profit or loss. Gains, losses and impairments on that security will be recognised in other comprehensive income without recycling.

The Group has assessed that its financial assets currently measured at amortised cost will continue with their respective classification and measurements upon the adoption of HKFRS9. Currently, the Group does not have financial assets classified as FVTPL and FVTOCI.

The classification and measurement requirements for financial liabilities under HKFRS 9 are largely unchanged from HKAS 39, except that HKFRS 9 requires the fair value change of a financial liability designated at FVTPL that is attributable to changes of that financial liability's own credit risk to be recognised in other comprehensive income (without reclassification to profit or loss). The Group currently does not have any financial liabilities designated at FVTPL and therefore this new requirement may not have any impact on the Group on adoption of HKFRS 9.

#### (b) **Impairment**

The new impairment model in HKFRS 9 replaces the "incurred loss" model in HKAS 39 with an "expected credit loss" model. Under the expected credit loss model, it will no longer be necessary for a loss event to occur before an impairment loss is recognised. Instead, an entity is required to recognise and measure either a 12-month expected credit loss or a lifetime expected credit loss, depending on the asset and the facts and circumstances. The Group expects that the application of the expected credit loss model will result in earlier recognition of credit losses. Based on a preliminary assessment, if the Group were to adopt the new impairment requirements at 31 December 2017, there is no material effect on the amount of impairment loss.

For the year ended 31 December 2017 (Expressed in RMB unless otherwise indicated)

# POSSIBLE IMPACT OF AMENDMENTS, NEW STANDARDS AND INTERPRETATIONS ISSUED BUT NOT YET EFFECTIVE DURING THE YEAR ENDED 31 DECEMBER 2017 (Continued)

### HKFRS 15, Revenue from contracts with customers

HKFRS 15 establishes a comprehensive framework for recognising revenue from contracts with customers. HKFRS 15 will replace the existing revenue standards, HKAS 18, Revenue, which covers revenue arising from sale of goods and rendering of services, and HKAS 11, Construction contracts, which specifies the accounting for revenue from construction contracts.

Based on the assessment completed to date, the Group has identified the following areas which are expected to be affected:

#### (a) Timing of revenue recognition

Under HKFRS 15, revenue is recognised when the customer obtains control of the promised good or service in the contract. HKFRS 15 identifies 3 situations in which control of the promised good or service is regarded as being transferred over time:

- When the customer simultaneously receives and consumes the benefits provided by the entity's performance, as the entity performs;
- When the entity's performance creates or enhances an asset (for example work in progress) that the customer controls as the asset is created or enhanced;
- When the entity's performance does not create an asset with an alternative use to the entity and the entity has an enforceable right to payment for performance completed to date.

If the contract terms and the entity's activities do not fall into any of these 3 situations, then under HKFRS 15 the entity recognises revenue for the sale of that good or service at a single point in time, being when control has passed. Transfer of risks and rewards of ownership is only one of the indicators that will be considered in determining when the transfer of control occurs.

The Group's revenue recognition policies are disclosed in note 2(t). Currently, revenue arising from construction contracts and the provision of services is recognised over time, whereas revenue from the sale of goods is generally recognised when the risks and rewards of ownership have passed to the customers. The current practice is in line with the HKFRS 15. The Group has assessed that the new revenue standard is not likely to have significant impact on the timing of revenue recognition.

#### Significant financing component (b)

HKFRS 15 requires an entity to adjust the transaction price for the time value of money when a contract contains a significant financing component, regardless of whether the payments from customers are received significantly in advance or in arrears.

Currently, the Group would only apply such a policy when payments are significantly deferred, which is currently common for EMC contracts regarding energy system upgrading or reforming. The Group recognize revenue when the reforming or upgrading project is finished and related control and risk are transferred to customer. As customer will pay for the project by instalments, which cover from 7 years to 20 years, in assessing whether such deferred payments schemes include a significant financing component, the Group has considered the difference between the total amount of instalments due from those customers and the cash selling price, and the length of time between the payment date and the completion date of legal assignment (i.e. the date when the customers obtain control of the properties) based on the typical arrangements entered into with the customers. The current practice is in line with the HKFRS 15. The Group has assessed that the new revenue standard is not likely to have significant impact.

Advance payments are not common in the Group's arrangements with its customers. The Group has assessed that the new revenue standard is not likely to have significant impact.

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# 31 POSSIBLE IMPACT OF AMENDMENTS, NEW STANDARDS AND INTERPRETATIONS ISSUED BUT NOT YET EFFECTIVE DURING THE YEAR ENDED 31 DECEMBER 2017 (Continued)

### HKFRS 15, Revenue from contracts with customers (Continued)

The Group plans to elect to use the cumulative effect transition method for the adoption of HKFRS 15 and will recognise the cumulative effect of initial application as an adjustment to the opening balance of equity at 1 January 2018. The Group expects that the transition adjustment to be made upon the initial adoption of HKFRS 15 will not be material.

# **HKFRS 16, Leases**

As disclosed in note 2(i), currently the Group classifies leases into finance leases and operating leases and accounts for the lease arrangements differently, depending on the classification of the lease. The Group enters into some leases as the lessor and others as the lessee.

HKFRS 16 is not expected to impact significantly on the way that lessors account for their rights and obligations under a lease. However, once HKFRS 16 is adopted, lessees will no longer distinguish between finance leases and operating leases. Instead, subject to practical expedients, lessees will account for all leases in a similar way to current finance lease accounting, i.e. at the commencement date of the lease the lessee will recognise and measure a lease liability at the present value of the minimum future lease payments and will recognise a corresponding "rightof-use" asset. After initial recognition of this asset and liability, the lessee will recognise interest expense accrued on the outstanding balance of the lease liability, and the depreciation of the right-of-use asset, instead of the current policy of recognising rental expenses incurred under operating leases on a systematic basis over the lease term. As a practical expedient, the lessee can elect not to apply this accounting model to short-term leases (i.e. where the lease term is 12 months or less) and to leases of low-value assets, in which case the rental expenses would continue to be recognised on a systematic basis over the lease term.

HKFRS 16 will primarily affect the Group's accounting as a lessee of leases for property, plant and equipment which are currently classified as operating leases. The application of the new accounting model is expected to lead to an increase in both assets and liabilities and to impact on the timing of the expense recognition in the statement of profit or loss over the period of the lease. As disclosed in note 27(b), at 31 December 2017 the Group's future minimum lease payments under non-cancellable operating leases amount to RMB24,085,000 for properties. Among which RMB8,327,000 is payable after 1 year but within 5 years. Some of these amounts may therefore need to be recognised as lease liabilities, with corresponding right-of-use assets, once HKFRS 16 is adopted. The Group will need to perform a more detailed analysis to determine the amounts of new assets and liabilities arising from operating lease commitments on adoption of HKFRS 16, after taking into account the applicability of the practical expedient and adjusting for any leases entered into or terminated between now and the adoption of HKFRS 16 and the effects of discounting.

HKFRS 16 is effective for annual periods beginning on or after 1 January 2019. The standard offers different transition options and practical expedients, including the practical expedient to grandfather the previous assessment of which existing arrangements are, or contain, leases. If this practical expedient is chosen, the Group will apply the new definition of a lease in HKFRS 16 only to contracts that are entered into on or after the date of initial application. If the practical expedient is not chosen, the Group will need to reassess all of its decisions about which existing contracts are, or contain, leases, using the new definition. Depending on whether the Group elects to adopt the standard retrospectively or follow a modified retrospective method of recognising a cumulative-effect adjustment to the opening balance of equity at the date of initial application, the Group may or may not need to restate comparative information for any changes in accounting resulting from the reassessment. The Group has not yet decided whether it will choose to take advantage of this practical expedient, and which transition approach to be taken.