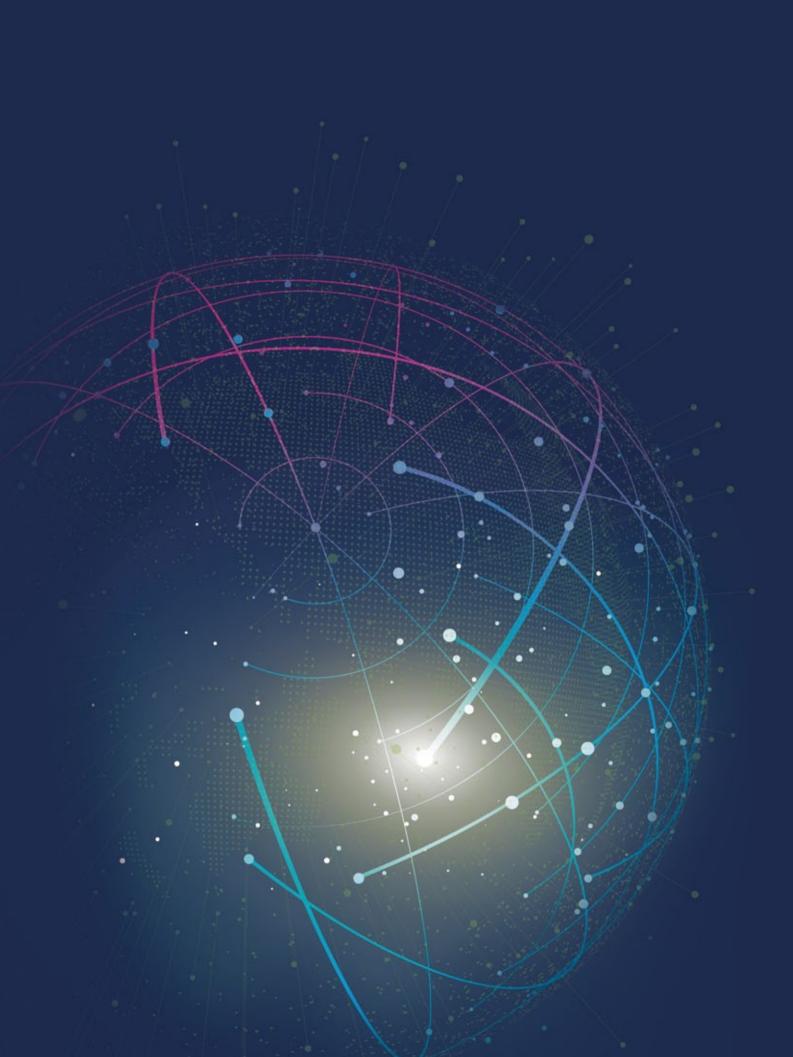


# TIANNENG POWER INTERNATIONAL LIMITED 天能動力國際有限公司

(Incorporated in the Cayman Islands with limited liability) Stock code : 00819







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# **CORPORATE INFORMATION**

# **Executive Directors**

Dr. Zhang Tianren *(Chairman)* Mr. Zhang Aogen Mr. Chen Minru (resigned with effect from 18 May 2018) Mr. Shi Borong Mr. Zhang Kaihong Mr. Zhou Jianzhong

# **Independent Non-Executive Directors**

Mr. Guo Konghui (retired with effect from 18 May 2018) Mr. Huang Dongliang Mr. Wu Feng Mr. Zhang Yong (appointed with effect from 8 August 2018)

# **Audit Committee Members**

Mr. Huang Dongliang *(Chairman)* Mr. Wu Feng Mr. Guo Konghui (retired with effect from 18 May 2018) Mr. Zhang Yong (appointed with effect from 8 August 2018)

# **Remuneration Committee Members**

Mr. Wu Feng *(Chairman)* Mr. Chen Minru (resigned with effect from 18 May 2018) Mr. Huang Dongliang Mr. Zhang Aogen (appointed with effect from 8 August 2018)

# **Nomination Committee Members**

Dr. Zhang Tianren *(Chairman)* Mr. Huang Dongliang Mr. Wu Feng

# **Company Secretary**

Ms. Hui Wai Man Shirley

# **Auditor**

Deloitte Touche Tohmatsu Certified Public Accountants 35th Floor, One Pacific Place 88 Queensway Hong Kong

# **Statutory Address**

Cricket Square Hutchins Drive P.O. Box 2681 Grand Cayman KY1-1111 Cayman Islands

# **Principal Place of Business in Hong Kong**

Suite 3202, 32 Floor, Central Plaza 18 Harbour Road Wanchai, Hong Kong

# **Principal Share Registrar**

Conyers Trust Company (Cayman) Limited Cricket Square, Hutchins Drive, P.O. Box 2681, Grand Cayman KY1-1111, Cayman Islands

# Hong Kong Branch Share Registrar and Transfer Office

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

## **CORPORATE INFORMATION**

# **Public Relations**

Porda Havas International Finance Communications Group Units 2009-2018, 20/F., Shui On Centre 6-8 Harbour Road Wanchai, Hong Kong

# **Listing Information**

The Stock Exchange of Hong Kong Limited Stock Code: 00819

# Company's Website

http://www.tianneng.com.hk

# **COMPANY PROFILE**



Tianneng Power International Limited ("the Company" or "Tianneng Power") and its subsidiaries ("the Group") is a leading enterprise in the industry of new energy power battery in China, founded in 1986. In 2007, Tianneng Power was listed on the Main Board of The Stock Exchange of Hong Kong Limited (the "Stock Exchange") as the "First mainland enterprise of power battery". After more than 30 years of development, it has become a large high-tech energy group focusing on the manufacturing and provision of services of environmentally friendly power batteries for electric vehicles, while offering integrated power storage ancillary services, and integrating the R&D, production and sale of lithium batteries for new energy vehicles, start-and-stop batteries for vehicles and wind power and solar power storage batteries; the recycling and cyclic utilization of waste batteries; the construction of smart micro-grids in cities; as well as the building of green and smart industrial parks.

"Responsibility, Innovation, Striving and Sharing" are the core values of Tianneng Power, and these core values focus on striving for value, enhancing responsibilities, persistently driving for innovation, constantly generating motivation, boosting core competitiveness, consistently achieving high-quality development, creating values for customers and providing a platform for employees, with the aims to create returns to our shareholders and to give back to our community through concrete actions.

# FINANCIAL HIGHLIGHTS

# (Amounts are expressed in thousand of RMB except per share data) Consolidated Statement of Comprehensive Income (Note 1)

X./	2018	2017	2016	2015	2014
Revenue	34,552,090	26,903,901	21,480,891	17.804.068	14,043,731
Profit/(Loss) before taxation	1,604,911	1,407,588	1,145,083	745,629	(407,102)
Taxation	(304,114)	(227,356)	(239,561)	(117,832)	114,115
Profit/(Loss) for the year	1,300,797	1,180,232	905,522	627,797	(292,987)
Non-controlling interests	48,367	1,863	46,976	16,861	11,930
Profit/(Loss) attributable to the owners					
of the Company	1,252,430	1,178,369	858,546	610,936	(304,917)
Earnings/(Loss) per share (RMB/share)	1 11	1.05	0.74	0.55	(0.07)
– Basic – Diluted	1.11 1.09	1.05 1.02	0.76 0.74	0.55 0.54	(0.27) (0.27)
	1.09	1.02	0.74	0.54	(0.27)

# **Consolidated Statement of Financial Position (Note 2)**

	2018	2017	2016	2015	2014
Total assets	16,641,291	13,981,698	12,129,825	10,546,091	8,713,603
Total liabilities	10,868,011	8,918,212	8,023,225	7,078,950	5,967,963
Net assets/Total equity	5,773,280	5,063,486	4,106,600	3,467,141	2,745,640

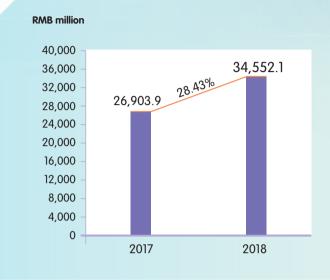
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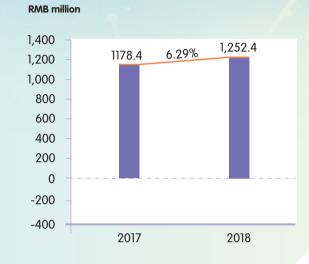
- The results for the years ended 31 December 2014 and 2015 are set out on page 64 of the Annual Report 2015 of the Company. The results for the years ended 31 December 2015 and 2016 are set out on page 61 of the Annual Report 2016 of the Company. The results for the years ended 31 December 2016 and 2017 are set out on page 61 of the Annual Report 2017 of the Company. All such information is extracted from the financial statements prepared under Hong Kong Financial Reporting Standards ("HKFRSs").
- 2. The consolidated statement of financial position as at 31 December 2014 and 2015 are set out on page 65 of the Annual Report 2015 of the Company. The consolidated statement of financial position as at 31 December 2015 and 2016 are set out on page 62 of the Annual Report 2016 of the Company. The consolidated statement of financial position as at 31 December 2016 and 2017 are set out on page 62 of the Annual Report 2016 of the Company. The consolidated statement of financial position as at 31 December 2016 and 2017 are set out on page 62 of the Annual Report 2016 of the Company. All such information is extracted from the financial statements prepared under HKFRSs.

# FINANCIAL HIGHLIGHTS

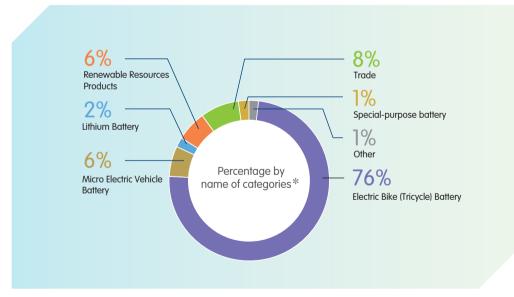
# **SALES TURNOVER**

# PROFIT ATTRIBUTABLE TO SHAREHOLDERS





# **SEGMENT TURNOVER**



Special purpose battery includes battery products mainly for tubular battery, lead-acid starter battery, energy storage battery and standby battery.

# CHAIRMAN'S STATEMENT



# Striving for ecological reform to win the future

Dear shareholders,

2018 was an important year for Tianneng to reform, plan and grow under adverse circumstances. We were confident in concentrating on our major business, strengthening the social needs in the sustainable development of the eco-industrial chain, firmly capturing the general tone of "stable and progressive" in our work, steering the direction towards green wisdom (綠色智) with the focus on quality and efficiency and upholding the main principle of creating diversified values. The Group's sales and profit tax have reached an unprecedented high, maintaining a rapid and steady growth momentum. Due to a lift in the Group's overall rankings and more significant industrial integration advantages, the comprehensive strength has reached a new level, and the Group was marching towards the goal of becoming the world's most respected world-class new energy company.

# Profit Attributable to Shareholders and Dividend during the Year

During the year, the Group's consolidated turnover was approximately RMB34,552 million (2017: approximately RMB26,904 million), representing an increase of 28.43% as compared to the previous year. The profit attributable to owners of the Group was approximately RMB1,252 million (2017: approximately RMB1,178 million), representing an increase of 6.29% as compared to the previous year. The Group's basic earnings per share was approximately RMB1.11 (2017: approximately RMB1.05). The Company proposes to declare a cash dividend of HK38 cents (2017: HK37.00 cents) per ordinary share of the Company (the "Shares") held by the shareholders of the Company (the "Shareholders"). The proposal shall be subject to the approval by the Shareholders at the annual general meeting ("AGM") to be held on 16 May 2019.

# In 2018, Fostering Steady and Innovative Development

Facing the difficult situation in the complex and volatile global economy and the tightening boundaries of the ecological environment, all employees of the Group were united to work against these challenges. During the year, the Group's industrial structure continued to optimize and upgrade, the technological research and development (R&D), products and services continued to progress, laying a solid foundation for high-quality and sustainable development.

The industrial structure continues to optimize and upgrade, and the technological R&D continued to grow. During the reporting period, the Group firmly grasped the multi-track development of the cornerstone segment\*, enhanced the balanced layout of regional structures, and broadened the integration of intelligent manufacturing and informatization to enhance quality and efficiency. Among the second and third batches of the national green manufacturing lists, two of our subsidiaries were selected as the model enterprises of green supply chain management, two subsidiaries were selected as green factories, and eight products were selected as green design products. In terms of industrial layout, the Group has successively invested in a number of projects in Henan and Anhui provinces, effectively activating the geographical advantages of each region and realizing complementary advantages to continuously promote the high-quality development of the industry in a vigorous manner.

Green bamboo energy (綠竹能源)\* is poised to move forward with the focus on high-end production. Lithium battery and high-tech frontier industries adopted the "main + auxiliary" development concepts and applied project inspection and acceptance through the new model of intelligent manufacturing. At the same time, Tianneng Green Manufacturing (天能 綠色製造) commenced construction of the first new energy supporting project in the national industrial park.

The green sustainable new materials industry has emerged and participated in the formulation and revision of relevant national industrial policies and regulations led by the national commissions; actively implemented and improved a series of industrial norms brought by the extension of the national ecological and environmental production responsibility, competing for the support from national and local policies to promote the development of ecological industries. The lithium battery recycling project has been developed simultaneously to improve the design of the multi-product circular industry chain.

The Group's forward-looking and comprehensive vision has been strategically placed to strengthen the acquisition of core talents, improve the senior talent management system, and further build a sophisticated R&D team with academicians, "National One Thousand Talents", foreign experts, and professors or doctors. In addition, we launched the industry-academic cooperation with local and overseas top universities to make directional research towards the outstanding problems in the changing world energy pattern. During the reporting period, the Group completed the acceptance of major projects for the Ministry of Science and Technology of the PRC and the Ministry of Industry and Information Technology of the PRC, and led the compilation of more than 10 national and industrial technical standards; broke through the core technology management of power battery technology formula, R&D and product performance of new materials, and accelerated the incubation of new projects such as the recycling of lithium batteries and fuel cells.

#### \* New energy battery

<sup>\*</sup> High-end eco-friendly battery

## CHAIRMAN'S STATEMENT

In addition, the Group continued to develop new patented products to lead the industry. The Group developed and massproduced new national targeted cornerstone products and energy solutions for cylindrical batteries, soft pack batteries and Pack that met the high capacity of the market, and successfully supported users of high-end power vehicles, electric vehicles and the industry as a whole. The R&D of highly reliable battery was included in the Group's mid- and long-term strategic development blueprint. In 2018, the Group completed over 500 patent applications with a total number of more than 1,000 patents, and won two China Excellent Design Awards for the 2018 China Patent Award.

**Promoting products and services to grow to create values to meet customers' needs.** During the reporting period, digital upgrades continued to grow vigorously. Accelerating the deep integration of "informatization and industrialization", establishing a dual platform for flexible intelligent manufacturing and driven by big data cloud, and developing its own series of big data application cases for pilot demonstration projects such as "lead carbon battery digital workshop" and "new energy vehicle power battery production-intelligentized plant" have formed an all-round intelligent manufacturing industry chain. As a result, the Group was successfully selected as Zhejiang First Batch of Cloud Example Enterprises, and it was awarded one of the enterprises of the Top 100 Enterprise of Chinese Light Industry.

**Executing global strategy to expand the market.** During the reporting period, the Group's domestic market share remained in a leading position, and the brand recognition in the international market was enhanced. The motive battery channel outlets were refined, and the market grew steadily; special-purpose batteries and tubular batteries seized the market in a stable and steady manner; speeding up the channel construction of start-stop batteries and expanding the business model. The Group vigorously promoted international cooperation and accelerated the globalization of the brand and market construction, thus further enhanced the influence of the global market.

# In 2019, Deeply Driving High-quality and Sustainable Development

2019 is Tianneng's year of advancement in its overall deepening reform. In a new era where opportunities meet challenges, we must keep our strategic stamina and move forward without fear.

While consolidating the foundation and stabilizing the major business, we will continue to boost the R&D of world-class sophisticated technology and the cultivation of global and senior professionals, making achievements in the process of optimizing the world energy pattern with high-end energy technologies. At the same time, the Group strives to enhance its economic and social benefits, building a bright and warm Tianneng which is with "great economic benefits, strong growth, plenty of happiness and a positive social image" and rising to rank top in the industry globally. In 2019, we will actively plan the diversified capital development, laying a solid foundation for the globalization, as well as creating a sustainable development industry with core competitiveness.

I am convinced that, driven by the mission of "New Energy New World", the Group will remain true to our original aspiration, keep our mission firmly in mind and continue to bring better returns to its Shareholders.

# **Appreciation**

I would like to take this opportunity to extend my sincere gratitude to all the employees of the Group for their contribution and hard work and to the Shareholders, business partners and various sectors of the society for their full support.

**Zhang Tianren** *Chairman* Hong Kong, 22 March 2019

Tianneng Power International Limited ("Tianneng" or "the Company" and together with its subsidiaries, "the Group") has three major businesses in the People's Republic of China ("PRC" or "China"), namely the research and development (R&D), production and sales of: 1) high-end eco-friendly batteries; 2) new energy batteries; 3) green renewable new materials.

# **Review of Operations**

In 2018, facing the difficult situation of the complex and volatile global economy and the increased operational pressure on the real economy, the Group continued to concentrate on the general tone of "stable and progressive" in our work, steering the direction towards green wisdom (綠色智造) with the focus on quality and efficiency and the main principle of reform and innovation. All major businesses have recorded steady growth, achieving the Group's high-quality and sustainable development.

In 2018, with strong comprehensive strength and development momentum, the Group continued to secure its position as the industrial leader ranking among the Fortune China Top 500, China Top 500 Enterprises and China Top 500 Private Enterprises. The Group was ranked 15th among the 2018 Global Top 500 New Energy Enterprises, rising 11 places from last year and representing one of the top three in China, positioning itself as a leading enterprise in the motive battery industry.

#### 1. The cornerstone segment is developing steadily, and the capital advantage is increasing year by year

High-end eco-friendly batteries are the Group's traditional major business, providing the Group with a solid cash flow. During the reporting period, the sales revenue of electric bicycle and electric tricycle batteries was approximately RMB26,290 million, increased by 21.11% year-on-year. The sales revenue of micro electric vehicles was approximately RMB2,005 million, representing a year-on-year increase of 35.81%.

#### (1) Electric bicycle and electric tricycle battery

China is the world's largest producer and distributer of electric bicycles. After years of development, electric bicycles have gradually become an important means of daily transportation for consumers to travel in short distances. According to data from the China Bicycle Association and the Ministry of Industry and Information Technology, the annual production volume of electric vehicles in China is around 30 million, and the total social ownership is about 250 million.

With the continuous growth of China's economy, the continuous improvement in the consumption level, the continuing increase of people's awareness on environmental protection, and the promotion of energy conservation and emission-reduction policies, the market demand for electric vehicles will continue to grow steadily. In recent years, according to Ipsos industry research report, by 2025, the demand for electric bicycle batteries and electric tricycle batteries in China will exceed USD10 billion.

On 15 May 2018, four government departments including State Administration for Market Regulation, Standardization Administration of China, and Ministry of Industry and Information Technology promulgated the national standards of "Safety Technical Specification for Electric Bicycle" (hereinafter referred to as the "New National Standard"), which will be effective from 15 April 2019. The introduction of the New National Standard is of great significance for the development of electric vehicles and their supporting industries in all aspects: regulating market order, improving product safety performance, and fostering market competition for the best to remain.

The electric vehicle battery is the power source on the electric vehicles. The high-end eco-friendly battery is applicable with various benefits and qualities such as wide temperature range, safe and stable, high price-performance ratio and a relatively mature recycling system, thus dominating the electric vehicle motive battery market.

The Group fully leveraged on the favorable opportunities introduced by the promulgation of the New National Standard to further enhance quality and efficiency, consolidate its leading position in the industry, and increase its market share steadily, mainly shown in the following aspects:

- (1) Deepening the strategic cooperation with leading vehicle enterprises, accelerating product standardization and modular production, and rapidly realizing technological cost reduction. Jointly developing new products that comply with the New National Standard and meet the needs of customers, and seizing share in the new market under the New National Standard.
- (2) Actively promoting intelligent manufacturing and technological upgrades. Through improvements in crafts and techniques such as casting and rolling, high-calcium low-tin alloy formula and negative graphene, the conductivity of batteries has improved, and the energy ratio has increased.
- (3) Giving full play to brand advantages and channel advantages to accelerate the coordinated development of lead and lithium and provide high-quality solutions for customers. During the reporting period, the Group has over 3,000 exclusive distributors and 300,000 end-user stores. The sales network spreads across the country with obvious competitive edges of the Group's channels.



#### (2) Micro electric vehicle battery

Micro electric vehicles are four-wheel low-speed vehicles entirely driven by electricity, with a maximum speed of 40-70 kilometres per hour in general and designed with a maximum of four seats. Such kind of vehicles is of small volume, affordable, and is commonly used for short-distance travelling.

Driven by factors such as diversified traffic conditions and moderate consumption upgrade, micro electric vehicles, as a convenient, low-carbon and eco-friendly transportation tool for the people, have gradually become an important part as usual traffic tools in rural areas and as "1+1" travel tools (i.e. one fuel vehicle + one micro electric vehicle) in urban areas. According to the statistics of China Industrial Association of Power Sources, there are currently 6 million micro electric vehicles in the domestic market and 1 million of such vehicles would be increased per annum.

Following the promulgation of relevant national policies in the end of 2018, the micro electric vehicle industry has become more standardized and regulated, hence the micro electric vehicle market has undergone significant developments. Being the "heart" of electric vehicles, motive battery is the core component parts that ensures rapid development of the electric vehicle industry, it has crucial influences on the quality, lifespan and cruising mileage of electric vehicles, as well as being the key element in determining whether an electric vehicle manufacturing enterprise has its core competitiveness. Currently, high-end eco-friendly batteries is the best option for micro electric vehicles, with its major markets concentrating in regions such as Shandong, Henan, Hebei in China.

At the "12th International New Energy Vehicles and Electric Vehicles Expo" (第十二屆國際新能源汽車電動車展 覽會) held in Shandong and the "18th North China International Bicycle and Electric Vehicle Expo" (第十八屆中 國北方國際自行車電動車展覽會) held in Tianjin in which the Group participated during the reporting period, the Group launched new batteries with long lifespan, strong power, low temperature resistance, high capacity, and fine technique. The Group successfully held the "Hundred-kilometer Rally for Micro Vehicles" (微型車百公 里拉力賽) and the "Power of Models - National Excellent Supplier Conference" (榜樣的力量-全國優秀共贏商 大會), which demonstrated its brand strength. Tianneng continued to maintain its market leading position in the batteries for micro vehicles.





#### (3) Other high-end eco-friendly battery

In addition to the tradition electric bicycle and electric tricycle market, and micro electric vehicle market, highend eco-friendly batteries are widely used in other markets which mainly include electric forklifts, start-stop system for fuel vehicles and smart energy. During the reporting period, the sales revenue of starting batteries has an increase of approximately 200% as compared with the same period last year.

#### Electric forklift

With development of internet economy and logistic sector, electric forklift market had grown rapidly. According to China Industry Information Network, the sales of forklifts were more than 600,000 nationwide in 2018, of which the shares of electric forklifts had risen rapidly from 11% in 2011 to 47% in 2018. Therefore, the total demands for batteries amounted to more than RMB3.0 billion nationwide. Currently, Tianneng forklift battery is designed in accordance with European standards, with attributes such as service life and safety performance indicators that are superior to national standards, and it has established the strategic partnership with Anhui Heli, Hangcha Group, Linde Forklift (林 德叉車), and Noblift (諾力叉車), becoming the second largest domestic brand nationwide. In the coming three to five years, the Group will further increase its market share by expanding the after-sales market replacement of existing products, as well as developing new products such as lithium batteries, and striving for innovation in its business models.

#### Start-stop system for fuel vehicles

The start-stop system for fuel vehicles is closely related to the downstream automobile industry. According to data from the Ministry of Public Security, as of the end of 2018, the ownership of motor vehicles in China reached 327 million, including 240 million vehicles. Compared with 2017, the number of vehicles increased by 22.85 million per annum, representing an increase of 10.51%. Under the backdrop of increasing vehicle ownership, the vehicle start-stop market has continued to grow. The continuous growth of the vehicle ownership provides a favorable market condition for the Group's development of the vehicle start-stop system battery. Additionally, domestic vehicle manufacturers are affected by the national energy conservation and emission reduction policies, from which the pressure on fuel consumption limits has increased sharply. It is expected that the loading rate of the new vehicle start-stop system will increase significantly in the coming years, and the market for lead-acid start-stop batteries is huge.

Leveraging on its strong brand, marketing, service, and industrial leading advantages, the Group had collaborated with starting battery manufacturers to achieve a win-win situation in backend auto market. During the reporting period, establishing the strategic cooperation with the top ten starting battery manufacturers in the sector, the Group had integrated resources by collaborating with strong manufacturers with the number of distributors exceeding 800 rapidly. The Group successfully opened up the starting battery market and set up Tianneng brand.



#### **Smart energy**

The Group actively expanded its smart energy market. During the reporting period, the Group had become strategic partners with China Resources Power, hence both parties concurred to conduct purchase and sales in five aspects including electric business and services, energy storage and comprehensive energies, smart energy project development, preventive examination and maintenance of electric equipment, and electric energy saving upgrading and services, so as to achieve mutual benefits and development by leveraging on their respective advantages sufficiently. At the "SNEC 12th International Photovoltaic Power Generation and Smart Energy Exhibition & Conference" (SNEC第十二屆國際太陽能光伏與智慧能源展覽會) held in Shanghai in May, Tianneng exhibited its smart energy solutions and drew wide attention in the market. During the reporting period, the Group was awarded "2018 China Most Influential Enterprise in Energy Storage Industry" (2018年度 中國儲能產業最具影響力企業) and "2018 Top Ten Energy Storage Battery Supplier Award in Energy Storage Industry" (2018年度儲能產業十佳儲能電池供貨商獎).

#### 2. The green bamboo industry is gaining momentum and the cornerstone industry is developing synergistically

The spirit of green bamboo implies perseverance and being well prepared, which demonstrates the confidence and determination of the Group in progressing the development of green bamboo industry. The green bamboo industry consists of new energy battery and green renewable new material businesses.

#### New energy battery

(1)

The new energy battery is an important strategic industrial segment of the Group. During the reporting period, revenue from new energy batteries was approximately RMB553 million.

According to the data from the Ministry of Public Security, the number of new energy vehicles in China increased by 1.07 million in 2018, representing an increase of 70%. According to China



Association of Automobile (中國汽車協會), the domestic average production volume of lithium-powered bicycles was more than 2,700,000 per annum from 2015 to 2017. According to China Industrial Association of Power Sources, the domestic demands for motive lithium batteries had risen rapidly from 7% in 2012 to 52% in 2016, with strong market demands in the future.

According to the non-comprehensive statistics of the project archive of China Energy Storage Alliance (CNESA), at the end of December 2018, the cumulative installed capacity of operating energy storage projects was 180.9 GW globally, representing a year-on-year increase of 3%. Among which, the cumulative installed capacity of electrochemical energy storage was 6.5 GW, representing a year-on-year increase of 121%. In 2018, the installed capacity of the newly-added operating energy storage projects was 5.5 GW globally, among which, the additional operating capacity of electrochemical energy storage was the highest at 3.5 GW, representing a year-on-year increase of 288%.

At the end of December 2018, the cumulative installed capacity of operating energy storage projects in China was 31.2 GW, representing a year-on-year increase of 8%, among which, the cumulative installed capacity of electrochemical energy storage was 1.01 GW, representing a year-on-year increase of 159%. In 2018, the installed capacity of the newly-added operating energy storage projects in China was 2.3 GW, among which, the additional operating capacity of electrochemical energy storage was the highest at 0.6 GW, representing a year-on-year increase of 414%.

Developing its new energy battery business, the Group fully entered the energy storage sector in 2018 by introducing innovative smart energy solutions and actively exploring new room for business development. As a result, the Group built the first commercial user Shanghai Edgelight (上海邊光) energy storage power station and the lead-carbon battery energy storage power station in Shuyang, Jiangsu. The Group also established the distributed photovoltaic power generation energy technology project to achieve grid-connected power



generation, completed the delivery of distributed photovoltaic energy generation projects for Rongfeng Textile (蓉峰紡織) and Fenghe Textile (峰赫紡織) and was awarded "2018 China Most Influential Enterprise in Energy Storage Industry" (2018年度中國儲能產業最具影響力企業).

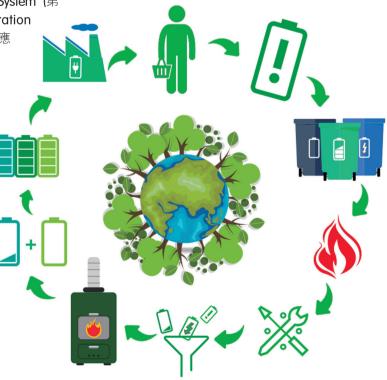
#### (2) Green renewable new materials

By deeply practicing the concept of "Lucid waters and lush mountains are invaluable assets" and resolutely implementing the producer responsibility extension system, the Group targets to create green circular economy and speed up the construction of "urban mines". During the reporting period, external revenue from green renewable new materials was approximately RMB2,046 million, representing an increase of approximately 32.81% as compared with the same period last year. As a result, it provided the Group with steady profit contribution, generating excellent economic and social benefits.

The Group strived to build a cycle industry chain integrating "recycling-smelting-reproduction" all the way, turning the enterprise into a pioneering demonstration base for green, low-carbon and recycling development. Leveraging on the existing used battery recovery bases, the Group deepened all-round green circular economy. With an annual processing capacity of 700,000 tonnes of used batteries and the battery recovery rate as high as approximately 99%, the Group had become a benchmark enterprise for the harmless treatment of used batteries.

During the reporting period, the Group participated in the formulation of the national standard of *General Guideline* of Standard System for Circular Economy of Industrial Enterprises and Parks (工業企業和園區循環經濟標準體系) and Industrial Standard for Recycling Used Battery\* (廢蓄電池回收規範行業標準), and acted as the representative of manufacturers, actively striving for support in policies for state tax. The "Solid Waste Resource" full life cycle identification traceability system and the performance evaluation technology project in cooperation with the Center for Solid Waste Management of Ministry of Ecology and Environment (生態環境部固管中心) have been established. The Group had been named as a "Resource Comprehensive Utilization Enterprise" (資源綜合利用企業) and "National Circular Economy Standardization Pilot Enterprise" (國家循環經濟標準化試點企業) by National Development and Reform Commission. Moreover, the Group had been listed as a "Key Promoting Project of Integration of Informatization and Industrialization for Promoting Energy-Saving and Emission Reduction in China" (國家兩化融合促 進節能減排重點推進項目) by the MIIT, and selected as "First Batch

Demonstration Plants for Green Manufacturing System" (第 一批綠色製造體系示範工廠) and "Demonstration Enterprise for Green Supply Chain" (綠色供應 鏈示範企業). During the reporting period, the Group was appraised as a "National Technology Center for Circular Economy" (全國循環經濟技術中心) and "A Copper Removal Composition for Recycled Lead Refining and Its Application", independently researched and developed by the Group, won the national invention patent award.



#### Executing global strategy to expand the market

In response to the national policy, the Group had made presence along the "Belt and Road" and to the world, and mainly exported its products to such regions as Southeast Asia, Australia, Middle East, Europe, and Africa, demonstrating a fast pace in its market development.

#### (1) Conduct international trade and global sales

In terms of the cornerstone segment, the focus is on underdeveloped regions and developing countries, with an aim to help them with their infrastructure construction. In terms of new energy batteries, many products have obtained international recognition and have accordingly been introduced to the high-end consumer markets in developed countries such as Europe and Australia. Leveraging on its leading technology and excellent products in the sector, the Group had been mainly expanding international markets including Southeast Asia, Australia, and Europe. In particular, electric transportation tools had become a trend in Southeast Asian countries where the industry of electric bicycles has entered a starting stage and will experience golden development in the future 5 to 10 years.

#### (2) Conduct research and development globally and so does manufacturing

The Group actively collaborated with overseas scientific research platform and integrated technological experts from many countries such as China, the USA, Korea, and Japan to create the core technological advantages in the whole industrial chain. Meanwhile, the Group actively explored opportunities of merge and acquisition in the up and down stream and planned to build an overseas R&D and production base in due course.

## **Prospects**

3.

In order to converge the core competitive advantages, the Board is considering the feasibility of a proposed spin-off and listing of 天能電池集團有限公司 Tianneng Battery Group Co., Ltd.\* by way of separate A shares listing of the Spin-off Company on a Stock Exchange in the PRC. For purpose of the Proposed Spin-off, on 9 November 2018, after the approval of the Board, the Company submitted a proposal on the Proposed Spin-off to the Hong Kong Stock Exchange pursuant to Practice Note 15 of the Listing Rules. For details, please refer to the announcement published by the Company on 9 November 2018 in relation to the "Proposed Spin-off and separate listing of the batteries business by way of Proposed A Shares Listing of the Spin-off Company on a Stock Exchange in the PRC".

Under the dual opportunities of industrial consumption upgrade and stricter environmental protection governance, the Group will continue to consolidate and enhance the development edges of the traditional major business, accelerate the breakthrough of new technologies for innovative sectors, and achieve new progress in promoting the integration of technology and materials, accelerating the construction of the green manufacturing industrial park and turning it into a demonstration base for transformation and upgrade and platform type corporate construction of the Group. It will promote the industry towards the mid-to-high end and gradually channel the production capacity to the overseas market, creating more favorable conditions for the Group to compete internationally. Meanwhile, we must initiate breakthroughs in special-purpose batteries, start-stop batteries, and tubular batteries, continue to enrich the industrial landscape, actively explore new areas to apply in products, and identity new room for production capacity. We should also keep contributing to green energy by adopting a dual-engine strategy of technological innovation and business model innovation, in the aim of creating a better life, as well as building Tianneng in its better version and as one of the most respected world-class new energy enterprises with our unremitting efforts.

# **Management Analysis**

#### **Gross profit**

The Group's gross profit and gross profit margin increased to approximately RMB4,086 million and approximately 11.82% respectively in 2018 from approximately RMB3,507 million and approximately 13.04% respectively in 2017, representing an increase of approximately 16.49% and a decrease of 1.22 percentage points respectively as compared to the previous year. The increase of gross profit was mainly attributable to the increase in income and the improvement of management. The decrease of gross profit margin was mainly attributable to the revenue from trading segment with low profit margin.

#### Other income

Other income of the Group increased by approximately 19.50% from approximately RMB309 million in 2017 to approximately RMB370 million in 2018. The increase was mainly attributable to the increase in government grants income.

#### Selling and distribution costs

Selling and distribution costs of the Group increased by approximately 31.81% from approximately RMB675 million in 2017 to approximately RMB890 million in 2018. The slight increase in selling and distribution costs was mainly due to the increase in transportation expenses.

#### Administrative expenses

Administrative expenses increased by approximately 25.65% from approximately RMB449 million in 2017 to approximately RMB564 million in 2018. Such increase was mainly due to the increase in staff cost and consultancy expenses.

#### **Finance costs**

Finance costs increased by approximately 16.16% from approximately RMB153 million in 2017 to approximately RMB178 million in 2018, which was mainly due to the increase in total borrowings during the year.

#### **Taxation**

Tax charges of the Group increased by approximately 33.76% from approximately RMB227 million in 2017 to approximately RMB304 million in 2018, which was mainly due to the increase in profit during the year.

# Liquidity and Financial Resources

The net cash from operating activities for the year of 2018 was approximately RMB2,077 million (2017: RMB2,202 million). In this year, the Group had better profit and strengthened management of account receivables and account payables enabling the overall cash flow of operating activities to maintain at a good level.

As at 31 December 2018, the bank balances and cash (including pledged bank deposits) of the Group was approximately RMB4,902 million (31 December 2017: approximately RMB4,600 million). As at 31 December 2018, the Group obtained undrawn banks facilities of approximately RMB3,333 million (31 December 2017: approximately RMB2,843 million). The bank balances and cash (including pledged bank deposits) approximately of RMB4,859 million, RMB23 million, RMB13 million and RMB7 million were denominated in Renminbi, Hong Kong Dollars, US Dollars and Euros respectively. As the bank balances in Hong Kong Dollars, US Dollars and Euros collectively accounted for approximately 0.87% of the total balances, the Group's relevant exchange risk is low.

As at 31 December 2018, the net current assets of the Group were approximately RMB1,073 million (31 December 2017: net current assets of approximately RMB1,208 million). The decrease was primarily attributable to improvement of the operating capacity of the Company and increase in bills payables and contract liabilities. The Company believes that it will be able to meet its liabilities as and when they fall due and meet the capital requirement for operations. The Company is able to control the level of its liabilities and financial risks.

As at 31 December 2018, the interest bearing borrowings, finance leases and loan notes (together as "interest bearing loans") of the Group with maturity of within one year totally amounted to approximately RMB2,235 million (31 December 2017: approximately RMB1,329 million). The interest bearing loans of the Group with maturity of more than one year amounted to approximately RMB467 million (31 December 2017: RMB904 million). The interest bearing loans of RMB2,066 million carried fixed and variable interest rates ranging from 3.99% to 8.00% (2017: 3.85% to 8.00%) per annum. The interest bearing loans amounting to HK\$500 million carried a variable interest rate ranging from 2.26% to 3.26% per annum (2017: fixed interest rate ranging from 2.44% to 3.19% per annum). The Company will closely monitor the changes in interest rate and assess the interest rate risk.

The objective of the Company's financial policy is to maintain healthy capital structure to minimize the capital cost through prudent financial management. During the year under review, the Group continued to further make use of long-term loans in order to optimize its loan structure.

# **Financial Position**

#### Assets

As at 31 December 2018, the total assets of the Group were approximately RMB16,641 million, representing an increase of 19.02% as compared to approximately RMB13,982 million as at 31 December 2017. Among them, non-current assets increased by approximately 9.07% to approximately RMB5,270 million and current assets increased by approximately 24.28% to approximately RMB11,371 million. The major reason for the increase of non-current assets was due to the capital expenditure on production plants and equipment upgrading. The increase in current assets was mainly attributable to the increase in inventories and bank deposits.

#### **Liabilities**

As at 31 December 2018, the total liabilities of the Group were approximately RMB10,868 million, representing an increase of approximately 21.86% as compared to approximately RMB8,918 million as at 31 December 2017. Among them, current liabilities increased by approximately 29.67% to approximately RMB10,298 million, mainly due to the increase in borrowings and contract liabilities. Non-current liabilities decreased by approximately RMB570 million, mainly due to the decrease in long-term interest bearing borrowings and long-term loan notes.

# Analysis by Key Financial KPIs

#### **Profitability:**

	2018	2017
Return on equity	22.53%	23.31%
Gross profit margin	11.82%	13.04%
– Trading of new energy materials	0.12%	N/A
<ul> <li>Sales of batteries and battery related accessories</li> </ul>	12.82%	13.04%
Net profit margin	3.76%	4.39%

The gross profit margin in 2018 decreased due to the revenue from trading segment with low profit margin. Not considering the trading business, the gross profit margin decreased by 0.22 percentage point to 12.82% in 2018 compared to 2017.

#### Liquidity:

	2018	2017
Current ratio	1.10	1.15
Quick ratio	0.80	0.88

Both the ratios above in 2018 slightly decreased when compared with those in 2017, mainly due to a lower increase of current assets as compared to that of the current liabilities.

#### **Operating Cycle:**

	2018	2017
Inventory turnover days	32	31
Account receivables turnover days	10	12
Account payables turnover days	27	32
Bills and account receivables turnover days	21	30
Bills and account payables turnover days	46	52

The inventory turnover days increased by 1 day to 32 days in 2018 due to the enhancement of capacity in 2018. Account receivables turnover days decreased by 2 days from 2017 to 10 days in 2018 due to improved management of account receivables in 2018. Account payables turnover days for 2018 decreased by 5 days to 27 days mainly due to the decrease in account payables. Bills and account receivables turnover days and bills and account payables turnover days decreased by 9 days and 6 days respectively due to 18.33% decrease and 12.00% decrease in bills receivables and account payables respectively at the end of 2018 compared to the end of 2017.

#### Capital:

	2018	2017
Net debt ratio	-19.59%	-32.38%
Interest coverage ratio (Note)	11.69%	10.92%

Note: EBITDA divided by total interest expenses

As the interest bearing debt ("Debt") and the cash and bank balances as at 31 December 2018 were RMB2,703 million and RMB3,834 million respectively, the net debt was RMB-1,131 million. The net debt ratio substantially increased from -32.38% to -19.59%. Total loans increased and there was adequate capital during the year.

The interest coverage ratio increased slightly, mainly due to an increase in net profit in 2018.

#### **Return of Shareholders:**

	2018	2017
Earning per share (Basic)	1.11	1.05
Dividend payout ratio ("DPR")	30% (Note)	30%

Note: the index is derived from the dividend to be proposed by the Company's board of directors for 2018, which is subject to approval at the annual general meeting.

# **Capital Expenditure**

The capital expenditure in 2018 was approximately RMB654 million (2017: approximately RMB555 million). A majority of expenditure was incurred on the construction of Wushang base in Changxing, Puyang base in Henan and Jieshou base in Anhui.

# **Capital Commitments**

The amount contracted for but not stated in the consolidated financial statements in respect of the acquisition of property, plant and equipment as at 31 December 2018 was approximately RMB338 million (31 December 2017: approximately RMB302 million).

# **Gearing Ratio**

The Group's gearing ratio (which is based on the amount of total interest bearing loans divided by total assets multiplied by 100%) as at 31 December 2018 was approximately 16.24% (31 December 2017: approximately 15.97%).

# **Exposure to Exchange Rate Fluctuation**

As the Group's operations were mainly conducted in China and the majority of businesses were transacted in Renminbi, the Group has set up policy to strike a balance between uncertainty and the risk of opportunity loss due to the growing significance of its exposures to fluctuations in foreign currencies. Foreign currency forward contracts can be used to eliminate the currency exposures. During the year, the Group has entered into certain foreign currency forward contracts and closely monitored the movement of foreign currency rate. The Board is of the view that the Company's operating cash flow and liquidity are not subject to significant foreign exchange rate risk.

# **Contingent Liabilities**

The Group did not have any significant contingent liabilities as at 31 December 2018 (31 December 2017: Nil).

# **Pledge of Assets**

As at 31 December 2018, the bank facilities of the Group were secured by bank deposits, bills receivables, property, plant and equipment and prepaid lease payments. The aggregate net book value of the assets pledged amounted to approximately RMB2,898 million (31 December 2017: RMB1,546 million).

# **Employee and Remuneration Policies**

As at 31 December 2018, the Group employed a total of 20,508 employees (31 December 2017: 19,027 employees). Staff costs excluding directors' emoluments of the Group for the year of 2018 amounted to approximately RMB1,626 million (2017: RMB1,387 million). The costs included basic salaries and benefits as well as staff benefits such as discretionary bonus, medical and insurance plans, pension scheme (including the schemes under the statutory requirement of the government such as pension insurance in China and mandatory provident fund in Hong Kong), unemployment insurance plans and share option scheme etc. Competitive remuneration packages were offered to employees. The Company has adopted incentive programs (including share option scheme) to encourage employee performance and provided a range of training programs for the development of its staff.

Please refer to the paragraphs headed "Emolument Policy" in the "Directors' Report" section of this annual report for the mechanism for determining the emolument payable to the Directors.

# **Significant Investments Held**

Save as the disclosures in Note 19 and Note 25 to the Consolidated Financial Statements, there were no other significant investments held by the Group as at 31 December 2018. Such investment refers to its increased holdings of those excellent companies in the industry, reflecting its confidence in the prospect of the industry and the increase in corporate interest.

# Material Acquisition and Disposal

Save as the disclosure in Note 35 to the Consolidated Financial Statements, the Group has no material acquisition and disposal as at 31 December 2018. Such acquisitions facilitate the expansion and distribution of capacity and expand business, to reap greater economic benefits.

# Purchase, Sale or Redemption of the Company's Listed Shares

Please refer to the paragraphs headed "Share Capital and Issue of Securities" as set out in the "Directors' Report" section of this annual report for the purchase, sales and redemption of the Company's shares in this year.

# **Principal Risks and Uncertainties**

Many economic experts closely monitor whether the global and China economy growth will slow down in coming years. The Group's sales of traditional business such as the e-bike battery may be under uncertainties if the consumer market downturn exists. It is the reason that the Group started industries transformation and upgrading a few years ago, aiming to diversify the risk of over reliance on any single business segment.

In the past few years, labour cost in China continuously increased and the production-oriented entities in China were facing the increasing pressure of higher production cost. The Group will apply more resources in establishing production automation system in order to reduce manpower per production unit. At the same time, the new incentive scheme will be adopted as the other way for improving the manpower efficiency.

Please refer to note 4, 39 and 42 to the consolidated financial statements for other risks and uncertainties.

# **Future Development**

For the Group's future plans and development, please refer to the "Prospects" in the "Management Discussion and Analysis" section of this annual report.

# **Closure of Register of Members**

The register of members of the Company will be closed from Friday, 10 May 2019 to Thursday, 16 May 2019, both days inclusive, during which period no transfer of the shares of the Company will be registered. In order to qualify for attending the annual general meeting of the Company of this year, all share certificates, together with duly completed transfer forms, must be lodged with the Company's Hong Kong branch share registrar, Tricor Investor Services Limited, at Level 22, Hopewell Centre, 183 Queen's Road East, Hong Kong, no later than 4:30 p.m. on Thursday, 9 May 2019.

Further, the register of members of the Company will be closed from Tuesday, 28 May 2019 to Thursday, 30 May 2019 (both days inclusive), during which period no transfer of the shares of the Company will be registered. In order to establish entitlements to the proposed final dividend, all transfers accompanied by the relevant share certificates must be lodged with the Company's Hong Kong branch share registrar, Tricor Investor Services Limited, at Level 22, Hopewell Centre, 183 Queen's Road East, Hong Kong not later than 4:30 p.m. on Monday, 27 May 2019. Subject to the approval of the shareholders at the AGM of the Company to be held on 16 May 2019, the proposed final dividend is expected to be paid on or before Friday, 28 June 2019.

# **Executive Directors**



#### **Dr. ZHANG Tianren** 張天任博士

Aged 56, is the chairman of our Board, president and founder of our Group. Dr. ZHANG is responsible for our overall management and formulation of our business strategies. Dr. ZHANG graduated from Zhejiang University with a master degree of management, and was an honorary doctorate of the International American University (美國加州國際大學) and a visiting professor of the Zhejiang Sci-tech University. Dr. ZHANG has 33 years of experience in technological research and development and management of rechargeable battery industry in China. Dr. ZHANG was the factory manager of Zhejiang Changxing Storage Battery Factory during the period between 1989 and 2002, and has been the chairman and the general manager of Tianneng Battery since 2003.

In addition to his key position in our Group, Dr. ZHANG was also a member of the 12th and 13th National People's Congress, an executive committee member of All-China Federation of Industry and Commerce and vice chairman of Zhejiang Federation of Industry and Commerce. Besides, he was a vice president of China Electrical Equipment Industry Association, vice council chairman of China Battery Industry Association, a member of China EV100, vice president of the National Technology and Equipment Industry Association (全國工商聯科技裝備業商會副會長), president of Battery Industry Association of Zhejiang Province and etc..

Dr. ZHANG was awarded as one of the World Outstanding Chinese at 11th World Outstanding Chinese Award, 1st New Technological Merchants in Zhejiang, 2009 Outstanding Zhejiang Merchants, Top Ten Influential Persons of the PRC Electric Appliance Industry 2009, the Personalities for the Year in the Chinese Market Economy Award 2011, 2012 Bauhinia Cup Outstanding Entrepreneur, the 2012 Ernst & Young Entrepreneur of the Year, 2014 Honorary Zhejiang Merchant and Distinguished Zhejiang Merchant (二零一四年光榮浙商、傑出浙商), 8th Outstanding Entrepreneur of China and 2016 Global New Energy Business Leader. Dr. ZHANG is the younger brother of Mr. ZHANG Aogen.



## **Mr. ZHANG Aogen** 張敖根先生

Aged 61, is our executive Director and vice-president and is responsible for our foreign trade and overseas investment functions. Mr. ZHANG joined Zhejiang Changxing Storage Battery Factory as a deputy factory manager in 1988 and was appointed as a deputy general manager of Tianneng Battery in 2001. Mr. ZHANG attended the seminar of business management for senior president in Zhejiang University from September 2007 to December 2008. Mr. ZHANG is a senior economist and has experience in sales management, procurement management as well as trade and investment. Mr. ZHANG is also an elder brother of Dr. ZHANG Tianren, chairman of our Board.



#### **Mr. SHI Borong** 史伯榮先生

Aged 65, is our executive Director and vice president and is fully responsible for the business of the production bases of the Group in Jieshou and in Wuhu. Mr. SHI joined Zhejiang Changxing Storage Battery Factory in 1989 and was promoted as deputy factory manager of Zhejiang Changxing Storage Battery Factory in 1990. He acted as deputy general manager of Tianneng Battery in 2003 and was appointed as the standing deputy general manager of Tianneng Battery in 2010. In September 2013, Mr. SHI was appointed as the chairman of Tianneng Battery (Anhui) Co., Ltd. and Anhui Zhongneng Power Supply Co., Ltd. Mr. SHI attended the seminar of business management for senior president in Zhejiang University from August 2007 to September 2008. Mr. SHI is a senior economist and has 29 years of management experience in rechargeable battery enterprises.



## **Mr. ZHANG Kaihong** 張開紅先生

Aged 61, is our executive Director, vice president and the chief expert of technical center. Mr. ZHANG joined Zhejiang Changxing Storage Battery Factory in 1988 and acted as deputy factory manager of Zhejiang Changxing Storage Battery Factory in 1992. Mr. ZHANG was also appointed as deputy general manager of Tianneng Battery in 2003 and as general manager of Tianneng Wuhu in 2006. From February 2014, Mr. ZHANG was appointed as a vice-president of national level technology centre of Tianneng Group. Mr. ZHANG attended the seminar of business management for senior president in Zhejiang University from August 2007 to September 2008. Mr. ZHANG is a senior engineer with 32 years of experience in research and development, quality control and corporate management of rechargeable battery products.



## **Mr. ZHOU Jianzhong** 周建中先生

Aged 48, is our executive Director and vice president. Mr. ZHOU is responsible for promoting the development of strategic and emerging industries of our Group as well as assisting the president in operations and management. Mr. ZHOU joined the Group in 1996 and has been the head of market management section of Tianneng Battery, standing deputy general manager of Tianneng Power Supply, standing deputy general manager of Tianneng Battery, standing deputy general manager of Tianneng Power Supply, standing deputy general manager of Tianneng Power Supply, standing deputy general manager of Tianneng Power Supply Material. He was appointed as vice-president of the Group in 2011. Mr. ZHOU attended the seminar of business management for senior president in Zhejiang University from September 2007 to December 2008, and attended the training program for general managers in China Europe International Business School from July 2017 to March 2018. He is a senior economist with 24 years of experience in the sales and management of rechargeable batteries and corporate management.

# **Independent Non-Executive Directors**



#### Mr. WU Feng 吳鋒先生

Aged 68, was appointed as an independent non-executive Director in June 2015. Mr. WU graduated from Taiyuan Institute of Technology (太原工學院) in 1981 with a master degree of engineering. In 2014, Mr. WU was awarded an honorary doctorate degree by the University of Massachusetts Boston in America. Mr. WU is currently the professor, tutor of PHD students and the chief professor of the energy and environmental materials discipline of Beijing Institute of Technology, the academician of Chinese Academy of Engineering, the academician of the International Eurasian Academy of Sciences and vice council chairman of China Battery Industry Association. Mr. WU takes the lead in the field of new secondary battery and related energy resources in China. He took charge of and undertook multiple important and key national researches and special projects. Mr. WU was appointed as the "Chief Scientist of the Special Project of New Secondary Battery of National (973) Key Basic Research Program" by the Ministry of Science and Technology of the PRC for three times in a row. Mr. WU is currently an independent director of EVE Energy Co., Ltd. which is a listed company on Shenzhen Stock Exchange in China. Mr WU was an independent director of Shenzhen Senior Technology Material Co., Ltd., which is a listed company on Shenzhen Stock Exchange in China, until his resignation in October 2018.



## Mr. HUANG Dongliang 黃董良先生

Aged 63, was appointed as an independent non-executive Director in February 2007. Mr. HUANG graduated from Zhongnan Finance University in 1988 with a bachelor degree majored in economics. Mr. HUANG obtained the qualifications of professor, senior accountant and registered tax agent in China. Mr. HUANG is a certified public accountant registered under the Chinese Institute of Certified Public Accountants. Mr. HUANG is currently an independent director of Zhejiang Medicine Co., Ltd. (浙江醫藥股份有限公司) which is a listed company on Shanghai Stock Exchange. Mr. HUANG was an independent director of Lander Sports Development Co., Ltd. (萊茵達體育發展股份有限公司), which is a listed company on Shenzhen Stock Exchange in China, until his retirement in May 2018.



#### **Mr. ZHANG Yong** 張湧先生

Aged 43, was appointed as an independent non-executive Director in August 2018. Mr. ZHANG graduated from Fudan University, majoring in international finance and obtained a doctoral degree in economics. Mr. ZHANG is currently a researcher of the Comprehensive Research Institute of Shanghai Free Trade Zone of Fudan University (復旦大學上海自貿區綜合研究院), a part time professor of Nanjing University, a part time tutor for postgraduate students of Shanghai University of Finance and Economics and a visiting professor of Shanghai Lixin University of Accounting and Finance (上海立信會計金融學院).

# Senior Management



#### **Mr. ZHAO Haimin** 趙海敏先生

Aged 54, is the vice-president of the Group. Mr. ZHAO is responsible for managing the research centre as well as the information technology commission of the Group. Mr. ZHAO joined us in 2004 as an assistant to the general manager and deputy general manager, etc. of Tianneng Battery Company. Mr. ZHAO was responsible for aftersale services, human resources and sales management of the Group, during which he organized and implemented the first tracking system of laser printing for quality and aftersale informationalization and the introduction of overseas high-end talents under the national "Thousand Talents Program" (國家千人) in respect of the field of new energy. Mr. ZHAO graduated from Bengbu Industrial Technology Institute (蚌埠工業技術學校), majoring in textile. Later, he attended a vocational school and a university for corporate management and was enrolled in the MBA programme in China University of Geosciences in 2009. Mr. ZHAO is a senior engineer. He has extensive knowledge in non-woven fabrics and battery separators. Prior to joining us, Mr. ZHAO was an assistant to the general manager in Huzhou KINGSAFE Group Co., Ltd. (湖州金三發集團) and was responsible for the management of technology, production and sales.



# Ms. WANG Jing

## 王靜女士

Aged 55, is our financial controller. Ms. WANG is responsible for the financial management of the Group. She joined the Group in 2004 as the manager of financial department of Tianneng Battery and was appointed as our financial controller in 2009. She has more than 38 years of financial management experience. Ms. WANG graduated from Hangzhou Institute of Electrical Engineering in Industrial Accounting in July 1988 and attended the advanced seminar of modern management (CFO) in Zhejiang Institute of Finance & Economics from June 2008 to June 2009. Prior to joining us, Ms. WANG worked in Zhejiang Leomax Cement Company Limited (浙江三獅水泥股份有限公司), Huzhou Kingsafe Group (湖州金三發集團) and Huzhou Tianheng United CPA Firm (湖州天 衡聯合會計師事務所) and was responsible for the financial management and audit.



#### Ms. HUI Wai Man, Shirley 許惠敏女士

Aged 51, is the company secretary of the Company. Ms. HUI is responsible for the company secretarial affairs of the Group. She joined the Group in September 2009. She is a certified public accountant in Hong Kong, a fellow member of Hong Kong Institute of Certified Public Accountants and the Institute of Chartered Secretaries and Administrators as well as a fellow member of Hong Kong Institute of Chartered Secretaries. Also, she is a member of Society of Chinese Accountants and Managements and Hong Kong Securities Institute. Ms. HUI has over 29 years of professional experience in public accounting and corporate financing.

The Company is committed to ensuring high standards of corporate governance. The Board believes that good corporate governance practices are increasingly important for maintaining and promoting investors' confidence.

# **Corporate Governance Code**

The Company has adopted the provisions of the Corporate Governance Code (the "Code") as contained in Appendix 14 to the Rules Governing the Listing of Securities on the Hong Kong Stock Exchange (the "Listing Rules") during the period from 1 January 2018 to 31 December 2018. For the year ended 31 December 2018, except for the Code provision A.2.1, the Company has complied with the provisions set out in the Code. Dr. Zhang Tianren is both the Chairman and CEO of the Company who is responsible for managing the Group's business. The Board considers that vesting the roles of Chairman and CEO in the same person facilitates the execution of the Company's business strategies and maximizes the effectiveness of its operation. With the present Board structure and scope of business, the Board considers that there is no imminent need to separate the roles into two individuals. However, the Board will continue to review the effectiveness of the Group's corporate governance structure to assess whether the separation of the position of the Chairman and CEO is necessary.

The Company has established an audit committee in compliance with the Rule 3.21 of the Listing Rules. The Company's audit committee comprises three independent non-executive Directors. Mr. Guo Konghui, an independent non-executive director ("**INED**") and a member of Audit Committee of the Company, retired as INED and ceased to be a member of the Audit Committee with effect from the conclusion of the Company's annual general meeting on 18 May 2018 (the "**AGM**"). On 8 August 2018, the Company appointed Mr. Zhang Yong as an INED and a member of Audit Committee.

Pursuant to Rule 3.10(1) of the Listing Rules, a board of a listed issuer must include at least three INEDs; pursuant to Rule 3.10A of the Listing Rules, an issuer must appoint INEDs representing at least one-third of the board; and pursuant to Rule 3.21 of the Listing Rules, the audit committee must comprise a minimum of three members. So during the period from conclusion of the AGM to 7 August 2018, the number of INED and the composition of the audit committee have failed to meet the relevant requirements under the Listing Rules.

Other than the above disclosures, the Company has also complied with Rules 3.10(1), 3.10(2) and 3.10A of the Listing Rules and appointed three independent non-executive Directors including one with financial management expertise.

# **Board of Directors**

#### Composition

As at 31 December 2018, the Board comprised eight members. Dr. Zhang Tianren is an executive Director, the Chairman and CEO of the Company. The executive Directors of the Company are Mr. Zhang Aogen, Mr. Zhang Kaihong, Mr. Shi Borong and Mr. Zhou Jianzhong. In compliance with Rule 3.10 of the Listing Rules, the Company had three independent non-executive Directors comprising one-third of the members of the Board, namely, Mr. Huang Dongliang, Mr. Wu Feng and Mr. Zhang Yong. Mr. Huang Dongliang has appropriate professional accounting experience and expertise.

All Directors have distinguished themselves in their field of expertise, and have exhibited high standards of personal and professional ethics and integrity. The biographical details of each Director are disclosed on pages 24 to 26 of this annual report.

Each independent non-executive Director has pursuant to Rule 3.13 of the Listing Rules, confirmed that he is independent of the Company and the Company also considers each of them to be independent.

Apart from Mr. Zhang Aogen being an elder brother of Dr. Zhang Tianren, the Chairman of the Board, there is no other relationship (including financial, business, family or other material relationship) among members of the Board. All of them are able to make free and independent judgment.

## Function

The Board, led by the Chairman, is responsible for formulation and approval of the Group's development, business strategies and policies, approval of business plans, recommendation of dividend and supervision of management. While the management of the Company was given sufficient autonomy by the Board to handle the daily ordinary course of administration and management, when the Board delegates aspects of its management and administration functions to management, it has given clear directions as to the powers of management, in particular, with respect to the circumstances where management shall report back and obtain prior approval from the Board before making decisions or entering into any commitments on behalf of the Company.

There is a formal schedule of matters specifically reserved to and delegated by the Board. The Board had given clear directions to the management of the Company that certain matters (including the following) must be reserved to the Board:

- Publication of final, interim and quarterly results (if any) of the Company;
- Dividend distribution or other distributions;
- Treasury policy, accounting policy and remuneration policy;
- Review on internal control system and risk management;
- Changes to major corporate structure of the Group or Board composition requiring notification by announcement;
- Notifiable transaction and non-exempted connected transaction/continuing connected transaction;
- Proposed transaction requiring Shareholders' approval;
- Capital re-structuring and issue of new securities;
- Joint-venture with outside party involving capital commitment from the Group of over 5% of the relevant size test of the Company; and
- Financial assistance to the Directors.

In addition, the Board carries the function of reviewing the corporate governance practice and disclosure system as follows:

- Review the Company's policies and practices on corporate governance;
- Review and monitor the training and continuous professional development of Directors and senior management;
- Review and monitor the Company's policies and practices on compliance with legal and regulatory requirements;
- Review and monitor the code of conduct and compliance manual (if any) applicable to employees and Directors; and
- Review the Company's compliance with the Code and disclosure in the Corporate Governance Report.

The Company held five Board meetings and one general meeting during the year ended 31 December 2018. The attendance of individual Directors at these meetings was as follows:

Name	Attendance of Board meeting in person	Attendance of general meeting in person
Executive Directors		
Dr. Zhang Tianren	5/5	1/1
Mr. Zhang Aogen	5/5	1/1
Mr. Chen Minru (resigned with effect from 18 May 2018)	2/2	1/1
Mr. Zhang Kaihong	5/5	1/1
Mr. Shi Borong	5/5	1/1
Mr. Zhou Jianzhong	5/5	1/1
Independent Non-executive Directors:		
Mr. Huang Dongliang	5/5	1/1
Mr. Guo Konghui (retired with effect from 18 May 2018)	1/1	0/1
Mr. Wu Feng	4/5	0/1
Mr. Zhang Yong (appointed with effect form 8 August 2018)	3/3	0/0 <sup>(note)</sup>

Note: No meeting(s) were held during the relevant period of appointment.

The term of appointment of the independent non-executive Directors is as follows:

Mr. Huang Dongliang	11 June 2018 to 10 June 2019
Mr. Wu Feng	6 June 2018 to 5 June 2019
Mr. Zhang Yong (appointed with effect form 8 August 2018)	8 August 2018 to 7 August 2021

The Company has taken out appropriate insurance coverage for the Directors in respect of legal actions taken against Directors and officers of the Group. The Board reviews the extent of the insurance coverage every year.

#### **Responsibilities**

In the course of discharging their duties, the Directors act in good faith, with due diligence and care, and in the best interests of the Company and the Shareholders. Their responsibilities include:

- 🦯 holding regular Board meetings focusing on business strategy, operational issues and financial performance;
- monitoring the quality, timeliness, relevance and reliability of internal and external reporting;
- monitoring and managing the potential conflicts of interest of management, Board members and Shareholders, including misuse of corporate assets and abuse in connected transactions; and
- ensuring processes are in place to maintain the overall integrity of the Company, including financial statements and internal control systems.

#### **Board Diversity**

With a view to achieving a sustainable and balanced development, the Company sees increasing diversity at the Board level as an essential element in supporting the attainment of its strategic objectives and its sustainable development. In designing the Board's composition, Board diversity has been considered from a number of aspects, including but not limited to age, cultural and educational background, ethnicity, professional experience, skills, knowledge and length service. All Board appointments will be based on meritocracy, and candidates will be considered against objective criteria, having due regard for the benefits of diversity on the Board. Selection of candidates will be based on a range of diversity perspectives, including but not limited to age, cultural and educational background, professional experience, skills, knowledge and length of service. The ultimate decision will be based on merit and contribution that the selected candidates will bring to the Board. According to Rule 13.92 of the Listing Rules, the above Board diversity policy of the Company has been approved by the Board and adopted by the Nomination Committee on 30 August 2013 and amended with effect from 1 January 2019 in compliance with the Listing Rules.

The Nomination Committee holds meeting at least once a year to review the diversity of the Board, discusses the measurable objectives, including knowledge, appropriate professional qualifications, relevant business background and experience, skills, relevant management expertise and independence of Directors, and gives recommendation to the Board. During the year, the Nomination Committee took the view that the measurable objectives were achieved to a large extent. It paid particular attention to the cultural and educational background, professional and technical experience, and skills of the members of Board and also reviewed the composition of executive Directors and independent non-executive Directors so as to ensure appropriate independence within the Board.

#### **Directors' Training**

Pursuant to Provision A.6.5 of the Code, all Directors should participate in continuous professional development to develop and refresh their knowledge and skills. The Directors have been given relevant guideline materials to ensure that they are apprised of the latest changes in the commercial, legal and regulatory requirements in relation to the Company's businesses, and to refresh their knowledge and skills on the roles, functions and duties of a listed company director.

For the period from 1 January 2018 to 31 December 2018, all Directors provided their records of training to the Company. All Directors, namely Dr. Zhang Tianren, Mr. Zhang Aogen, Mr. Zhang Kaihong, Mr. Shi Borong, Mr. Zhou Jianzhong, Mr. Huang Dongliang, Mr. Wu Feng and Mr. Zhang Yong, participated in continuous professional development mainly by reading various materials regarding directors' responsibilities, prevention of breaching the Listing Rules and disclosure of inside information, etc.

#### **Company Secretary's Training**

Pursuant to Rule 3.29 of the Listing Rules, the Company Secretary must take no less than 15 hours of relevant professional training in each financial year. The Company Secretary provided her training records to the Company indicating that she had taken more than 15 hours of relevant professional development by means of attending in-house briefings and seminars and reading relevant guideline materials.

#### **Shareholders' Rights**

Set out below is a summary of certain rights of the Shareholders as required to be disclosed pursuant to the Code.

# Convening an extraordinary general meeting and procedures for putting forward proposals by Shareholders at general meeting

Each general meeting other than an annual general meeting shall be called an extraordinary general meeting. General meetings may be held in any part of the world as may be determined by the Board.

According to Article No. 58 of the Company's articles of association, any one or more members holding at the date of deposit of the requisition not less than one-tenth of the paid up capital of the Company carrying the right of voting at general meetings of the Company shall at all times have the right, by written requisition to the Secretary of the Board of the Company, to require an extraordinary general meeting to be called by the Board for the transaction of any business specified in such requisition; and such meeting shall be held within two months after the deposit of such requisition.

If within twenty-one days of such deposit the Board fails to proceed to convene such meeting, the requisitionist(s) himself (themselves) may do so in the same manner, and all reasonable expenses incurred by the requisitionist(s) as a result of the failure of the Board shall be reimbursed to the requisitionist(s) by the Company.

Any requisition to convene an extraordinary general meeting or proposal to be put forward at the general meeting can be addressed to the principal place of business of the Company in Hong Kong marked with the attention of the Company Secretary. The requisitionists must state in their request(s) the objects of the extraordinary general meeting to be convened, and such request must be signed by all the requisitionists. Upon receipt, the Company will verify the requisitionists' particulars and if the request is in order, the Company will convene the extraordinary general meeting in accordance with its articles of association.

# **Enquiries from Shareholders to the Board**

In order to ensure effective communication between the Shareholders and the Board, the Company adopted the Shareholders communication procedures on 24 February 2012. According to the Shareholders communication procedures, the Board should be responsible for maintaining an on-going dialogue with Shareholders and in particular, use annual general meetings or other general meetings to communicate with them and encourage their participation. The chairman of the Board should attend the annual general meeting. He should also invite the independent non-executive Directors, chairmen of the audit, remuneration, nomination and any other committees (as appropriate) to attend. In their absence, the chairman should invite another member of the committee or failing this, his duly appointed delegate, to attend. These persons should be available to answer questions at the annual general meeting.

The chairman of the independent Board committee (if any) should also be available to answer questions at any general meeting to approve a connected transaction or any other transaction that requires independent Shareholders' approval.

Shareholders and investors are welcome to visit the Company's website and raise enquiries through our Investor Relations Department and/or our Company's public relations representative (Porda Havas International Finance Communications (Group) Holdings Company Limited) whose contact details are available on the website.

# **Remuneration of Committee**

The Company has established a Remuneration Committee with specific terms of reference which deal clearly with its duties and responsibilities. As at 31 December 2018, the Remuneration Committee had three members, comprising Mr. Wu Feng (Chairman and independent non-executive Director), Mr. Huang Dongliang (independent non-executive Director) and Mr. Zhang Aogen (executive Director).

The terms of reference of the Remuneration Committee follow the guidelines set out in the Code and it is mainly responsible for making recommendations to the Board on the Company's policy for the remuneration of Directors and senior management.

The Remuneration Committee shall meet at least once a year. Two committee meetings were held in 2018 to approve and adopt the revised terms of reference of the Remuneration Committee. The attendance of each member is set out as follows:

	Mee	Meeting attended		
Name	Meeting held	in person		
Mr. Huang Dongliang	2	2		
Mr. Chen Minru (resigned with effect from 18 May 2018)	2	2		
Mr. Wu Feng	2	1		
Mr. Zhang Aogen (appointed with effect from 8 August 2018)	0 (note)	0		

Note: No meeting(s) were held between 8 August 2018 and 31 December 2018.

During the Remuneration Committee meeting, proposal for adjustment of remuneration package for Directors and senior management ("the Proposal") was reviewed and approved by the Remuneration Committee and the Proposal was proposed to the Board for approval. The Proposal was approved by the Board.

# **Nomination Committee**

The Company has established a Nomination Committee with specific terms of reference which deal clearly with its duties and responsibilities. As at 31 December 2018, the Nomination Committee had three members, comprising Dr. Zhang Tianren (the Chairman and an executive Director), Mr. Huang Dongliang (independent non-executive Director) and Mr. Wu Feng (independent non-executive Director).

The terms of reference of the Nomination Committee have been determined with reference to the Code. The Nomination Committee is responsible for identifying potential new Directors and recommending to the Board for decision. A Director appointed by the Board is subject to re-election by Shareholders at the first annual general meeting after his/her appointment. Under the Company's articles of association, at each annual general meeting, one-third of the Directors for the time being (or if their number is not a multiple of three, the number nearest to but not less than one-third) shall retire from office by rotation provided that every Director shall be subject to retirement by rotation at an annual general meeting at least once every three years. Basically, the nomination procedure follows the articles of association of the Company. Potential new Directors are selected on the basis of their qualification, skills and experience which the Nomination Committee considers will make a positive contribution to the performance of the Board.

When making recommendations regarding the appointment of any proposed candidate to the Board or re-appointment of any existing member(s) of the Board, the Nomination Committee shall consider a variety of factors including without limitation the following in assessing the suitability of the proposed candidate:

- a. Reputation for integrity;
- b. Qualifications including professional qualifications, skills, knowledge and experience that are relevant to the Company's business and corporate strategy;

#### CORPORATE GOVERNANCE REPORT

- c. Willingness to devote adequate time to discharge duties as a Board member and other directorships and significant commitments;
- d. Diversity in all aspects, including but not limited to gender, age (18 years or above), cultural and educational background, ethnicity, professional experience, skills, knowledge and length of service; and
- e. Such other perspectives appropriate to the Company's business.

These factors are for reference only, and are not meant to be exhaustive and decisive. The Nomination Committee may consider other factors so as to ensure that the Board has a balance of skills, experience and diversity of perspectives appropriate to the requirements of the Company's business. The Nomination Committee has the discretion to nominate any person, as it considers appropriate.

The Nomination Committee shall meet at least once a year. One committee meeting was held in 2018 to review the composition of the Board, consider the independence of the independent non-executive Directors and the retirement of Directors. The attendance of each member is set out as follows:

	M	eeting attended
Name	Meeting held	in person
Dr. Zhang Tianren	1	1
Mr. Huang Dongliang	1	1
Mr. Wu Feng	1	1

### **Remuneration of the Senior Management and Directors**

The remuneration of the senior management of our Group for the year ended 31 December 2018 falls within the following band:

Number of People

4

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Nil to RMB1,000,000
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## Model Code for Securities Transactions by Directors

The Company has adopted the Model Code for Securities Transactions by Directors of Listed Issuers (the "Model Code") contained in Appendix 10 of the Listing Rules. Having made specific enquiry, all Directors have complied with the required standard set out in the Model Code throughout the year ended 31 December 2018.

## **Audit Committee**

The Company has established an Audit Committee in compliance with Rule 3.21 of the Listing Rules. As at 31 December 2018, the Company's Audit Committee comprised three independent non-executive Directors, namely Mr. Huang Dongliang (chairman), Mr. Wu Feng and Mr. Zhang Yong.

The primary duties of the Audit Committee (inter alia) are to review the financial reporting process and internal control system of the Group, and to make proposals to the Board as to appointment, renewal and resignation of the Company's independent external auditors and the related remuneration and appointment terms. The Audit Committee has reviewed the annual report with the management and the Company's independent external auditors and recommended its adoption by the Board.

The written terms of reference, which describe the authority and duties of the Audit Committee, are regularly reviewed and were updated by the Board to comply with provision C.3.3 of the Code in 2018. The Audit Committee held two meetings during the year ended 31 December 2018. The attendance of each member is set out as follows:

	I	Meeting attended
Name	Meeting held	in person
Mr. Huang Dongliang	2	2
Mr. Guo Konghui (retired with effect from 18 May 2018)	1	1
Mr. Wu Feng	2	2
Mr. Zhang Yong (appointed with effect from 8 August 2018)	1	1

The Audit Committee oversees the financial reporting process. In this process, the management of the Company is responsible for the preparation of the Group's financial statements including the selection of suitable accounting policies. Independent external auditors are responsible for auditing and attesting to the Group's financial statement and evaluating the Group's system of internal controls. The Audit Committee oversees the respective works of the management and the independent external auditors to monitor the processes and safeguards employed by them. The Audit Committee reports to the Board on its findings after each of its meeting. With effect from 1 January 2018, the Audit Committee oversees the Group's risk management system.

The Audit Committee reviewed and discussed the Group's financial statements for the year ended 31 December 2018 with the management and independent external auditors. The Audit Committee also received reports and met with the external independent auditors to discuss the general scope of their audit work and their assessment of the Group's internal controls.

#### CORPORATE GOVERNANCE REPORT

Based on these reviews, discussions and the report of the external independent auditors, the Audit Committee recommended for the Board's approval of the consolidated financial statements for the six months ended 30 June 2018 and the year ended 31 December 2018, with the Auditors' Report thereon.

The Audit Committee recommended to the Board that the Shareholders be asked to re-appoint Deloitte Touche Tohmatsu ("Deloitte") as the Group's independent external auditor for the year ending 31 December 2019.

## **Compliance Adviser**

To better perform the responsibility set out in the Listing Rules, the Company engaged Gram Capital Limited as its compliance adviser from 20 January 2017 and until 19 January 2019.

### **Independent External Auditor**

The Audit Committee reviews each year a letter from the independent external auditor of the Company, Deloitte, confirming its independence, approves its appointment, discusses the scope of its audit and approves its fees.

Deloitte has provided annual statutory audit services in respect of the Company's financial statements prepared under Hong Kong Financial Reporting Standards ("HKFRSs") for the year ended 31 December 2018. Deloitte has also reviewed the 2018 unaudited interim financial report of the Company, prepared under HKFRSs.

During the year ended 31 December 2018, the fee paid and payable to Deloitte in respect of audit and audit related services amounted to approximately RMB2.09 million. In respect of non-audit services, the fees paid and payable to Deloitte relating to review on interim financial report amounted to approximately RMB600,000.

## **Internal Control and Risk Management**

The Board is responsible for maintaining an adequate system of internal controls within the Group and reviewing their effectiveness at least annually, covering all material controls, including financial, operational and compliance controls as well as risk management functions. The Board is committed to strengthening the Group's internal control system, and has established a series of internal control policies and procedures. The system of internal controls is designed to facilitate effective and efficient operations, to safeguard assets and to ensure the quality of internal and external reporting and compliance with applicable laws and regulations. It is also designed to provide reasonable, but not absolute, assurance that material misstatement or loss can be avoided, and to manage and minimize risks of failure in operation systems.

The Company engaged an international professional management consultancy firm, Corporate Governance Professionals Limited ("CGPL"), to assess and evaluate the risk and effectiveness of its system of internal controls up to 31 December 2018. The Audit Committee members, together with the senior management, have reviewed, considered and discussed all the findings and recommendations of the internal control review relating to the internal control system that operates within the Group, and the Audit Committee is satisfied that the internal control system of the Group is sound and adequate. Pursuant to the system improvement recommendations made by CGPL, the Group will continue to improve its internal management and control systems.

The Board has also conducted an annual review on the effectiveness of the accounting and financial reporting function of the Company and takes the view that the Company possesses adequate resources and its staffs are equipped with suitable qualifications and experience in this regard.

Going forward, the Company will conduct regular reviews of the Company's internal control and risk management systems and their effectiveness to ensure that the interest of the Shareholders is safeguarded.

## **Going Concern**

The Directors, having made appropriate enquiries, consider that the Company has adequate resources to continue in operational existence for the foreseeable future and that, for this reason, it is appropriate to adopt the going concern basis in preparing the financial statements.

## **Communication with Shareholders**

The objective of Shareholder communication is to provide the Shareholders with detailed information about the Company so that they can exercise their rights as the Shareholders in an informed manner. The Company uses a range of communication tools to ensure the Shareholders are kept well informed. These include general meeting, annual report, various notices, announcements and circulars. Procedure for demanding voting by poll has been included in all circulars accompanying notice convening general meeting and the detailed procedures for conducting a poll has been read out by the Chairman at general meeting. The general meeting provides the Shareholders with a useful forum and encourages the Shareholders to attend the general meetings of the Company to raise comments and exchange views with the Board. The Chairman, Directors and independent external auditor, where appropriate, are available to answer questions at the meeting.

## **Directors' Responsibility in Preparing the Financial Statements**

The Directors acknowledge that it is their responsibilities to prepare the financial statements. The responsibilities of the independent external auditor with respect to financial reporting are set out in the Independent Auditor's Report on page 53 to page 56.

## **Constitutional Documents**

There are no significant changes in the Company's constitutional documents during the year ended 31 December 2018.

## **CONNECTED TRANSACTIONS**

## Acquisition of non-controlling interest of Zhejiang Tianneng Energy Technology Co., Ltd. ("Tianneng Energy")

As set out in the Company's announcement dated 10 August 2018, the equity transfer agreements were entered into, pursuant to which Tianneng Battery agrees to acquire additional 40% of the equity interest in a subsidiary, Tianneng Energy from the non-controlling shareholders, a group comprising, among others, Mr. Zhang and other management and employees of the Group, at considerations of approximately RMB74,864,000, RMB7,719,000 and RMB43,977,000, representing 24%, 2% and 14% of the equity interest, respectively. The Group's interests in Tianneng Energy is accordingly increased from 60% to 100% upon the completion of the transaction. Details of the transaction is set out in the Company's announcement dated 10 August 2018. The increase of the Group's equity interests in Zhejiang Tianneng Energy from 60% to 100% do not result in any changes of the Group's control over Tianneng Energy and is accordingly accounted for as equity transaction.

### Non-exempt continuing connected transactions

#### 1. Lease Agreements

#### Introduction and major terms

Tianneng Energy, which became a connected subsidiary of the Company on 27 January 2016, has entered into a lease agreement with Tianneng Battery and Tianneng Power Supply respectively, which constitute continuing connected transactions of the Company under chapter 14A of the Listing Rules, details of which are set out below:

Lease Agreement between Tianneng Energy and Tianneng Battery

Date:	28 January 2016
Lessor:	Tianneng Energy
Lessee:	Tianneng Battery
Premises:	Such portion of office space, staff quarters, research and development building and storeroom at Changxing Headquarter, Zhicheng Town, Changxing County, Zhejiang Province, PRC with a total leased area of 21,092.79 square metres
Term:	1 January 2016 to 31 December 2018
Rental:	RMB248,591.98 per month for the year ending 31 December 2016, RMB273,451.17 per month for the year ending 31 December 2017 and RMB300,796.29 per month for the year ending 31 December 2018. The monthly rent is payable in advance quarterly, on the fifth to tenth day of every quarter.
Lease Agreement be	etween Tianneng Energy and Tianneng Power Supply
Date:	28 January 2016
Lessor:	Tianneng Energy as the lessor
Lessee:	Tianneng Power Supply as the lessee
Premises:	Such portion of office space, staff quarters and research and development building at Changxing Headquarter, Zhicheng Town, Changxing County, Zhejiang Province, PRC with a total leased area of 21,221.95 square metres
Term:	1 January 2016 to 31 December 2018
Rental:	RMB192,649.41 per month from 1 January 2016 to 30 June 2016; RMB241,336.51 per month from 1 July 2016 to 31 December 2016; RMB265,470.16 per month for the year ending 31 December 2017 and RMB292,036.14 per month for the year ending 31 December 2018. The monthly rent is payable in advance quarterly, on the fifth to tenth day of every quarter.

#### **Annual Caps**

Based on the terms of the above lease agreements, the Annual Caps to be paid by Tianneng Battery and Tianneng Power Supply to Tianneng Energy for each of the three financial years ending 31 December 2018 will not be more than the respective amounts as follows:

For the financial	For the financial	For the financial
year ended	year ended	year ended
31 December 2016	31 December 2017	31 December 2018
RMB5.587.019	RMB6.467.056	

The actual rent paid by Tianneng Battery and Tianneng Power Supply during the year under review is approximately RMB4,275,000.

#### Reasons for the entering into the lease agreements

The terms of the lease agreements are in line with, and with reference to, other similar leased properties in the PRC. An independent property valuer has been appointed by the Company to review the rent payable under the lease agreements and confirmed that such rent was at the prevailing market rent as at 31 December 2014 and there will be an estimated increase in rent of 10% per annum from 2016 to 2018.

#### 2. Consignment sale framework agreement

#### Introduction and major terms

Tianneng Energy has entered into a consignment sale framework agreement with Tianneng Power Supply, which constitutes a continuing connected transaction of the Company under chapter 14A of the Listing Rules upon Tianneng Energy becoming a connected subsidiary of the Company, details of which are set out below:

Date:	28 January 2016
Consignor:	Tianneng Energy as the consignor
Consignee:	Tianneng Power Supply as the consignee
General terms:	Tianneng Energy appoints Tianneng Power Supply as its consignee to, from time to time, sell on its behalf, the Lithium and Ni-MH Battery Products manufactured by Tianneng Energy at the online sales platforms operated by the Remaining Group
Term:	1 January 2016 to 31 December 2018
Pricing policy:	Based on the unit price of the Lithium and Ni-MH Battery Products or the product price list determined by Tianneng Energy from time to time on normal commercial terms, which shall be not less favourable than those offered to other independent third parties. The pricing for each product must be with reference to the market price for similar products offered to independent third parties having regards to the quality, market demands and the costs of sales of the products.

#### CONNECTED TRANSACTIONS

Based on the terms of the above consignment sale framework agreement, the Annual Caps to be paid by Tianneng Power Supply to Tianneng Energy for each of the three financial years ending 31 December 2018 will not be more than the respective amounts as follows:

For the financial	For the financial	For the financial	
year ended	year ended	year ended	
31 December 2018	31 December 2017	31 December 2016	
RMB40,000,000	RMB26,000,000	RMB15,000,000	

The actual transaction amount in the year under review is approximately RMB722,000.

#### Reasons for the entering into the consignment sale framework agreement

The consignment sale framework agreement provides a framework to allow Tianneng Power Supply to sell the Lithium and Ni-MH Battery Product on behalf of Tianneng Energy on the online sales platforms operated by Tianneng Power Spply.

The independent non-executive Directors have reviewed the above continuing connected transactions, and confirmed that they have been entered into:

- a) in the ordinary and usual course of businesses of the Group;
- b) on normal commercial terms; and
- c) in accordance with the relevant written agreements governing them on terms that are fair and reasonable and in the interests of the Shareholders as a whole.

The auditor of the Company was engaged to perform works on the continuing connected transactions set out above in accordance with Hong Kong Standard on Assurance Engagements 3000 "Assurance Engagements Other Than Audits or Reviews of Historical Financial Information" issued by the Hong Kong Institute of Certified Public Accountants. The auditor has provide a letter to the Board confirming that the continuing connected transactions disclosed above:

- (1) have been approved by the Board;
- (2) were, in all material respects, in accordance with the pricing policies of the Group (if applicable);
- (3) were entered into, in all material respects, in accordance with the relevant agreements governing the transactions; and
- (4) have not exceeded the cap.

A copy of the auditor's letter will be provided by the Company to the Hong Kong Stock Exchange.

## DIRECTORS' REPORT

The directors present their annual report and the audited consolidated financial statements for the year ended 31 December 2018.

## **Principal Activities**

The Company acts as an investment holding company and provides corporate management services. The Group is principally engaged in the production of motive batteries in China. The activities of principal subsidiaries are shown in note 45 to the consolidated financial statements.

## **Results and Appropriations**

The results of the Group for the year ended 31 December 2018 are set out in the consolidated statement of profit or loss and other comprehensive income on page 57. The Directors propose to declare a final dividend of HK38.00 cents per Share (2017: HK37.00 cents).

## **Property, Plant and Equipment**

During the year, approximately RMB108 million and RMB557 million construction in progress were completed and transferred to buildings and plant and machinery, respectively. During the year, the Group continued to expand its manufacturing facilities. The Group acquired buildings, plant and machinery for approximately RMB186 million. Details of these and other movements in the property, plant and equipment of the Group during the year are set out in note 16 to the consolidated financial statements.

### **Business Review**

Details of the Company's business review are set out in the "Management Discussion and Analysis" section of this annual report, of which this Directors' Report forms part.

## Share Capital and Issue of Securities

Details of the movement during the year in the share capital of the Company are set out in note 33 to the consolidated financial statements.

As at 31 December 2018, two tranches of corporate bonds in an aggregate amount of RMB780 million (2017: RMB780 million) issued by Tianneng Battery Group Co., Ltd., a wholly-owned subsidiary of the Company, to PRC domestic institutional investors for a term of 5 years and 6 years respectively remained outstanding. An principle amount of RMB380 million has been repaid in March 2019. Further details of the issues can be referred to the announcements of the Company dated 7 March 2014, 10 March 2014, 18 September 2014 and 26 September 2014.

During the year, neither the Company nor any of its subsidiaries purchased, sold or redeemed any of the Company's listed securities.

**DIRECTORS' REPORT** 

## **Distributive Reserves of the Company**

As at 31 December 2018, the Company's reserve available for distribution amounted to approximately RMB780 million (2017: RMB800 million). Under the Company Law (Revised) Chapter 25 of the Cayman Islands, the share premium of the Company is available for distribution or paying dividends to shareholders subject to the provisions of its memorandum or articles of association and provided that immediately following the distribution of dividends, the Company is able to pay its debts as they fall due in the ordinary course of business.

### **Directors**

The directors of the Company during the year and up to the date of this report were:

#### **Executive directors:**

Dr. Zhang Tianren *(Chairman)* Mr. Zhang Aogen Mr. Chen Minru *(Resigned with effect from 18 May 2018)* Mr. Zhang Kaihong Mr. Shi Borong Mr. Zhou Jianzhong

#### Independent non-executive directors:

Mr. Huang Dongliang Mr. Guo Konghui *(Retired with effect from 18 May 2018)* Mr. Wu Feng Mr. Zhang Yong *(Appointed with effect from 8 August 2018)* 

The term of appointment of the independent non-executive directors is as follows:

Mr. Huang Dongliang Mr. Wu Feng Mr. Zhang Yong *(Appointed with effect from 8 August 2018)*  11 June 2018 to 10 June 2019 6 June 2018 to 5 June 2019 8 August 2018 to 7 August 2021

In accordance with Article 86 and/or Article 87 (as the case may be) of the Company's articles of association, Mr. Zhang Yong, Mr. Shi Borong, Mr. Wu Feng and Mr. Huang Dongliang will retire from office and, being eligible, offer themselves for re-election at the forthcoming annual general meeting.

### **Directors' Service Contracts**

All of the executive Directors and independent non-executive Directors of the Company have entered into services contracts or a letter of appointment with the Company respectively. The term of appointment of Dr. Zhang Tianren, Mr. Zhang Aogen, Mr. Zhang Kaihong, Mr. Shi Borong and Mr. Huang Dongliang, is 3 years from 11 June 2007; the term of appointment of Mr. Zhou Jianzhong is 3 years from 27 March 2015; the term of appointment of Mr. Wu Feng, is 1 year from 6 June 2015; the term of appointment of Mr. Zhang Yong is 3 years from 8 August 2018. The term of appointment of each Director is renewable by mutual agreement of both parties unless terminated by not less than three months' prior notice in writing served by either party. All Directors are subject to retirement by rotation and re-election at the Company's annual general meeting at least once every three years in accordance with Article No. 87 of the Company's articles of association.

Save as disclosed above, no Director proposed for re-election at the AGM has a service contract which is not terminable by the Group within one year without payment of compensation (other than statutory compensation).

### **Permitted Indemnity**

The Company has taken out appropriate insurance coverage for the Directors in respect of legal actions taken against Directors and officers of the Group. The Board reviews the extent of the insurance coverage every year.

# Directors' and Chief Executive's Interests in Shares, Underlying Shares and Debentures

As at 31 December 2018, the interests and the short positions of the Directors and the chief executive of the Company in the Shares, underlying Shares and the debentures of the Company and its associated corporations (within the meaning of Part XV of the Securities and Futures Ordinance ("SFO")), as recorded in the register maintained by the Company under Section 352 of the SFO or as notified to the Company and the Hong Kong Stock Exchange pursuant to the Model Code were as follows:

# Directors' and Chief Executive's Interests in Shares, Underlying Shares and Debentures (Continued)

#### (a) Long positions

Ordinary shares of HK\$0.1 each of the Company:

		Number of interested	Aggregate approximate percentage of issued share capital of
Name of director	Capacity	<b>shares held</b> (note 1)	<b>the Company</b> (note 7)
Zhang Tianren	Interest of a controlled corporation (note 2)	410,355,650 (L)	36.42%
	Interest of spouse (note 2)	438,000 (L)	0.04%
Zhang Aogen	Interest of a controlled corporation (note 3)	13,641,022 (L)	1.21%
Zhang Kaihong	Interest of a controlled corporation (note 4)	18,884,174 (L)	1.68%
Shi Borong	Interest of a controlled corporation (note 5)	15,686,141 (L)	1.39%
Zhou Jianzhong	Interest of a controlled corporation (note 6)	2,362,815 (L)	0.21%
Huang Dongliang	Beneficial owner	240,000 (L)	0.02%

Notes:

1. The letters "L" and "S" denote long position and short position in the shares of the Company respectively.

2. The 410,355,650 shares of the Company were held by Prime Leader Global Limited, which was wholly-owned by Dr. Zhang Tianren. The interest in 438,000 shares arises from the share options granted to Ms. Yang Yaping, spouse of Dr. Zhang Tianren.

3. The 13,641,022 shares of the Company were held by Top Benefits International Limited, which was wholly-owned by Mr. Zhang Aogen.

4. The 18,884,174 shares of the Company were held by Plenty Gold Holdings Limited, which was wholly-owned by Mr. Zhang Kaihong.

5. The 15,686,141 shares of the Company were held by Precise Asia Global Limited, which was wholly-owned by Mr. Shi Borong.

6. The 2,362,815 shares of the Company were held by Centre Wealth Limited, which was wholly-owned by Mr. Zhou Jianzhong.

7. Shareholding percentage is based on 1,126,726,500 issued shares of the Company as at 31 December 2018.

# Directors' and Chief Executive's Interests in Shares, Underlying Shares and Debentures (Continued)

#### (b) Other interests and short positions

Save as disclosed above, on 22 November 2010, a total of 1,680,000 options were granted to the associates of the Directors in accordance with Company's share option scheme adopted pursuant to a resolution passed by the then Shareholders on 26 February 2007 (the "Scheme"). The names of other grantees who are associates of the Directors were listed in the announcement dated 22 November 2010. On 16 June 2014, the Company has granted 58,660,000 options to subscribe for Shares. Among the options, 2,215,000 options were granted to the associates of the Directors. The names of the grantees who are associates of the Directors were listed in the announcement dated 16 June 2014.

### **Retirement Benefits Scheme**

Details of the retirement benefits scheme of the Group are set out in note 40 to the consolidated financial statements.

## **Directors' Rights to Acquire Shares or Debentures**

Save as disclosed on page 49, at no time during the year was the Company, its parent company or any of its subsidiaries a party to any arrangements to enable the Directors of the Company or any of their spouses or children under 18 years of age to acquire benefits by means of acquisition of shares in, or debt securities, including debentures, of the Company or any other body corporate.

### **Directors' Interest in Competitors**

As at the date of this report, within the knowledge of the Directors, no Director or any of his/her respective associates has any interest in a business which competes or may compete with the business of the Group.

### **Directors' Interests in Contracts of Significance**

No transaction, arrangement or contract of significance, to which the Company, or any of its subsidiaries was a party and in which a Director or any entity in connection with any Director had a material interest, whether directly or indirectly, subsisting at the end of the year or at any time during the year. **DIRECTORS' REPORT** 

## **Substantial Shareholders**

As at 31 December 2018, the register of substantial shareholders maintained by the Company pursuant to Section 336 of the SFO shows that the following persons, other than a Director or chief executive of the Company, had notified the Company of relevant interests and short positions in the shares or underlying shares of the Company which would have to be disclosed to the Company and the Stock Exchange pursuant to Divisions 2 and 3 of Part XV of the SFO in the issued share capital of the Company:

Ordinary shares of HK\$0.1 each of the Company:

			Approximate percentage of issued share
Name of Shareholder	Capacity	Number of shares held (Note 1)	capital of the Company (Note 4)
Zhang Tianren	Interest of a controlled corporation (Note 2) Interest of spouse (Note 2)	410,355,650 (L) 438,000(L)	36.42% 0.04%
Prime Leader Global Limited	Beneficial owner	410,355,650 (L)	36.42%
UBS AG	Person having security interest in shares	55,975,005(L) 13,791,696(S)	4.97% 1.22%
UBS Group AG	Person having security interest in shares	55,975,005(L) 13,791,696(S)	4.97% 1.22%
Morgan Stanley	Interest of a controlled corporation (Note 3)	56,126,235(L) 47,678,217(S)	4.98% 4.23%

Notes:

1. The letters "L" and "S" denote long position and short position in the shares of the Company respectively.

2. The 410,355,650 shares were held by Prime Leader Global Limited, which was wholly-owned by Dr. Zhang Tianren. The interest in 438,000 Shares arises from the share options granted to Ms. Yang Yaping, spouse of Dr. Zhang Tianren. Ms. Yang Yaping, being the spouse of Dr. Zhang Tianren, is deemed to be interested in the shares held by Dr. Zhang Tianren.

#### **DIRECTORS' REPORT**

## Interests of Substantial Shareholders (Continued)

#### Notes: (Continued)

3. Pursuant to Part XV of the SFO, as at 31 December 2018, Morgan Stanley is deemed or taken to be interested in 56,126,235 shares (long position) and is holding a short position in 47,678,217 shares of the Company. The details of the shareholding interests of the subsidiaries directly or indirectly controlled by Morgan Stanley are set out below:

Name of controlled subsidiary	Number of share
Morgan Stanley Capital Management, LLC	56,126,235 (L)
	47,678,217 (S)
Morgan Stanley Domestic Holdings, Inc.	56,126,235 (L)
	47,678,217 (S)
Morgan Stanley International Incorporated	52,775,352 (L)
	24,607,717 (S)
Morgan Stanley International Incorporated	52,775,352 (L)
	24,607,717 (S)
MSDW Investment Holdings (US) LLC	52,775,352 (L)
	24,607,717 (S)
Morgan Stanley International Holdings Inc.	52,775,352 (L)
	24,607,717 (S)
Morgan Stanley International Holdings Inc.	52,775,352 (L)
	24,607,717 (S)
Morgan Stanley International Holdings Inc.	52,775,352 (L)
	24,607,717 (S)
Morgan Stanley International Holdings Inc.	52,775,352 (L)
	24,607,717 (S)
Morgan Stanley International Limited	52,775,352 (L)
	24,607,717 (S)
Morgan Stanley Group (Europe)	52,775,352 (L)
	24,607,717 (S)
Morgan Stanley Bramley Investments Limited	52,775,352 (L)
	24,607,717 (S)
Morgan Stanley UK Group	52,775,352 (L)
	24,607,717 (S)
Morgan Stanley UK Group	52,775,352 (L)
	24,607,717 (S)
Morgan Stanley Investments (UK)	52,775,352 (L)
Manner Charles 9. Calletter aller	24,607,717 (S)
Morgan Stanley & Co. International plc	52,775,352 (L)
Margan Staplay & Co. LLC	24,607,717 (S)
Morgan Stanley & Co. LLC	2,450,883 (L)
Margan Stanley Capital Services IIC	19,759,000 (S) 900,000 (L)
Morgan Stanley Capital Services LLC	900,000 (L) 3,311,500 (S)
	3,311,300 (3)

4. Shareholding percentage is based on 1,126,726,500 issued shares of the Company as at 31 December 2018.

## **Share Options**

The Scheme was adopted pursuant to a resolution passed by the Shareholders on 26 February 2007 for the primary purpose of providing incentives or rewards to selected participants for their contribution to the Group. Details of the Scheme are set out in Note 36 to the financial statements. An ordinary resolution was passed at the annual general meeting of the Company held on 16 May 2014 (the "2014 Annual General Meeting") relating to the refreshment of scheme mandate limit of the Scheme as set out in the supplemental notice of the 2014 Annual General Meeting. The Scheme expired on 10 June 2017.

On 30 March 2009, a total of 36,340,000 share options were offered to the eligible participants under the Scheme. 35,310,000 share options were accepted and granted on the same day. On 22 November 2010, a total of 44,720,000 share options were offered and granted to the Directors and eligible participants under the Scheme. After the refreshment of the Scheme, on 16 June 2014, a total of 58,660,000 options were offered and granted to the Directors and eligible participants. The details movement of Company's share options during the Reporting Period are as follows:

										Number		Approximate
					Weighted					of options		shareholding
					average					lapsed in		percentage
					closing price					accordance		of the
				Closing price	of Company's	Number				with the	Number	underlying
				of Company's	Shares	of option	Number	Number	Number	terms of the	of options	Shares for
				Shares	immediately	outstanding	of options	of options	of options	options or the	outstanding	the options
			Exercise	immediately	before the	as at	granted	exercised	cancelled	Scheme	as at	in the share
	Date of grant	Exercise	price of	before the	date of	1 January	during	during	during	during	31 December	capital of the
Name of grantee	of the options	period	the options	date of grant	exercise	2018	the period	the period	the period	the period	2018	Company
			(HK\$)	(HKS)	(HK\$)							
Huang Dongliang (Independent	16/6/2014	16/6/2015 to	2.90	2.89	-	90,000	-	-	-	-	90,000	0.01%
non-executive Director)		15/6/2024										
Other eligible participants	22/11/2010	22/11/2011 to	3.18	3.02	-	680,000	-	-	-	-	680,000	0.06%
		21/11/2020										
	16/6/2014	16/6/2015 to	2.90	2.89	-	40,081,500	-	(180,000)	-	(1,017,000)	38,884,500	3.45%
		15/6/2024										
					_							
						40,851,500	-	(180,000)	-	(1,017,000)	39,654,500	3.52%
					_							

On 18 May 2018, the Company by ordinary resolution approved the adoption of a new share option scheme with terms in line with the provisions of Chapter 17 of the Listing Rules. No options have yet been granted under such new share option scheme.

### **Independent Non-Executive Directors**

Mr. Huang Dongliang has signed a letter of appointment with the Company for an initial period of three years commencing 11 June 2007 and will continue thereafter until terminated by either party giving not less than three months' prior written notice to the other. The letters of appointment with the Company and independent non-executive directors expired on 10 June 2010. Thereafter, the terms of the independent non-executive directors have been renewed for a further term of one year in each year. Mr. Wu Feng (appointed on 6 June 2015) have signed the letters of appointment with the Company for an initial period of one year commencing 6 June 2015. Mr. Zhang Yong (appointed on 8 August 2018) has signed the letter of appointment with the Company for an initial period of three years commencing 8 August 2018. By mutual agreement of both parties, the appointment was renewed for a further year commencing 6 June 2017. The Company has received, from each of the independent non-executive Directors, an annual confirmation of his independence pursuant to Rule 3.13 of the Listing Rules. The Company considers all of the independent non-executive directors are independent.

## **Connected Transactions**

Details of the connected transactions entered into during the year are set out in the "Connected Transactions" section of this annual report.

### **Emolument Policy**

The Group's emolument policies are as follows:

- (i) the amount of remuneration is determined on a case by case basis depending on the directors or employee's relevant experience, responsibility, workload and the time devoted to the Group;
- (ii) non-cash benefits may be provided at the discretion of the board of directors to the relevant directors or employees under their remuneration package; and
- (iii) the directors or employees who are eligible participants under the share option scheme may be granted, at the discretion of the board of directors, options of the share option scheme adopted by the Company, as part of their remuneration package.

## **Dividend Policy**

The Company has adopted a dividend policy ("Dividend Policy"), pursuant to which the Company may distribute by way of (i) cash or (ii) shares as may be determined by the board of directors of the Company from time to time. The profit distribution policy of the Company is:

- (a) Profit distribution policy of the Company shall achieve continuity, stability and sustainability;
- (b) The Company targets a payout ratio with balance on distribution of profits and profits retained for business operation and future development;

#### **DIRECTORS' REPORT**

(c) Profit distribution of the Company shall take into account:

- (i) the earnings per share of the Company;
- (ii) the reasonable return in investment of the investors and the shareholders in order to provide incentive to them to continue to support the Company in their long-term development;
- (iii) the financial conditions and business plan of the Company;
- (iv) the market sentiment and circumstances.

#### **Pre-Emptive Rights**

There are no provisions for pre-emptive rights under the Company's articles of association or the laws of the Cayman Islands, being the jurisdiction in which the Company was incorporated, which would oblige the Company to offer new shares on a pro rata basis to existing shareholders.

#### **Major Customers and Suppliers**

During the year, the aggregate sales attributable to the Group's five largest customers were less than 6.56% of the Group's turnover. The largest customer accounted for 1.68% of the Group's total turnover. During the year, the Group's five largest suppliers accounted for 22.95% of the Group's total purchase and the largest supplier accounted for 6.44% of the Group's total purchase. At no time during the year did a director, an associate of a director or a shareholder of the Company (which to the knowledge of the directors owns more than 5% of the Company's share capital) have an interest in the any of the Group's five largest suppliers or customers.

#### **Corporate Governance**

Details of the Company's corporate governance practices are set out in the "Corporate Governance Report" section of this annual report.

#### **Environmental Protection**

Details of the Company's environmental policy and performance are published in the separate Environmental, Social and Governance Report which will be available at the Company's website and the website of the Stock Exchange not later than 3 months after the publication of this annual report.

## **Audit Committee**

The Company established an audit committee ("Audit Committee") in accordance with the requirements of the Listing Rules for the purposes of reviewing and providing supervision over the Group's financial reporting process and internal controls. As at 31 December 2018, the Audit Committee comprised three independent non-executive Directors, namely, Mr. Huang Dongliang, Mr. Wu Feng and Mr. Zhang Yong.

The Audit Committee meets regularly with the Company's senior management and the Company's auditors to consider the Company's financial reporting process, the effectiveness of internal controls, the audit process and risk management.

The Audit Committee has reviewed the annual results of the Group for the year ended 31 December 2018.

### **Donations**

During the year ended 31 December 2018, the Group made charitable donations of approximately RMB2.8437 million (2017: RMB2.2082 million).

## **Sufficiency of Public Float**

From information publicly available to the Company and within the knowledge of its directors as at the latest practicable date prior to the issue of this annual report, at least 25% of the Company's total issued share capital is held by the public throughout the year ended 31 December 2018 as required under the Listing Rules.

## **Auditor**

A resolution will be submitted to the annual general meeting to re-appoint Deloitte Touche Tohmatsu as the auditor of the Company.

On behalf of the Board

Zhang Aogen

Director

Hong Kong, 22 March 2019

## **INDEPENDENT AUDITOR'S REPORT**





#### TO THE MEMBERS OF TIANNENG POWER INTERNATIONAL LIMITED

天能動力國際有限公司 (incorporated in the Cayman Islands with limited liability)

## Opinion

We have audited the consolidated financial statements of Tianneng Power International Limited (the "Company") and its subsidiaries (collectively referred to as "the Group") set out on pages 57 to 139, which comprise the consolidated statement of financial position as at 31 December 2018, and the consolidated statement of profit or loss and other comprehensive income, consolidated statement of changes in equity and consolidated statement of cash flows for the year then ended, and notes to the consolidated financial statements, including a summary of significant accounting policies.

In our opinion, the consolidated financial statements give a true and fair view of the consolidated financial position of the Group as at 31 December 2018, 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"), and we have fulfilled our other ethical responsibilities in accordance with 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 judgment, 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 matter	How our audit addressed the key audit matter
Warranty provision	
We identified the warranty provision, referring to note	Our procedures in relation to management's warranty
30 of the consolidated financial statements, as a key	provision included:
audit matter due to its nature involving key estimation	
made by the directors of the Company and its	- testing the design, implementation and operating
significant balance as at 31 December 2018.	effectiveness of the Group's controls relating to
	the collection of input data used in the process of
At 31 December 2018, the warranty provision was	warranty provision calculation;
RMB549,230,000. The Group provides a warranty	
up to fifteen months on all lead-acid motive battery	- understanding and assessing reasonableness
products. For lead-acid motive battery products found	of the methodology adopted by management by
to be defective under the terms of the warranty, the	comparing with the historical estimates against
Group undertakes to replace the battery free of charge	actual warranty claims, our knowledge in the Group
for products returned within eight months from the	and the industry practices;
date of sale, and to repair the battery free of charge for	
products returned between the ninth month and the	<ul> <li>challenging the key assumptions on the estimated</li> </ul>
fifteenth month after the date of sale.	replacement cost and repair cost for returned
	products and predicted future warranty claim rate
The directors of the Company would estimate the	made by management; and
amount of warranty provision based upon on factors,	
including the actual warranty claims, unit sales history,	<ul> <li>checking mathematic accuracy of calculation</li> </ul>
the estimated replacement cost and repair cost for	provided by management.
returned products, predicted future warranty claim rate	
with reference to prior experiences and volumes of	
products sold.	

## **Other Information**

The directors of the Company are responsible for the other information. The other information comprises the information included in the annual report, but does not include 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.

#### INDEPENDENT AUDITOR'S REPORT

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 Directors and Those Charged with Governance for the Consolidated Financial Statements

The directors of the Company 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.

Those charged with governance are responsible 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 solely to you, as a body, in accordance with our agreed terms of engagement, 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 judgment and maintain professional skepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the consolidated financial statements, whether due to fraud
  or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient
  and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from
  fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions,
  misrepresentations, or the override of internal control.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Group's internal control.

- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by the directors.
- Conclude on the appropriateness of the directors' use of the going concern basis of accounting and, based on
  the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast
  significant doubt on the Group's ability to continue as a going concern. If we conclude that a material uncertainty
  exists, we are required to draw attention in our auditor's report to the related disclosures in the consolidated financial
  statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit
  evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the Group
  to cease to continue as a going concern.
- Evaluate the overall presentation, structure and content of the consolidated financial statements, including the disclosures, and whether the consolidated financial statements represent the underlying transactions and events in a manner that achieves fair presentation.
- Obtain sufficient appropriate audit evidence regarding the financial information of the entities or business activities within the Group to express an opinion on the consolidated financial statements. We are responsible for the direction, supervision and performance of the group audit. We remain solely responsible for our audit opinion.

We communicate with those charged with governance 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 those charged with governance with a statement that we have complied with relevant ethical requirements regarding independence, and to 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 those charged with governance, 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 the independent auditor's report is Lo Kin Cheong.

**Deloitte Touche Tohmatsu** *Certified Public Accountants* Hong Kong

22 March 2019

## CONSOLIDATED STATEMENT OF PROFIT OR LOSS AND OTHER COMPREHENSIVE INCOME

For the year ended 31 December 2018

		2018	201
	NOTES	RMB'000	RMB'000
Revenue	5	34,552,090	26,903,90
Cost of sales	3	(30,466,367)	(23,396,623
Gross profit		4,085,723	3,507,278
Other income	7	369,658	309,325
Other gains and losses	8	(43,481)	(63,81
mpairment losses, net of reversal	9	(23,007)	(82,743
Selling and distribution costs		(889,947)	(675,16
Administrative expenses		(563,674)	(448,61
Research and development costs		(1,114,293)	(882,66
Other expenses		(41,459)	(108,08
Share of profit of an associate		3,126	5,08
Finance costs	10	(177,735)	(153,00
Profit before taxation		1,604,911	1,407,588
Taxation	11	(304,114)	(227,350
Profit for the year	12	1,300,797	1,180,232
Other comprehensive (expense) income			
tems that will not be reclassified to profit or loss:			
Fair value loss on investments in equity instruments at fair			
value through other comprehensive income ("FVTOCI")	19	(137,116)	
ncome tax relating to item that will not be reclassified	17	2,775	
		2,775	
		(134,341)	-
Items that may be reclassified subsequently to profit or loss:			
Fair value gains on:	00	5 705	
– debt instruments measured at FVTOCI	23	5,785	-
– available-for-sale financial assets		_	16,81
ncome tax relating to items that may be reclassified subsequently		(1,446)	(2,77
		4,339	14,042
Other comprehensive (expense) income for the year, net of income tax		(130,002)	14,04
Total comprehensive income for the year		1,170,795	1,194,274
		.,	.,.,.,_,
Profit for the year attributable to:			
Owners of the Company		1,252,430	1,178,36
Non-controlling interests		48,367	1,86
		1,300,797	1,180,23
otal comprehensive income attributable to:			
Owners of the Company		1,122,413	1,192,41
Non-controlling interests		48,382	1,86
		1,170,795	1,194,27
Earnings per share	15		
– Basic	15	RMB 1.11	RMB 1.03
– Diluted		RMB 1.09	RMB 1.02
		K/WD 1.09	K/VID 1.0

## CONSOLIDATED STATEMENT OF FINANCIAL POSITION

At 31 December 2018

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	NOTES	2018 RMB'000	2017 RMB'000
Non-current assets	State Port		XQİ
Property, plant and equipment	16	4,113,612	3,949,384
Goodwill	10	499	499
Prepaid lease payments	17	324,615	240,449
Interest in an associate	17	524,015	15,574
	18	-	15,574
Equity instruments at FVTOCI Available-for-sale investments	19	297,357	006.000
		-	226,000
Deferred tax assets	20	366,999	336,434
Deposit for acquisition of property, plant and equipment		167,404	63,896
		5,270,486	4,832,236
Current assets			
Inventories	21	3,130,048	2,132,701
Bills, trade and other receivables	22	1,250,010	2,392,492
Amounts due from related parties	28	8,901	17,096
Prepaid lease payments	17	9,497	7,219
Debt instruments at FVTOCI	23	969,300	-
Financial assets at fair value through profit or loss ("FVTPL")	25	1,100,849	-
Pledged bank deposits	26	1,068,449	727,562
Bank balances and cash	26	3,833,751	3,872,392
		11,370,805	9,149,462
Current liabilities			
Bills, trade and other payables	27	6,131,130	5,970,617
Amounts due to related parties	28	25,550	62,142
Derivative financial instruments	25	23,330	7,561
	25	232,495	123,190
Taxation payable	29	•	
Borrowings – current portion		1,856,650	1,324,561
Long-term loan notes – due within one year	32	378,588	-
Obligations under finance leases – due within one year	22	-	4,275
Provisions Contract liabilities	30 31	549,230 1,124,451	449,158
		10,298,094	7,941,504
later was to be a set			
let current assets		1,072,711	1,207,958
iotal assets less current liabilities		6,343,197	6,040,194
Ion-current liabilities			
Borrowings – non-current portion	29	68,800	129,800
Deferred tax liabilities	20	102,609	72,567
Long-term loan notes	32	398,508	774,341
		569,917	976,708
		5,773,280	5,063,486

## CONSOLIDATED STATEMENT OF FINANCIAL POSITION

#### At 31 December 2018

	NOTES	2018 RMB′000	2017 RMB'000
Capital and reserves			
Share capital	33	109,905	109,889
Reserves	34	5,429,922	4,768,671
Kesel Ves		J,727,722	4,700,071
Equity attributable to the owners of the Company		5,539,827	4,878,560
Non-controlling interests		233,453	184,926
Total equity		5,773,280	5,063,486

The consolidated financial statements on pages 57 to 139 were approved and authorised for issue by the board of directors on 22 March 2019 and are signed on its behalf by:

Zhang Tianren DIRECTOR Zhang Aogen DIRECTOR

## CONSOLIDATED STATEMENT OF CHANGES IN EQUITY

For the year ended 31 December 2018

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		Attributable to owners of the Company											
	Share capital RMB'000	Share premium RMB'000	Special reserve RMB'000 (note 34)	Capital reserve RMB'000 (note 34)	Share options reserve RMB'000	Investment revaluation reserve RMB'000 (note 19)	Other FVTOCI reserve RMB'000 (note 23)	Statutory surplus reserve fund RMB'000 (note 34)	Discretionary surplus reserve fund RMB'000 (note 34)	Accumulated profits RMB'000	Subtotal RMB'000	Non- controlling interests RMB'000	Total RMB'000
At 1 January 2017 Profit and total comprehensive	109,889	782,734	10,000	138,264	34,128	-	-	456,672	139,630	2,259,850	3,931,167	175,433	4,106,600
income for the year	-	-	-	-	-	14,042	-	-	-	1,178,369	1,192,411	1,863	1,194,274
Transfer Non-controlling interests arising on	-	-	-	-	-	-	-	110,461	3,582	(114,043)		-	
the acquisition of a subsidiary Payment of dividends (note 14)	-	-	-	-	_	-	-	-	-	(254,005)	- (254,005)	7,630	7,630 (254,005)
Forfeiture of share options Recognition of equity-settled share based	-	-	-	-	(2,640)	-	-	-		2,640	-	-	-
payment (note 36)	-	-	-	-	8,987	-	-	-	-	-	8,987	-	8,987
At 31 December 2017	109,889	782,734	10,000	138,264	40,475	14,042	-	567,133	143,212	3,072,811	4,878,560	184,926	5,063,486
Adjustments (note 2)	-	-	-	-	-	-	(7,802)	-	-	(3,521)	(11,323)	(2,687)	(14,010)
At 1 January 2018 (restated) Profit for the year	109,889	782,734	10,000	138,264	40,475	14,042	(7,802)	567,133	143,212	3,069,290 1,252,430	4,867,237 1,252,430	182,239 48,367	5,049,476 1,300,797
Other comprehensive (expense) income for the year	-	-	-	-	-	(134,341)	4,324	-	-	1,232,400	(130,017)	15	(130,002)
Total comprehensive (expense) income for the year	-	-	-	-	-	(134,341)	4,324	-	-	1,252,430	1,122,413	48,382	1,170,795
Transfer	-	-	-	-	-	-	-	75,032	-	(75,032)	-	-	-
Capital injection from non-controlling shareholder Non-controlling interests arising on the acquisition	-	-	-	-	-	-	-	-	-	-	-	49,000	49,000
of a subsidiary (note 35) Acquisition of additional interests in	-	-	-	-	-	-	-	-	-	-	-	17,155	17,155
a subsidiary (note 34)	-	-	-	(112,237)	-	-	-	-	-	-	(112,237)	(14,323)	(126,560)
Payment of dividends (note 14) Dividend paid to non-controlling interests	-	-	-	-	-	-	-	-	-	(340,769)	(340,769) _	- (49,000)	(340,769) (49,000)
Issue of new shares upon exercise of share options	16	669	-	-	(232)	-	-	-	-	-	453	-	453
Forfeiture of share options Recognition of equity-settled share based payment (note 36)	-	-	-	-	(1,326) 2,730	-	-	-	-	1,326	- 2,730	-	- 2,730
At 31 December 2018	109,905	783,403	10,000	26,027	41,647	(120,299)	(3,478)	642,165	143,212	3,907,245	5,539,827	233,453	5,773,280

## CONSOLIDATED STATEMENT OF CASH FLOWS

For the year ended 31 December 2018

	2018 lote RMB'000	201 RMB'00	
Operating activities			
Profit before taxation	1,604,911	1,407,58	
Adjustments for:	1,004,711	1,107,50	
Interest income	(31,454)	(62,54	
Gains on structured bank deposits	(82,327)	(02,01	
Dividend income from equity instruments at FVTOCI	(7,005)		
Interest expenses	177,735	153,00	
Share of profit of an associate	(3,126)	(5,08	
Depreciation of property, plant and equipment	387,602	342,70	
Amortisation of prepaid lease payments	6,390	6,09	
Write-off/loss on disposal of property, plant and equipment	75,801	28,65	
Recognition of allowance for bad and doubtful debts, net of reversal	23,007	82,74	
	8,138	(6,40	
Recognition (reversal) of allowance for inventories		8,98	
Share option expenses	2,730	0,90	
Fair value change of held-for-trading investments	9,535	14.00	
Fair value change of derivative financial instruments	2,130	16,00	
Operating cash flows before movements in working capital	2,174,067	1,971,75	
ncrease in inventories	(960,323)	(178,52	
Decrease in bills, trade and other receivables	499,328	246,11	
Decrease in debt instruments at FVTOCI	212,285		
Increase in bills, trade and other payables	153,281	483,77	
Increase in contract liabilities	319,532		
ncrease (decrease) in provisions	100,072	(19,26	
(Decrease) increase in amounts due to related parties with trade nature	(36,592)	49,68	
Decrease (increase) in amounts due from related parties with trade nature	8,195	(16,49	
(Increase) decrease in held-for-trading investments	(20,436)	57,64	
Cash generated from operations	2,449,409	2,594,68	
Interest paid	(182,616)	(172,04	
Withholding tax paid on dividend	(102,010)	(6,56	
Income tax paid	(189,601)	(213,77	
Net cash from operating activities	2,077,192	2,202,30	
	2,017,172	2,202,00	
Investing activities	21.454	(0.54	
Interest received	31,454	62,54	
Dividend income from equity instruments at FVTOCI	7,005		
Dividend received from an associate	2,924	00.54	
Proceeds from disposal of property, plant and equipment	26,871	22,54	
Purchase of property, plant and equipment	(476,326)	(388,11	
Purchases of equity instruments at FVTOCI/available-for-sale investments	(208,473)	(209,18	
Payments for derivative financial instruments	(9,842)	(378,06	
Proceeds from derivative financial instruments	-	389,04	
Placement of pledged bank deposits	(1,068,449)	(727,56	
Withdrawal of pledged bank deposits	727,562	1,235,67	
Placement of structured bank deposits	(20,429,470)		
Withdrawal of structured bank deposits	19,437,417		
Asset-related government grants received	42,336	55,92	
Deposit for acquisition of property, plant and equipment	(162,142)	(57,97	
Acquisition of prepaid lease payments	(24,101)	(46,75	
Net cash outflow relating to acquisition of subsidiaries	35 ( <b>12,537</b> )	(12,55	
Net cash used in investing activities	(2,115,771)	(54,49	

## CONSOLIDATED STATEMENT OF CASH FLOWS

For the year ended 31 December 2018

		2018	2017	
	Note	RMB'000	RMB'000	
Financing activities				
Bank borrowings raised		3,974,665	3,493,961	
Repayments of borrowings		(3,503,576)	(3,358,092)	
Repayments of loan notes		-	(20,367)	
Proceeds from issue of shares – option exercise		453		
Dividends paid		(340,769)	(254,005)	
Dividends paid to non-controlling interests		(49,000)	_	
Acquisition of additional interests in a subsidiary	34	(126,560)	-	
Capital contribution from a non-controlling shareholder		49,000	-	
Repayment of obligations under finance leases		(4,275)	(15,006)	
Net cash used in financing activities		(62)	(153,509)	
Net (decrease) increase in cash and cash equivalents		(38,641)	1,994,305	
Cash and cash equivalents at the beginning of the year		3,872,392	1,878,087	
Cash and cash equivalents at the end of the year, represented				
by bank balances and cash		3,833,751	3,872,392	

For the year ended 31 December 2018

## 1. General

Tianneng Power International Limited (the "Company") was incorporated and registered as an exempted company with limited liability in the Cayman Islands under the Companies Law of the Cayman Islands on 16 November 2004 and its shares are listed on The Stock Exchange of Hong Kong Limited (the "Hong Kong Stock Exchange") with effect from 11 June 2007. The addresses of the registered office and principal place of business of the Company are disclosed in the "Corporation Information" section of the annual report.

The Company is an investment holding company. The principal activities of its subsidiaries are set out in note 45. The Company and its subsidiaries are collectively referred to as the "Group".

The consolidated financial statements are presented in Renminbi ("RMB") which is also the functional currency of the Company.

## 2. Application of New and Amendments to Hong Kong Financial Reporting Standards ("HKFRSs")

#### 2.1 New and Amendments to HKFRSs that are mandatorily effective for the current year

The Group has applied the following new and amendments to HKFRSs and Hong Kong Accounting Standards ("HKAS") issued by the Hong Kong Institute of Certified Public Accountants ("HKICPA") for the first time in the current year:

HKFRS 9	Financial Instruments
HKFRS 15	Revenue from Contracts with Customers and the related Amendments
HK(IFRIC)-Int 22	Foreign Currency Transactions and Advance Consideration
Amendments to HKFRS 2	Classification and Measurement of Share-based Payment Transactions
Amendments to HKFRS 4	Applying HKFRS 9 Financial Instruments with HKFRS 4 Insurance Contracts
Amendments to HKAS 28	As part of the Annual Improvements to HKFRSs 2014-2016 Cycle
Amendments to HKAS 40	Transfers of Investment Property

Except as described below, the application of the new and amendments to HKFRSs in the current year has had no material impact on the Group's financial performance and positions for the current and prior years and/or on the disclosures set out in these consolidated financial statements.

#### 2.1.1 HKFRS 15 Revenue from Contracts with Customers ("HKFRS 15")

The Group has applied HKFRS 15 for the first time in the current year. HKFRS 15 superseded HKAS 18 *Revenue*, HKAS 11 *Construction Contracts* and the related interpretations.

For the year ended 31 December 2018

## 2. Application of New and Amendments to Hong Kong Financial Reporting Standards ("HKFRSs") (Continued)

#### 2.1 New and Amendments to HKFRSs that are mandatorily effective for the current year (Continued)

#### 2.1.1 HKFRS 15 Revenue from Contracts with Customers ("HKFRS 15") (Continued)

The Group has applied HKFRS 15 retrospectively with the cumulative effect of initially applying this Standard recognised at the date of initial application, 1 January 2018. Any difference at the date of initial application is recognised in the opening accumulated profits (or other components of equity, as appropriate) and comparative information has not been restated. Furthermore, in accordance with the transition provisions in HKFRS 15, the Group has elected to apply the Standard retrospectively only to contracts that are not completed at 1 January 2018. Accordingly, certain comparative information may not be comparable as comparative information was prepared under HKAS 18 *Revenue* and HKAS 11 *Construction Contracts* and the related interpretations. The application of HKFRS 15 does not have a material impact on the timing and amounts of revenue recognition of the Group.

The Group recognises revenue from sales of lead-acid motive batteries, lithium battery products, recycled lead products and other battery related accessories ("Sales of batteries and battery related accessories") and trade of new energy materials.

Information about the Group's performance obligations and the accounting policies resulting from application of HKFRS 15 are disclosed in notes 3 and 5, respectively.

#### Summary of effects arising from initial application of HKFRS 15

At the date of initial application, advances from customers of RMB804,919,000 previously included in bills, trade and other payables were reclassified to contract liabilities upon application of HKFRS 15.

The following tables summarise the impacts of applying HKFRS 15 on the Group's consolidated statement of financial position as at 31 December 2018 and its consolidated statement of cash flows for the current year for each of the line items affected. Line items that were not affected by the changes have not been included.

#### Impact on the consolidated statement of financial position

	<b>As reported</b> RMB'000	Adjustments RMB'000	Amounts without application of HKFRS15 RMB'000
<b>Current liabilities</b> Bills, trade and other payables Contract liabilities	6,131,130 1,124,451	1,124,451 (1,124,451)	7,255,581

#### Impact on the consolidated statement of cash flows

	<b>As reported</b> RMB'000	<b>Adjustments</b> RMB'000	Amounts without application of HKFRS15 RMB'000
<b>Operating activities</b> Increase in bills, trade and other payables Increase in contract liabilities	153,281 319,532	319,532 (319,532)	472,813

For the year ended 31 December 2018

## 2. Application of New and Amendments to Hong Kong Financial Reporting Standards ("HKFRSs") (Continued)

#### 2.1 New and Amendments to HKFRSs that are mandatorily effective for the current year (Continued)

#### 2.1.2 HKFRS 9 Financial Instruments ("HKFRS 9")

In the current year, the Group has applied HKFRS 9 *Financial Instruments* and the related consequential amendments to other HKFRSs. HKFRS 9 introduces new requirements for 1) the classification and measurement of financial assets and financial liabilities, 2) expected credit losses ("ECL") for financial assets and 3) general hedge accounting.

The Group has applied HKFRS 9 in accordance with the transition provisions set out in HKFRS 9, i.e. applied the classification and measurement requirements (including impairment under ECL model) retrospectively to instruments that have not been derecognised as at 1 January 2018 (date of initial application) and has not applied the requirements to instruments that have already been derecognised as at 1 January 2018. The difference between carrying amounts as at 31 December 2017 and the carrying amounts as at 1 January 2018 are recognised in the opening accumulated profits and other components of equity, without restating comparative information.

Accordingly, certain comparative information may not be comparable as comparative information was prepared under HKAS 39 *Financial Instruments: Recognition and Measurement*.

Accounting policies resulting from application of HKFRS 9 are disclosed in note 3.

#### Summary of effects arising from initial application of HKFRS 9

The table below illustrates the classification and measurement of financial assets and financial liabilities and other items subject to ECL under HKFRS 9 and HKAS 39 at the date of initial application, 1 January 2018.

	Notes	Available- for-sale investments RMB'000	Equity instruments at FVTOCI RMB'000	Debt instruments at FVTOCI RMB'000	Receivables at amortised cost previously classified as loans and receivables RMB'000	Deferred tax assets RMB'000	Investment revaluation reserve RMB'000	Other FVTOCI reserve RMB'000	Accumulated profits RMB'000	Non- controlling interests RMB'000
Closing balance at 31 December 2017 – HKAS 39		226,000	-	-	2,392,492	336,434	14,042	-	3,072,811	184,926
Effect arising from initial application of HKFRS 9:										
Reclassification – From available-for-sale investments – From loans and receivables	(a) (b)	(226,000) _	226,000	- 1,186,894	_ (1,186,894)	-	-	-	-	-
Remeasurement – Impairment under ECL model – Fair value adjustment on debt instruments at FVTOCI	(c)	-	-	- (11,094)	(8,979) _	3,290 2,773	-	- (7,802)	(3,521) –	(2,168) (519)
Opening balance at 1 January 2018		-	226,000	1,175,800	1,196,619	342,497	14,042	(7,802)	3,069,290	182,239

For the year ended 31 December 2018

## 2. Application of New and Amendments to Hong Kong Financial Reporting Standards ("HKFRSs") (Continued)

2.1 New and Amendments to HKFRSs that are mandatorily effective for the current year (Continued)

#### 2.1.2 HKFRS 9 Financial Instruments ("HKFRS 9") (Continued)

#### (a) Available-for-sale investments

#### From available-for-sale investments to equity instruments at FVTOCI

The Group elected to present in OCI for the fair value changes of all its equity investments previously classified as available-for-sale. These investments are not held for trading and not expected to be sold in the foreseeable future. At the date of initial application of HKFRS 9, RMB226,000,000 were reclassified from available-for-sale investments to equity instruments at FVTOCI. The fair value gains of RMB14,042,000 relating to those investments previously carried at fair value continued to accumulate in investment revaluation reserve.

#### (b) Loans and receivables

#### From loans and receivables to debt instruments at FVTOCI

As part of the Group's cash flow management, the Group has the practice of discounting some of the bills receivables to financial institutions or transferring some of the bills receivables received from customers to its suppliers to settle its payables through endorsing the bank issued bills to its suppliers before the bills are due for payment and derecognises bills discounted and endorsed on the basis that the Group has transferred substantially all risks and rewards to the relevant counterparties. Accordingly, the Group's bills receivables of RMB1,186,894,000 were considered as within the hold to collect contractual cash flows and to sell business model, and reclassified to debt instruments at FVTOCI. The related fair value losses of RMB11,094,000, net of deferred tax assets of RMB2,773,000 has been recognised against other FVTOCI reserve and non-controlling interests of RMB7,802,000 and RMB519,000, respectively as at 1 January 2018.

#### From loans and receivables to financial assets at amortised cost

Except for bills receivables, all remaining loans and receivables were reclassified as financial assets at amortised cost since the Group's business model is to hold these financial assets for collection of contractual cash flows, and the cash flows represent solely payments of principal and interest on the principal amount outstanding.

#### (c) Impairment under ECL model

The Group applies the HKFRS 9 simplified approach to measure ECL which uses a lifetime ECL for all trade receivables and amounts due from related parties with trade in nature arising from transactions within the scope of HKFRS 15. To measure the ECL, receivables have been grouped based on shared credit risk characteristics.

ECL for other financial assets at amortised cost, including debt instruments at FVTOCI, other receivables, pledged bank deposits and bank balances, are assessed on 12-month ECL ("12m ECL") basis as there had been no significant increase in credit risks since initial recognition.

For the year ended 31 December 2018

## 2. Application of New and Amendments to Hong Kong Financial Reporting Standards ("HKFRSs") (Continued)

2.1 New and Amendments to HKFRSs that are mandatorily effective for the current year (Continued)

#### 2.1.2 HKFRS 9 Financial Instruments ("HKFRS 9") (Continued)

#### (c) Impairment under ECL model (Continued)

As at 1 January 2018, additional credit loss allowance of RMB8,979,000, net of deferred assets of RMB3,290,000 has been recognised against accumulated profits and non-controlling interests of RMB3,521,000 and RMB2,168,000 respectively. The additional loss allowance is charged against trade receivables through a loss allowance account.

All loss allowance for trade receivables as at 31 December 2017 reconciled to the opening loss allowances as at 1 January 2018 are as follows:

	Amount RMB'000
At 31 December 2017 – HKAS 39 Amounts remeasured through opening accumulated profits	181,947 8,979
At 1 January 2018	190,926

For the year ended 31 December 2018

## 2. Application of New and Amendments to Hong Kong Financial Reporting Standards ("HKFRSs") (Continued)

#### 2.1 New and Amendments to HKFRSs that are mandatorily effective for the current year (Continued)

## 2.1.3 Impacts on opening consolidated statement of financial position arising from the application of all new standards, amendments and interpretations

As a result of the changes in the Group's accounting policies above, the opening consolidated statement of financial position had to be restated. The following table show the adjustments recognised for each of the line items affected. Line items that were not affected by the changes have not been included.

	31 December			1 January
	<b>2017</b> (Audited) RMB'000	HKFRS 15 RMB'000	HKFRS 9 RMB'000	<b>2018</b> (Restated) RMB'000
Non-current assets	00/ 000		(00/ 000)	
Available-for-sale investments Equity instruments at FVTOCI	226,000	-	(226,000) 226,000	226,000
Deferred tax assets	336,434	-	6,063	342,497
Others with no adjustments	4,269,802	_	-	4,269,802
	4,832,236	-	6,063	4,838,299
Current assets				
Bills, trade and other receivables	2,392,492	-	(1,195,873)	1,196,619
Debt instruments at FVTOCI	_	-	1,175,800	1,175,800
Others with no adjustments	6,756,970	_	_	6,756,970
	9,149,462	-	(20,073)	9,129,389
Current liabilities				
Bills, trade and other payables	5,970,617	(804,919)	-	5,165,698
Contract liabilities	-	804,919	-	804,919
Others with no adjustments	1,970,887	-	-	1,970,887
	7,941,504	-	-	7,941,504
Net current assets	1,207,958	-	(20,073)	1,187,885
Total assets less current liabilities	6,040,194	-	(14,010)	6,026,184
Non-current liabilities				
Others with no adjustments	976,708	-	-	976,708
Net assets	5,063,486	-	(14,010)	5,049,476
Capital and reserves				
Share capital	109,889	-	-	109,889
Share premium and reserves	4,768,671	_	(11,323)	4,757,348
Equity attributable to the owners				
of the Company	4,878,560	-	(11,323)	4,867,237
Non-controlling interests	184,926	-	(2,687)	182,239
Total equity	5,063,486	_	(14,010)	5,049,476

For the year ended 31 December 2018

## 2. Application of New and Amendments to Hong Kong Financial Reporting Standards ("HKFRSs") (Continued)

- 2.1 New and Amendments to HKFRSs that are mandatorily effective for the current year (Continued)
  - 2.1.3 Impacts on opening consolidated statement of financial position arising from the application of all new standards, amendments and interpretations (Continued)
    - Note: For the purposes of reporting cash flows from operating activities under indirect method for the year ended 31 December 2018, movements in working capital have been computed based on opening statement of financial position as at 1 January 2018.

#### 2.2 New and amendments to HKFRSs in issue but not yet effective

The Group has not early applied the following new and amendments to HKFRSs that have been issued but are not yet effective:

Leases <sup>1</sup>
Insurance Contracts <sup>3</sup>
Uncertainty over Income Tax Treatments <sup>1</sup>
Definition of a Business⁴
Prepayment Features with Negative Compensation <sup>1</sup>
Sale or Contribution of Assets between an Investor and its Associate or Joint Venture <sup>2</sup>
Definition of Material⁵
Plan Amendment, Curtailment or Settlement <sup>i</sup>
Long-term Interests in Associates and Joint Ventures <sup>1</sup>
Annual Improvements to HKFRSs 2015-2017 Cycle <sup>1</sup>

<sup>1</sup> Effective for annual periods beginning on or after 1 January 2019

- <sup>2</sup> Effective for annual periods beginning on or after a date to be determined
- <sup>3</sup> Effective for annual periods beginning on or after 1 January 2021
- <sup>4</sup> Effective for business combinations and asset acquisitions for which the acquisition date is on or after the beginning of the first annual period beginning on or after 1 January 2020
- <sup>5</sup> Effective for annual periods beginning on or after 1 January 2020

Except for the new and amendments to HKFRSs mentioned below, the directors of the Company anticipate that the application of all other new and amendments to HKFRSs will have no material impact on the consolidated financial statements in the foreseeable future.

For the year ended 31 December 2018

## 2. Application of New and Amendments to Hong Kong Financial Reporting Standards ("HKFRSs") (Continued)

#### 2.2 New and amendments to HKFRSs in issue but not yet effective (Continued)

#### **HKFRS 16 Leases**

HKFRS 16 introduces a comprehensive model for the identification of lease arrangements and accounting treatments for both lessors and lessees. HKFRS 16 supersedes HKAS 17 *Leases* and the related interpretations when it becomes effective.

HKFRS 16 distinguishes lease and service contracts on the basis of whether an identified asset is controlled by a customer. In addition, HKFRS 16 requires sales and leaseback transactions to be determined based on the requirements of HKFRS 15 as to whether the transfer of the relevant asset should be accounted as a sale. HKFRS 16 also includes requirements relating to subleases and lease modifications.

Distinctions of operating leases and finance leases are removed for lessee accounting, and is replaced by a model where a right-of-use asset and a corresponding liability have to be recognised for all leases by lessees, except for short-term leases and leases of low value assets.

The right-of-use asset is initially measured at cost and subsequently measured at cost (subject to certain exceptions) less accumulated depreciation and impairment losses, adjusted for any remeasurement of the lease liability. The lease liability is initially measured at the present value of the lease payments that are not paid at that date. Subsequently, the lease liability is adjusted for interest and lease payments, as well as the impact of lease modifications, amongst others. For the classification of cash flows, the Group currently presents upfront prepaid lease payments as investing cash flows in relation to leasehold lands for own use while other operating lease payments are presented as operating cash flows.

Upon application of HKFRS 16, lease payments in relation to lease liability will be allocated into a principal and an interest portion which will be presented as operating cash flows by the Group, while upfront prepaid lease payments will continue to be presented as investing cash flows in accordance with the nature.

Under HKAS 17, the Group has already recognised an asset and a related finance lease liability for finance lease arrangement and prepaid lease payments for leasehold lands where the Group is a lessee. The application of HKFRS 16 will not result in changes in classification of these assets since the Group will present right-of-use assets separately at which the corresponding underlying assets would be presented if they were owned.

Other than certain requirements which are also applicable to lessor, HKFRS 16 substantially carries forward the lessor accounting requirements in HKAS 17, and continues to require a lessor to classify a lease either as an operating lease or a finance lease.

For the year ended 31 December 2018

# 2. Application of New and Amendments to Hong Kong Financial Reporting Standards ("HKFRSs") (Continued)

#### 2.2 New and amendments to HKFRSs in issue but not yet effective (Continued)

#### **HKFRS 16 Leases (Continued)**

Furthermore, extensive disclosures are required by HKFRS 16.

As at 31 December 2018, the Group has non-cancellable operating lease commitments of RMB35,777,000 as disclosed in note 37. A preliminary assessment indicates that these arrangements will meet the definition of a lease. Upon application of HKFRS 16, the Group will recognise a right-of-use asset and a corresponding liability in respect of all these leases unless they qualify for low value or short-term leases.

In addition, the Group currently considers refundable rental deposits paid of RMB1,575,000 as rights under leases to which HKAS 17 applies. Based on the definition of lease payments under HKFRS 16, such deposits are not payments relating to the right to use the underlying assets, accordingly, the carrying amounts of such deposits may be adjusted to amortised cost. Adjustments to refundable rental deposits paid would be considered as additional lease payments and included in the carrying amount of right- of-use assets. Adjustments to refundable rental deposits received would be considered as advance lease payments.

The application of new requirements may result in changes in measurement, presentation and disclosure as indicated above. The Group has elected the practical expedient to apply HKFRS 16 to contracts that were previously identified as leases applying HKAS 17 and HK(IFRIC)-Int 4 *Determining whether an Arrangement contains a Lease* and not apply this standard to contracts that were not previously identified as containing a lease applying HKAS 17 and HK(IFRIC)-Int 4. Therefore, the Group has not reassessed whether the contracts are, or contain a lease which already existed prior to the date of initial application. Furthermore, the Group has elected the modified retrospective approach for the application of HKFRS 16 as lessee and has recognised the cumulative effect of initial application to opening accumulated profits without restating comparative information.

## 3. Significant Accounting Policies

The consolidated financial statements have been prepared in accordance with HKFRSs issued by the HKICPA. In addition, the consolidated financial statements include applicable disclosures required by the Rules Governing the Listing of Securities on the Hong Kong Stock Exchange and by the Hong Kong Companies Ordinance.

The consolidated financial statements have been prepared on the historical cost basis except for certain financial instruments that are measured at fair values at the end of each reporting period, as explained in the accounting policies set out below.

Historical cost is generally based on the fair value of the consideration given in exchange for goods and services.

Fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date, regardless of whether that price is directly observable or estimated using another valuation technique. In estimating the fair value of an asset or a liability, the Group takes into account the characteristics of the asset or liability if market participants would take those characteristics into account when pricing the asset or liability at the measurement date. Fair value for measurement and/or disclosure purposes in these consolidated financial statements is determined on such a basis, except for share-based payment transactions that are within the scope of HKFRS 2 *Share-based Payment*, leasing transactions that are within the scope of HKAS 17, and measurements that have some similarities to fair value but are not fair value, such as net realisable value in HKAS 2 *Inventories* or value in use in HKAS 36 *Impairment of Assets*.

For the year ended 31 December 2018

# 3. Significant Accounting Policies (Continued)

In addition, for financial reporting purposes, fair value measurements are categorised into Level 1, 2 or 3 based on the degree to which the inputs to the fair value measurements are observable and the significance of the inputs to the fair value measurement in its entirety, which are described as follows:

- Level 1 inputs are quoted prices (unadjusted) in active markets for identical assets or liabilities that the entity can access at the measurement date;
- Level 2 inputs are inputs, other than quoted prices included within Level 1, that are observable for the asset or liability, either directly or indirectly; and
- Level 3 inputs are unobservable inputs for the asset or liability.

The principal accounting policies are set out below.

#### **Basis of consolidation**

The consolidated financial statements incorporate the financial statements of the Company and entities controlled by the Company and its subsidiaries. Control is achieved when the Company:

- has power over the investee;
- is exposed, or has rights, to variable returns from its involvement with the investee; and
- has the ability to use its power to affect its returns.

The Group reassesses whether or not it controls an investee if facts and circumstances indicate that there are changes to one or more of the three elements of control listed above.

Consolidation of a subsidiary begins when the Group obtains control over the subsidiary and ceases when the Group loses control of the subsidiary. Specifically, income and expenses of a subsidiary acquired or disposed of during the year are included in the consolidated statement of profit or loss and other comprehensive income from the date the Group gains control until the date when the Group ceases to control the subsidiary.

Profit or loss and each item of other comprehensive income are attributed to the owners of the Company and to the noncontrolling interests. Total comprehensive income of subsidiaries is attributed to the owners of the Company and to the noncontrolling interests even if this results in the non-controlling interests having a deficit balance.

When necessary, adjustments are made to the financial statements of subsidiaries to bring their accounting policies into line with the Group's accounting policies.

All intragroup assets and liabilities, equity, income, expenses and cash flows relating to transactions between members of the Group are eliminated in full on consolidation.

Non-controlling interests in subsidiaries are presented separately from the Group's equity therein, which represent present ownership interests entitling their holders to a proportionate share of net assets of the relevant subsidiaries upon liquidation.

For the year ended 31 December 2018

# 3. Significant Accounting Policies (Continued)

### **Basis of consolidation (Continued)**

#### Changes in the Group's interests in existing subsidiaries

Changes in the Group's interests in subsidiaries that do not result in the Group losing control over the subsidiaries are accounted for as equity transactions. The carrying amounts of the Group's relevant components of equity and the non-controlling interests are adjusted to reflect the changes in their relative interests in the subsidiaries, including re-attribution of relevant reserves between the Group and the non-controlling interests according to the Group's and the non-controlling interests' proportionate interests.

Any difference between the amount by which the non-controlling interests are adjusted, and the fair value of the consideration paid or received is recognised directly in equity and attributed to owners of the Company.

#### **Business combinations**

Acquisitions of businesses are accounted for using the acquisition method. The consideration transferred in a business combination is measured at fair value, which is calculated as the sum of the acquisition-date fair values of the assets transferred by the Group, liabilities incurred by the Group to the former owners of the acquiree and the equity interests issued by the Group in exchange for control of the acquiree. Acquisition-related costs are generally recognised in profit or loss as incurred.

At the acquisition date, the identifiable assets acquired and the liabilities assumed are recognised at their fair value, except that:

- deferred tax assets or liabilities, and assets or liabilities related to employee benefit arrangements are recognised and measured in accordance with HKAS 12 *Income Taxes* and HKAS 19 *Employee Benefits* respectively;
- liabilities or equity instruments related to share-based payment arrangements of the acquiree or share-based payment arrangements of the Group entered into to replace share-based payment arrangements of the acquiree are measured in accordance with HKFRS 2 *Share-based Payment* at the acquisition date (see the accounting policy below); and
- assets (or disposal groups) that are classified as held for sale in accordance with HKFRS 5 Non-current Assets Held for Sale and Discontinued Operations are measured in accordance with that standard.

Goodwill is measured as the excess of the sum of the consideration transferred, the amount of any non-controlling interests in the acquiree, and the fair value of the acquirer's previously held equity interest in the acquiree (if any) over the net amount of the identifiable assets acquired and the liabilities assumed as at acquisition date. If, after re-assessment, the net amount of the identifiable assets acquired and liabilities assumed exceeds the sum of the consideration transferred, the amount of any non-controlling interests in the acquiree and the fair value of the acquirer's previously held interest in the acquiree (if any), the excess is recognised immediately in profit or loss as a bargain purchase gain.

For the year ended 31 December 2018

# 3. Significant Accounting Policies (Continued)

#### **Business combinations (Continued)**

Non-controlling interests that are present ownership interests and entitle their holders to a proportionate share of the relevant subsidiary's net assets in the event of liquidation are initially measured at the non-controlling interests' proportionate share of the recognised amounts of the acquiree's identifiable net assets or at fair value. The choice of measurement basis is made on a transaction-by-transaction basis. Other types of non-controlling interest are measured at their fair value.

When a business combination is achieved in stages, the Group's previously held equity interest in the acquiree is remeasured to fair value at the acquisition date (i.e. the date when the Group obtains control), and the resulting gain or loss, if any, is recognised in profit or loss or other comprehensive income, as appropriate. Amounts arising from interests in the acquiree prior to the acquisition date that have previously been recognised in other comprehensive income and measured under HKFRS 9/HKAS 39 would be accounted for on the same basis as would be required if the Group had disposed directly of the previously held equity interest.

#### Acquisition of a subsidiary not constituting a business

When the Group acquires a group of assets and liabilities that do not constitute a business, the Group identifies and recognises the individual identifiable assets acquired and liabilities assumed by allocating the purchase price first to financial assets/financial liabilities at the respective fair values, the remaining balance of the purchase price is then allocated to the other identifiable assets and liabilities on the basis of their relative fair values at the date of purchase. Such a transaction does not give rise to goodwill or bargain purchase gain.

#### Goodwill

Goodwill arising on an acquisition of a business is carried at cost as established at the date of acquisition of the business (see the accounting policy above) less accumulated impairment losses, if any.

For the purposes of impairment testing, goodwill is allocated to each of the Group's cash-generating units (or groups of cashgenerating units) that is expected to benefit from the synergies of the combination, which represent the lowest level at which the goodwill is monitored for internal management purposes and not larger than an operating segment.

A cash-generating unit (or group of cash-generating units) to which goodwill has been allocated is tested for impairment annually, or more frequently when there is indication that the unit may be impaired. For goodwill arising on an acquisition in a reporting period, the cash-generating unit (or group of cash-generating units) to which goodwill has been allocated is tested for impairment before the end of that reporting period. If the recoverable amount is less than its carrying amount, the impairment loss is allocated first to reduce the carrying amount of any goodwill and then to the other assets on a pro-rata basis based on the carrying amount of each asset in the unit (or group of cash-generating units).

On disposal of the relevant cash-generating unit or any of the cash-generating unit within the group of cash- generating units, the attributable amount of goodwill is included in the determination of the amount of profit or loss on disposal. When the Group disposes of an operation within the cash-generating unit (or a cash- generating unit within a group of cash-generating units), the amount of goodwill disposed of is measured on the basis of the relative values of the operation (or the cash-generating unit) disposed of and the portion of the cash-generating unit (or the group of cash-generating units) retained.

For the year ended 31 December 2018

# 3. Significant Accounting Policies (Continued)

#### Investment in an associate

An associate is an entity over which the Group has significant influence. Significant influence is the power to participate in the financial and operating policy decisions of the investee but is not control or joint control over those policies.

The results and assets and liabilities of associates are incorporated in these consolidated financial statements using the equity method of accounting. The financial statements of associates used for equity accounting purposes are prepared using uniform accounting policies as those of the Group for like transactions and events in similar circumstances. Under the equity method, an investment in an associate is initially recognised in the consolidated statement of financial position at cost and adjusted thereafter to recognise the Group's share of the profit or loss and other comprehensive income of the associate. Changes in net assets of the associate other than profit or loss and other comprehensive income are not accounted for unless such changes resulted in changes in ownership interest held by the Group. When the Group's share of losses of an associate exceeds the Group's interest in that associate (which includes any long-term interests that, in substance, form part of the Group's net investment in the associate), the Group discontinues recognising its share of further losses. Additional losses are recognised only to the extent that the Group has incurred legal or constructive obligations or made payments on behalf of the associate.

An investment in an associate is accounted for using the equity method from the date on which the investee becomes an associate. On acquisition of the investment in an associate, any excess of the cost of the investment over the Group's share of the net fair value of the identifiable assets and liabilities of the investee is recognised as goodwill, which is included within the carrying amount of the investment. Any excess of the Group's share of the net fair value of the identifiable assets and liabilities over the cost of the investment, after reassessment, is recognised immediately in profit or loss in the period in which the investment is acquired.

The Group assesses whether there is an objective evidence that the interest in an associate may be impaired. When any objective evidence exists, the entire carrying amount of the investment (including goodwill) is tested for impairment in accordance with HKAS 36 *Impairment of Assets* as a single asset by comparing its recoverable amount (higher of value in use and fair value less costs of disposal) with its carrying amount. Any impairment loss recognised forms part of the carrying amount of the investment. Any reversal of that impairment loss is recognised in accordance with HKAS 36 to the extent that the recoverable amount of the investment subsequently increases.

When the Group ceases to have significant influence over an associate, it is accounted for as a disposal of the entire interest in the investee with a resulting gain or loss being recognised in profit or loss. When the Group retains an interest in the former associate and the retained interest is a financial asset within the scope of HKFRS 9/HKAS 39, the Group measures the retained interest at fair value at that date and the fair value is regarded as its fair value on initial recognition in accordance with HKFRS9/HKAS 39. The difference between the carrying amount of the associate at the date the equity method was discontinued, and the fair value of any retained interest and any proceeds from disposing the relevant interest in the associate is included in the determination of the gain or loss on disposal of the associate. In addition, the Group accounts for all amounts previously recognised in other comprehensive income in relation to that associate on the same basis as would be required if that associate had directly disposed of the related assets or liabilities. Therefore, if a gain or loss previously recognised in other comprehensive income by that associate to profit or loss on the disposal of the related assets or liabilities, the Group reclassifies the gain or loss from equity to profit or loss (as a reclassification adjustment) upon disposal/partial disposal of the relevant associate.

When a group entity transacts with an associate of the Group, profits and losses resulting from the transactions with the associate are recognised in the Group's consolidated financial statements only to the extent of interests in the associate that are not related to the Group.

For the year ended 31 December 2018

# 3. Significant Accounting Policies (Continued)

## Revenue from contracts with customers (upon application of HKFRS 15 in accordance with transitions in note 2)

Under HKFRS 15, the Group recognises revenue when (or as) a performance obligation is satisfied, i.e. when "control" of the goods or services underlying the particular performance obligation is transferred to the customer.

A performance obligation represents a good or service (or a bundle of goods or services) that is distinct or a series of distinct goods or services that are substantially the same.

Control is transferred over time and revenue is recognised over time by reference to the progress towards complete satisfaction of the relevant performance obligation if one of the following criteria is met:

- the customer simultaneously receives and consumes the benefits provided by the Group's performance as the Group performs;
- the Group's performance creates and enhances an asset that the customer controls as the Group performs; or
- the Group's performance does not create an asset with an alternative use to the Group and the Group has an enforceable right to payment for performance completed to date.

Otherwise, revenue is recognised at a point in time when the customer obtains control of the distinct good or service.

The Group recognised revenue at a point in time when the control of the goods is transferred.

A contract asset represents the Group's right to consideration in exchange for goods or services that the Group has transferred to a customer that is not yet unconditional. It is assessed for impairment in accordance with HKFRS 9. In contrast, a receivable represents the Group's unconditional right to consideration, i.e. only the passage of time is required before payment of that consideration is due.

A contract liability represents the Group's obligation to transfer goods or services to a customer for which the Group has received consideration (or an amount of consideration is due) from the customer.

A contract asset and a contract liability relating to a contract are accounted for on a net basis.

#### Variable consideration

For contracts that contain variable consideration, the Group estimates the amount of consideration to which it will be entitled using either (a) the expected value method or (b) the most likely amount, depending on which method better predicts the amount of consideration to which the Group will be entitled.

The estimated amount of variable consideration is included in the transaction price only to the extent that it is highly probable that such an inclusion will not result in a significant revenue reversal in the future when the uncertainty associated with the variable consideration is subsequently resolved.

At the end of each reporting period, the Group updates the estimated transaction price (including updating its assessment of whether an estimate of variable consideration is constrained) to represent faithfully the circumstances present at the end of the reporting period and the changes in circumstances during the reporting period.

#### **Refund liabilities**

The Group recognises a refund liability if the Group expects to refund some or all of the consideration received from customers.

For the year ended 31 December 2018

# 3. Significant Accounting Policies (Continued)

#### Revenue recognition (prior to 1 January 2018)

Revenue is measured at the fair value of the consideration received or receivable. Revenue is reduced for estimated customer returns, rebates and other similar allowances.

Revenue is recognised when the amount of revenue can be reliably measured; when it is probable that future economic benefits will flow to the Group and when specific criteria have been met for each of the Group's activities, as described below.

Revenue from the sale of goods is recognised when the goods are delivered and title has passed.

Dividend income from investments is recognised when the shareholders' rights to receive payment have been established.

Interest income is accrued on a time basis, by reference to the principal outstanding and at the effective interest rate applicable, which is the rate that exactly discounts the estimated future cash receipts through the expected life of the financial asset to that asset's net carrying amount on initial recognition.

#### Leases

Leases are classified as finance leases whenever the terms of the lease transfer substantially all the risks and rewards of ownership to the lessee. All other leases are classified as operating leases.

#### The Group as lessee

Assets held under finance leases are recognised as assets of the Group at their fair value at the inception of the lease or, if lower, at the present value of the minimum lease payments. The corresponding liability to the lessor is included in the consolidated statement of financial position as a finance lease obligation.

Lease payments are apportioned between finance expenses and reduction of the lease obligation so as to achieve a constant rate of interest on the remaining balance of the liability. Finance expenses are recognised immediately in profit or loss, unless they are directly attributable to qualifying assets, in which case they are capitalised in accordance with the Group's general policy on borrowing costs (see the accounting policy below).

Operating lease payments are recognised as an expense on a straight-line basis over the lease term.

In the event that lease incentives are received to enter into operating leases, such incentives are recognised as a liability. The aggregate benefit of incentives is recognised as a reduction of rental expense on a straight-line basis.

#### Leasehold land for own use

When the Group makes payments for a property interest which includes both leasehold land and building elements, the Group assesses the classification of each element as a finance or an operating lease separately based on the assessment as to whether substantially all the risks and rewards incidental to ownership of each element have been transferred to the Group, unless it is clear that both elements are operating leases in which case the entire property is accounted as an operating lease. Specifically, the entire consideration (including any lump-sum upfront payments) are allocated between the leasehold land and the building element at initial recognition.

To the extent the allocation of the relevant payments can be made reliably, interest in leasehold land that is accounted for as an operating lease is presented as "prepaid lease payments" in the consolidated statement of financial position and is amortised over the lease term on a straight-line basis. When the lease payments cannot be allocated reliably between the leasehold land and building elements, the entire property is generally classified as if the leasehold land is under finance lease.

For the year ended 31 December 2018

# 3. Significant Accounting Policies (Continued)

#### **Foreign currencies**

In preparing the financial statements of each individual group entity, transactions in currencies other than the functional currency of that entity (foreign currencies) are recorded in its functional currency (i.e. the currency of the primary economic environment in which the entity operates) at the rates of exchanges prevailing on the dates of the transactions. At the end of the reporting period, monetary items denominated in foreign currencies are retranslated at the rates prevailing at that date. Non-monetary items that are measured in terms of historical cost in a foreign currency are not retranslated.

Exchange differences arising on the settlement of monetary items, and on the retranslation of monetary items, are recognised in profit and loss for the period in which they arise.

#### **Borrowing costs**

Borrowing costs directly attributable to the acquisition, construction or production of qualifying assets, which are assets that necessarily take a substantial period of time to get ready for their intended use or sale, are added to the cost of those assets, until such time as the assets are substantially ready for their intended use or sale.

Investment income earned on the temporary investment of specific borrowings pending their expenditure on qualifying assets is deducted from the borrowing costs eligible for capitalisation.

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

#### **Government grants**

Government grants are not recognised until there is reasonable assurance that the Group will comply with the conditions attaching to them and that the grants will be received.

Government grants are recognised in profit or loss on a systematic basis over the periods in which the Group recognises as expenses the related costs for which the grants are intended to compensate. Specifically, government grants whose primary condition is that the Group should purchase, construct or otherwise acquire non-current assets are recognised as a deduction from the carrying amount of the relevant asset in the consolidated statement of financial position and transferred to profit or loss over the useful lives of the related assets.

Government grants that are receivable as compensation for expenses or losses already incurred or for the purpose of giving immediate financial support to the Group with no future related costs are recognised in profit or loss in the period in which they become receivable.

#### **Retirement benefit costs**

Payments to defined contribution retirement benefit plans are recognised as an expense when employees have rendered service entitling them to the contributions.

For the year ended 31 December 2018

# 3. Significant Accounting Policies (Continued)

#### **Share-based payments**

Equity-settled share-based payment transactions

#### Share options granted to employees

Equity-settled share-based payments to employees and others providing similar services are measured at the fair value of the equity instruments at the grant date.

The fair value of the equity-settled share-based payments determined at the grant date without taking into consideration all nonmarket vesting conditions is expensed on a straight-line basis over the vesting period, based on the Group's estimate of equity instruments that will eventually vest, with a corresponding increase in equity (share options reserve). At the end of each reporting period, the Group revises its estimates of the number of options that are expected to ultimately vest based on assessment of all relevant non-market vesting conditions. The impact of the revision of the original estimates during the vesting period, if any, is recognised in profit or loss such that the cumulative expense reflects the revised estimate, with a corresponding adjustment to share options reserve.

When the share options are exercised, the amount previously recognised in share options reserve will be transferred to share premium. When the share options are forfeited after the vesting date or are still not exercised at the expiry date, the amount previously recognised in share options reserve will be transferred to accumulated profits.

#### **Taxation**

Income tax expense represents the sum of the tax currently payable and deferred tax.

The tax currently payable is based on taxable profit for the year. Taxable profit differs from profit before taxation because of income or expense that are taxable or deductible in other years and items that are never taxable or deductible. The Group's liability for current tax is calculated using tax rates that have been enacted or substantively enacted by the end of the reporting period.

Deferred tax is recognised on temporary differences between the carrying amounts of assets and liabilities in the consolidated financial statements and the corresponding tax base used in the computation of taxable profit. Deferred tax liabilities are generally recognised for all taxable temporary differences. Deferred tax assets are generally recognised for all deductible temporary differences to the extent that it is probable that taxable profits will be available against which those deductible temporary differences can be utilised. Such deferred tax assets and liabilities are not recognised if the temporary difference arises from the initial recognition (other than in a business combination) of assets and liabilities in a transaction that affects neither the taxable profit nor the accounting profit. In addition, deferred tax liabilities are not recognised if the temporary difference arises from the initial recognition of goodwill.

Deferred tax liabilities are recognised for taxable temporary differences associated with investments in subsidiaries and interest in an associate, except where the Group is able to control the reversal of the temporary difference and it is probable that the temporary difference will not reverse in the foreseeable future. Deferred tax assets arising from deductible temporary differences associated with such investments and interest are only recognised to the extent that it is probable that there will be sufficient taxable profits against which to utilise the benefits of the temporary differences and they are expected to reverse in the foreseeable future.

The carrying amount of deferred tax assets is reviewed at the end of the reporting period and reduced to the extent that it is no longer probable that sufficient taxable profits will be available to allow all or part of the asset to be recovered.

Deferred tax is calculated at the tax rates that are expected to apply in the period when the liability is settled or the asset is realised, based on tax rates (and tax laws) that have been enacted or substantively enacted by the end of the reporting period.

For the year ended 31 December 2018

# 3. Significant Accounting Policies (Continued)

#### **Taxation** (Continued)

The measurement of deferred tax liabilities and assets reflects the tax consequences that would follow from the manner in which the Group expects, at the end of the reporting period, to recover or settle the carrying amount of its assets and liabilities.

Deferred tax assets and liabilities are offset when there is a legally enforceable right to set off current tax assets against current tax liabilities and when they relate to income taxes levied by the same taxation authority and the Group intends to settle its current tax assets and liabilities on a net basis.

Current and deferred tax is recognised in profit or loss, except when it relates to items that are recognised in other comprehensive income or directly in equity, in which case, the current and deferred tax is also recognised in other comprehensive income or directly in equity respectively. Where current tax or deferred tax arises from the initial accounting for a business combination, the tax effect is included in the accounting for the business combination.

#### Property, plant and equipment

Property, plant and equipment including buildings held for use in the production or supply of goods or services, or for administrative purposes, other than construction in progress, are stated in the consolidated statement of financial position at cost, less subsequent accumulated depreciation and accumulated impairment losses, if any.

Properties in the course of construction for production, supply or administrative purposes are carried at cost, less any recognised impairment loss. Costs include professional fees and, for qualifying assets, borrowing costs capitalised in accordance with the Group's accounting policy. Such properties are classified to the appropriate categories of property, plant and equipment when completed and ready for intended use. Depreciation of these assets, on the same basis as other property assets, commences when the assets are ready for their intended use.

Depreciation is recognised so as to write off the cost of items of property, plant and equipment other than construction in progress less their residual values over their estimated useful lives, using the straight-line method. The estimated useful lives, residual values and depreciation method are reviewed at the end of each reporting period, with the effect of any changes in estimate accounted for on a prospective basis.

Assets held under finance leases are depreciated over their expected useful lives on the same basis as owned assets. However, when there is no reasonable certainty that ownership will be obtained by the end of the lease term, assets are depreciated over the shorter of the lease term and their useful lives.

An item of property, plant and equipment is derecognised upon disposal or when no future economic benefits are expected to arise from the continued use of the asset. Any gain or loss arising on the disposal or retirement of an item of property, plant and equipment is determined as the difference between the sales proceeds and the carrying amount of the asset and is recognised in profit or loss.

#### Impairment loss on tangible assets

At the end of the reporting period, the Group reviews the carrying amounts of its assets to determine whether there is any indication that those assets have suffered an impairment loss. If any such indication exists, the recoverable amount of the relevant asset is estimated in order to determine the extent of the impairment loss, if any.

The recoverable amount of tangible assets are estimated individually, when it is not possible to estimate the recoverable amount of an asset individually, the Group estimates the recoverable amount of the cash-generating unit to which the asset belongs. When a reasonable and consistent basis of allocation can be identified, corporate assets are also allocated to individual cashgenerating units, or otherwise they are allocated to the smallest group of cash-generating units for which a reasonable and consistent allocation basis can be identified.

For the year ended 31 December 2018

# 3. Significant Accounting Policies (Continued)

### Impairment loss on tangible assets (Continued)

Recoverable amount is the higher of 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 the time value of money and the risks specific to the asset (or a cash-generating unit) for which the estimates of future cash flows have not been adjusted.

If the recoverable amount of an asset (or a cash-generating unit) is estimated to be less than its carrying amount, the carrying amount of the asset (or a cash-generating unit) is reduced to its recoverable amount. An impairment loss is recognised immediately in profit or loss.

Where an impairment loss subsequently reverses, the carrying amount of the asset (or a cash-generated unit) is increased to the revised estimate of its recoverable amount, but so that the increased carrying amount does not exceed the carrying amount that would have been determined had no impairment loss been recognised for the asset (or a cash-generating unit) in prior years. A reversal of an impairment loss is recognised as income immediately.

#### **Research and development expenditure**

Expenditure on research activities is recognised as an expense in the period in which it is incurred.

An internally-generated intangible asset arising from development activities (or from the development phase of an internal project) is recognised if, and only if, all of the following have been demonstrated:

- the technical feasibility of completing the intangible asset so that it will be available for use or sale;
- the intention to complete the intangible asset and use or sell it;
- the ability to use or sell the intangible asset;
- how the intangible asset will generate probable future economic benefits;
- the availability of adequate technical, financial and other resources to complete the development and to use or sell the intangible asset; and
- the ability to measure reliably the expenditure attributable to the intangible asset during its development.

The amount initially recognised for internally-generated intangible asset is the sum of the expenditure incurred from the date when the intangible asset first meets the recognition criteria listed above. Where no internally-generated intangible asset can be recognised, development expenditure is charged to profit or loss in the period in which it is incurred.

Subsequent to initial recognition, internally-generated intangible asset is measured at cost less accumulated amortisation and accumulated impairment losses (if any), on the same basis as intangible assets acquired separately.

#### Inventories

Inventories are stated at the lower of cost and net realisable value. Cost is calculated using the weighted average method. Net realisable value represents the estimated selling price for inventories less all estimated costs of completion and costs necessary to make the sale.

For the year ended 31 December 2018

# 3. Significant Accounting Policies (Continued)

#### **Provisions**

Provisions are recognised when the Group has a present obligation (legal or constructive) as a result of a past event, it is probable that the Group will be required to settle the obligation, and a reliable estimate can be made of the amount of the obligation.

The amount recognised as a provisions is the best estimate of the consideration required to settle the present obligation at the end of the reporting period, taking into account the risks and uncertainties surrounding the obligation. Where a provision is measured using the cash flows estimated to settle the present obligation, its carrying amount is the present value of those cash flows (where the effect of time value of money is material).

When some or all of the economic benefits required to settle a provision are expected to be recovered from a third party, a receivable is recognised as an asset if it is virtually certain that reimbursement will be received and the amount of the receivable can be measured reliably.

Provisions for the expected cost of warranty obligations under the relevant sale of goods legislation are recognised at the date of sale of the relevant products, at the directors' best estimate of the expenditure required to settle the Group's obligation.

### **Financial instruments**

Financial assets and financial liabilities are recognised when a group entity becomes a party to the contractual provisions of the instrument. All regular way purchases or sales of financial assets are recognised and derecognised on a trade date basis. Regular way purchases or sales are purchases or sales of financial assets that require delivery of assets within the time frame established by regulation or convention in the market place.

Financial assets and financial liabilities are initially measured at fair value except for trade receivables arising from contracts with customers which are initially measured in accordance with HKFRS 15 since 1 January 2018. Transaction costs that are directly attributable to the acquisition or issue of financial assets and financial liabilities (other than financial assets or financial liabilities at fair value through profit or loss) are added to or deducted from the fair value of the financial assets or financial liabilities, as appropriate, on initial recognition. Transaction costs directly attributable to the acquisition of financial liabilities at fair value through profit or loss are recognised immediately in profit or loss.

The effective interest method is a method of calculating the amortised cost of a financial asset or financial liability and of allocating interest income and interest expense over the relevant period. The effective interest rate is the rate that exactly discounts estimated future cash receipts and payments (including all fees and points paid or received that form an integral part of the effective interest rate, transaction costs and other premiums or discounts) through the expected life of the financial asset or financial liability, or, where appropriate, a shorter period, to the net carrying amount on initial recognition.

#### **Financial assets**

Classification and subsequent measurement of financial assets (upon application of HKFRS 9 in accordance with transitions in note 2)

Financial assets that meet the following conditions are subsequently measured at amortised cost:

- the financial asset is held within a business model whose objective is to collect contractual cash flows; and
- the contractual terms give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding.

For the year ended 31 December 2018

# 3. Significant Accounting Policies (Continued)

**Financial instruments (Continued)** 

#### Financial assets (Continued)

Classification and subsequent measurement of financial assets (upon application of HKFRS 9 in accordance with transitions in note 2) (Continued)

Financial assets that meet the following conditions are subsequently measured at FVTOCI:

- the financial asset is held within a business model whose objective is achieved by both collecting contractual cash flows and selling; and
- the contractual terms give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding.

All other financial assets are subsequently measured at FVTPL, except that at the date of initial application/initial recognition of a financial asset the Group may irrevocably elect to present subsequent changes in fair value of an equity investment in OCI if that equity investment is neither held for trading nor contingent consideration recognised by an acquirer in a business combination to which HKFRS 3 *Business Combinations* applies.

A financial asset is classified as held for trading if:

- it has been acquired principally for the purpose of selling in the near term; or
- on initial recognition it is a part of a portfolio of identified financial instruments that the Group manages together and has a recent actual pattern of short-term profit-taking; or
- it is a derivative that is not designated and effective as a hedging instrument.

In addition, the Group may irrevocably designate a financial asset that are required to be measured at the amortised cost or FVTOCI as measured at FVTPL if doing so eliminates or significantly reduces an accounting mismatch.

#### (i) Amortised cost and interest income

Interest income is recognised using the effective interest method for financial assets measured subsequently at amortised cost and receivables subsequently measured at FVTOCI. Interest income is calculated by applying the effective interest rate to the gross carrying amount of a financial asset, except for financial assets that have subsequently become credit-impaired (see below). For financial assets that have subsequently become credit-impaired, interest income is recognised by applying the effective interest rate to the amortised cost of the financial asset from the next reporting period. If the credit risk on the credit-impaired financial instrument improves so that the financial asset is no longer credit-impaired, interest income is recognised by applying the effective interest rate to the gross carrying amount of the financial asset from the beginning of the reporting period following the determination that the asset is no longer credit impaired.

For the year ended 31 December 2018

# 3. Significant Accounting Policies (Continued)

#### **Financial instruments (Continued)**

#### Financial assets (Continued)

Classification and subsequent measurement of financial assets (upon application of HKFRS 9 in accordance with transitions in note 2) (Continued)

#### (ii) Receivables classified as at FVTOCI

Subsequent changes in the carrying amounts for receivables classified as at FVTOCI as a result of interest income calculated using the effective interest method are recognised in profit or loss. All other changes in the carrying amount of these receivables are recognised in OCI and accumulated under the heading of other FVTOCI reserve. Impairment allowances are recognised in profit or loss with corresponding adjustment to OCI without reducing the carrying amounts of these receivables. The amounts that are recognised in profit or loss are the same as the amounts that would have been recognised in profit or loss if these receivables had been measured at amortised cost. When these receivables are derecognised, the cumulative gains or losses previously recognised in other comprehensive income are reclassified to profit or loss.

#### (iii) Equity instruments designated as at FVTOCI

Investments in equity instruments at FVTOCI are subsequently measured at fair value with gains and losses arising from changes in fair value recognised in OCI and accumulated in the investment revaluation reserve; and are not subject to impairment assessment. The cumulative gain or loss will not be reclassified to profit or loss on disposal of the equity investments, and will be transferred to accumulated profits.

Dividends from these investments in equity instruments are recognised in profit or loss when the Group's right to receive the dividends is established, unless the dividends clearly represent a recovery of part of the cost of the investment. Dividends are included in the "other income" line item in profit or loss.

#### (iv) Financial assets at FVTPL

Financial assets that do not meet the criteria for being measured at amortised cost or FVTOCI or designated as FVTOCI are measured at FVTPL.

Financial assets at FVTPL are measured at fair value at the end of each reporting period, with any fair value gains or losses recognised in profit or loss. The net gain or loss recognised in profit or loss excludes any dividend or interest earned on the financial asset and is included in the "other gains and losses" line item.

For the year ended 31 December 2018

# 3. Significant Accounting Policies (Continued)

**Financial instruments (Continued)** 

#### Financial assets (Continued)

#### Impairment of financial assets (upon application of HKFRS 9 with transitions in accordance with note 2)

The Group recognises a loss allowance for ECL on financial assets which are subject to impairment under HKFRS 9 (including trade receivables, other receivables, amounts due from related parties, debt instruments at FVTOCI, pledged bank deposits and bank balances). The amount of ECL is updated at each reporting date to reflect changes in credit risk since initial recognition.

Lifetime ECL represents the ECL that will result from all possible default events over the expected life of the relevant instrument. In contrast, 12m ECL represents the portion of lifetime ECL that is expected to result from default events that are possible within 12 months after the reporting date. Assessment are done based on the Group's historical credit loss experience, adjusted for factors that are specific to the debtors, general economic conditions and an assessment of both the current conditions at the reporting date as well as the forecast of future conditions.

The Group always recognises lifetime ECL for trade receivables and amounts due from related parties with trade in nature. The ECL on these assets are assessed individually for debtors with credit impaired and collectively using a provision matrix with appropriate groupings for others.

For all other instruments, the Group measures the loss allowance equal to 12m ECL, unless when there has been a significant increase in credit risk since initial recognition, the Group recognises lifetime ECL. The assessment of whether lifetime ECL should be recognised is based on significant increases in the likelihood or risk of a default occurring since initial recognition.

#### (i) Significant increase in credit risk

In assessing whether the credit risk has increased significantly since initial recognition, the Group compares the risk of a default occurring on the financial instrument as at the reporting date with the risk of a default occurring on the financial instrument as at the date of initial recognition. In making this assessment, the Group considers both quantitative and qualitative information that is reasonable and supportable, including historical experience and forward-looking information that is available without undue cost or effort.

In particular, the following information is taken into account when assessing whether credit risk has increased significantly:

- an actual or expected significant deterioration in the financial instrument's internal credit rating;
- significant deterioration in external market indicators of credit risk, e.g. a significant increase in the credit spread, the credit default swap prices for the debtor;
- existing or forecast adverse changes in business, financial or economic conditions that are expected to cause a significant decrease in the debtor's ability to meet its debt obligations;
- an actual or expected significant deterioration in the operating results of the debtor;
- an actual or expected significant adverse change in the regulatory, economic, or technological environment of the debtor that results in a significant decrease in the debtor's ability to meet its debt obligations.

For the year ended 31 December 2018

## 3. Significant Accounting Policies (Continued)

#### **Financial instruments (Continued)**

#### Financial assets (Continued)

Impairment of financial assets (upon application HKFRS 9 with transitions in accordance with note 2) (Continued)

#### (i) Significant increase in credit risk (Continued)

Irrespective of the outcome of the above assessment, the Group presumes that the credit risk has increased significantly since initial recognition when contractual payments are more than 30 days past due, unless the Group has reasonable and supportable information that demonstrates otherwise.

The Group regularly monitors the effectiveness of the criteria used to identify whether there has been a significant increase in credit risk and revises them as appropriate to ensure that the criteria are capable of identifying significant increase in credit risk before the amount becomes past due.

#### (ii) Definition of default

For internal credit risk management, the Group considers an event of default occurs when information developed internally or obtained from external sources indicates that the debtor is unlikely to pay its creditors, including the Group, in full (without taking into account any collaterals held by the Group).

Irrespective of the above, the Group considers that default has occurred when a financial asset is more than 90 days past due unless the Group has reasonable and supportable information to demonstrate that a more lagging default criterion is more appropriate.

#### (iii) Credit-impaired financial assets

A financial asset is credit-impaired when one or more events of default that have a detrimental impact on the estimated future cash flows of that financial asset have occurred. Evidence that a financial asset is credit- impaired includes observable data about the following events:

- (a) significant financial difficulty of the issuer or the borrower;
- (b) a breach of contract, such as a default or past due event;
- (c) the lender(s) of the borrower, for economic or contractual reasons relating to the borrower's financial difficulty, having granted to the borrower a concession(s) that the lender(s) would not otherwise consider;
- (d) it is becoming probable that the borrower will enter bankruptcy or other financial reorganisation; or
- (e) the disappearance of an active market for that financial asset because of financial difficulties.

For the year ended 31 December 2018

# 3. Significant Accounting Policies (Continued)

**Financial instruments (Continued)** 

#### **Financial assets (Continued)**

Impairment of financial assets (upon application HKFRS 9 with transitions in accordance with note 2) (Continued)

#### (iv) Write-off policy

The Group writes off a financial asset when there is information indicating that the counterparty is in severe financial difficulty and there is no realistic prospect of recovery, for example, when the counterparty has been placed under liquidation or has entered into bankruptcy proceedings, or in the case of trade receivables, when the amounts are over three years past due, whichever occurs sooner. Financial assets written off may still be subject to enforcement activities under the Group's recovery procedures, taking into account legal advice where appropriate. A write-off constitutes a derecognition event. Any subsequent recoveries are recognised in profit or loss.

#### (v) Measurement and recognition of ECL

The measurement of ECL is a function of the probability of default, loss given default (i.e. the magnitude of the loss if there is a default) and the exposure at default. The assessment of the probability of default and loss given default is based on historical data adjusted by forward-looking information. Estimation of ECL reflects an unbiased and probability-weighted amount that is determined with the respective risks of default occurring as the weights.

Generally, the ECL is the difference between all contractual cash flows that are due to the Group in accordance with the contract and the cash flows that the Group expects to receive, discounted at the effective interest rate determined at initial recognition.

Where ECL is measured on a collective basis or cater for cases where evidence at the individual instrument level may not yet be available, the financial instruments are grouped on the following basis:

- Nature of financial instruments (i.e. the Group's debt instruments at FVTOCI, trade and other receivables and amounts due from related parties are each assessed as a separate group);
- Past-due status;
- Nature, size and industry of debtors; and
- Internal credit ratings.

The grouping is regularly reviewed by management to ensure the constituents of each group continue to share similar credit risk characteristics.

Interest income is calculated based on the gross carrying amount of the financial asset unless the financial asset is credit impaired, in which case interest income is calculated based on amortised cost of the financial asset.

Except for debt instruments that are measured at FVTOCI, the Group recognises an impairment gain or loss in profit or loss for all financial instruments by adjusting their carrying amount, with the exception of trade receivables, other receivables and amounts due from related parties where the corresponding adjustment is recognised through a loss allowance account. For debt instruments that are measured at FVTOCI, the loss allowance is recognised in OCI and accumulated in the other FVTOCI reserve without reducing the carrying amount of these receivables.

For the year ended 31 December 2018

# 3. Significant Accounting Policies (Continued)

#### Financial instruments (Continued)

#### Financial assets (Continued)

#### Classification and subsequent measurement of financial assets (before application of HKFRS 9 on 1 January 2018)

Financial assets are classified into the following specified categories: loans and receivables, financial assets at fair value through profit or loss and available-for-sale ("AFS") financial assets. The classification depends on the nature and purpose of the financial assets and is determined at the time of initial recognition. All regular way purchases or sales of financial assets are recognised and derecognised on a trade date basis. Regular way purchases or sales are purchases or sales of financial assets that require delivery of assets within the time frame established by regulation or convention in the marketplace.

#### (i) Financial assets at FVTPL

Financial assets are classified as at FVTPL when the financial asset is (i) held for trading (ii) it is designated as at FTVPL (iii) contingent consideration that may be received by an acquirer as part of a business combination.

A financial asset is classified as held for trading if:

- it has been acquired principally for the purpose of selling in the near future; or
- on initial recognition, it is a part of an identified portfolio of financial instruments that the Group manages together and has a recent actual pattern of short-term profit-taking; or
- it is a derivative that is not designated and effective as a hedging instrument.

Financial assets at FVTPL are stated at fair value, with any gains or losses arising on remeasurement recognised directly in profit or loss. The net gain or loss recognised in profit or loss line item includes any dividend earned on the financial assets and is included in the 'other gains and losses' item. Fair value is determined in the manner described in note 42.

#### (ii) AFS financial assets

AFS financial assets are non-derivatives that are either designated as available-for-sale or are not classified as (a) loans and receivables, (b) held-to-maturity investments or (c) financial assets at FVTPL.

Equity securities held by the Group that are classified as AFS financial assets are measured at fair value at the end of each reporting period. Dividends on AFS equity instruments are recognised in profit or loss when the Group's right to receive the dividends is established. Other changes in the carrying amount of AFS financial assets are recognised in other comprehensive income and accumulated under the heading of investment revaluation reserve. When the investment is disposed of or is determined to be impaired, the cumulative gain or loss previously accumulated in the investment revaluation reserve is reclassified to profit or loss.

#### (iii) Loans and receivables

Loans and receivables are non-derivative financial assets with fixed or determinable payments that are not quoted in an active market. Subsequent to initial recognition, loans and receivables (including bills, trade and other receivables, amounts due from related parties, pledged bank deposits and bank balances and cash) are carried at amortised cost using the effective interest method, less any identified impairment losses.

Interest income is recognised by applying the effective interest rate, except for short-term receivables where the recognition of interest would be immaterial.

For the year ended 31 December 2018

# 3. Significant Accounting Policies (Continued)

**Financial instruments (Continued)** 

#### Financial assets (Continued)

#### Impairment of financial assets (before application of HKFRS 9 on 1 January 2018)

Financial assets, other than those at FVTPL, are assessed for indicators of impairment at the end of each reporting period. Financial assets are considered to be impaired when there is objective evidence that, as a result of one or more events that occurred after the initial recognition of the financial asset, the estimated future cash flows of the financial assets have been affected.

For AFS equity investments, a significant or prolonged decline in the fair value of the security below its cost is considered to be objective evidence of impairment.

For loans and receivables, the objective evidence of impairment could include:

- significant financial difficulty of the issuer or counterparty; or
- breach of contract, such as a default or delinquency in interest or principal payments; or
- it becoming probable that the borrower will enter bankruptcy or financial re-organisation, or
- disappearance of an active market for that financial asset because of financial difficulties.

For financial assets carried at amortised cost, the amount of the impairment loss recognised is the difference between the asset's carrying amount and the present value of the estimated future cash flows discounted at the financial asset's original effective interest rate.

The carrying amount of the financial asset is reduced by the impairment loss directly for all financial assets with the exception of bills, trade and other receivables and amounts due from related parties where the carrying amount is reduced through the use of an allowance account. Changes in the carrying amount of the allowance account are recognised in profit or loss. When a bills, trade and other receivable or amounts due from related parties is considered uncollectible, it is written off against the allowance account. Subsequent recoveries of amounts previously written off are credited to profit or loss.

When an AFS financial asset is considered to be impaired, cumulative gains or losses previously recognised in other comprehensive income are reclassified to profit or loss in the period.

For financial assets measured at amortised cost, if, in a subsequent period, the amount of impairment loss decreases and the decrease can be related objectively to an event occurring after the impairment was recognised, the previously recognised impairment loss is reversed through profit or loss to the extent that the carrying amount of the asset at the date the impairment is reversed does not exceed what the amortised cost would have been had the impairment not been recognised.

In respect of AFS equity investments, impairment losses previously recognised in profit or loss are not reversed through profit or loss. Any increase in fair value subsequent to an impairment loss is recognised in other comprehensive income and accumulated under the heading of investment revaluation reserve.

For the year ended 31 December 2018

# 3. Significant Accounting Policies (Continued)

**Financial instruments (Continued)** 

#### Financial assets (Continued)

#### Derecognition of financial assets

The Group derecognises a financial asset only when the contractual rights to the cash flows from the asset expire, or when it transfers the financial asset and substantially all the risks and rewards of ownership of the asset to another entity. If the Group neither transfers nor retains substantially all the risks and rewards of ownership and continues to control the transferred asset, the Group recognises its retained interest in the asset and an associated liability for amounts it may have to pay. If the Group retains substantially all the risks and rewards of a transferred financial asset, the Group continues to recognise the financial asset and also recognises a collateralised borrowing for the proceeds received.

On derecognition of a financial asset measured at amortised cost, the difference between the asset's carrying amount and the sum of the consideration received and receivable is recognised in profit or loss.

On derecognition of receivables classified as at FVTOCI upon application of HKFRS 9, the cumulative gain or loss previously accumulated in the other FVTOCI reserve is reclassified to profit or loss.

On derecognition of an investment in equity instrument which the Group has elected on initial recognition to measure at FVTOCI upon application of HKFRS 9, the cumulative gain or loss previously accumulated in the investments revaluation reserve is not reclassified to profit or loss, but is transferred to accumulated profits.

#### Financial liabilities and equity instruments

Debt and equity instruments issued by a group entity are classified as either financial liabilities or as equity in accordance with the substance of the contractual arrangements and the definitions of a financial liability and an equity instrument.

#### Equity instruments

An equity instrument is any contract that evidences a residual interest in the assets of an entity after deducting all of its liabilities. Equity instruments issued by the Group are recognised at the proceeds received, net of direct issue costs.

#### **Financial liabilities**

All financial liabilities are subsequently measured at amortised cost using the effective interest method or at FVTPL.

#### Financial liabilities at FVTPL

A financial liability other than a financial liability held for trading or contingent consideration of an acquirer in a business combination may be designated as at FVTPL upon initial recognition if:

- such designation eliminates or significantly reduces a measurement or recognition inconsistency that would otherwise arise; or
- the financial liability forms part of a group of financial assets or financial liabilities or both, which is managed and its
  performance is evaluated on a fair value basis, in accordance with the Group's documented risk management or investment
  strategy, and information about the grouping is provided internally on that basis; or
- it forms part of a contract containing one or more embedded derivatives, and HKFRS 9/HKAS 39 permits the entire combined contract to be designated as at FVTPL.

For the year ended 31 December 2018

# 3. Significant Accounting Policies (Continued)

#### **Financial instruments (Continued)**

Financial liabilities and equity instruments (Continued)

#### Financial liabilities at amortised cost

Financial liabilities including bills, trade and other payables, amounts due to related parties, loan notes and borrowings are subsequently measured at amortised cost, using the effective interest method.

#### **Derivative financial instruments**

Derivatives are initially recognised at fair value at the date when derivative contracts are entered into and are subsequently remeasured to their fair value at the end of the reporting period. The resulting gain or loss is recognised in profit or loss immediately.

#### Derecognition of financial liabilities

The Group derecognises financial liabilities when, and only when, the Group's obligations are discharged, cancelled or have expired. The difference between the carrying amount of the financial liability derecognised and the consideration paid and payable is recognised in profit or loss.

## 4. Critical Accounting Judgements and Key Sources of Estimation Uncertainty

In the application of the Group's accounting policies, which are described in note 3, the directors of the Company are required to make judgments, estimates and assumptions about the carrying amounts of assets and liabilities that are not readily apparent from other sources. The estimates and associated assumptions are based on historical experience and other factors that are considered to be relevant. Actual results may differ from these estimates.

The estimates and underlying assumptions are reviewed on an on-going 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.

#### Critical judgements in applying accounting policies

The following are the critical judgements, apart from those involving estimations (see below), that the directors of the Company have made in the process of applying the Group's accounting policies and that have the most significant effect on the amounts recognised in the consolidated financial statements.

#### Principal versus agent consideration (principal)

The Group started to engage in trading of new energy materials during the year ended 31 December 2018. Upon application of HKFRS 15, the Group assessed whether the Group should recognise revenue on gross basis based on the requirements in HKFRS 15. The Group concluded that the Group acts as the principal for such transactions as it controls the specified good before it is transferred to the customer after taking into consideration indicators such as the Group is primarily responsible for fulfilling the promise to provide the goods in specified quality and exposed to inventory risk.

For the year ended 31 December 2018

# 4. Critical Accounting Judgements and Key Sources of Estimation Uncertainty (Continued)

#### Key sources of estimation uncertainty

The following are the key assumptions concerning the future, and other key sources of estimation uncertainty at the end of the reporting period, that have a significant risk of causing a material adjustment to the carrying amounts of assets and liabilities within the next financial year.

#### Warranty provision

The Group provides a warranty up to fifteen months on all lead-acid motive battery products. For lead-acid motive battery products found to be defective under the terms of the warranty, the Group undertakes to replace the battery free of charge for products returned within eight months from the date of sale, and to repair the battery free of charge for products returned between the ninth month and the fifteenth month after the date of sale. Estimated costs related to product warranty are accrued at the time of sale and are based upon various factors including the historical actual warranty claims, the estimated replacement cost and repair cost for returned products, predicted future warranty claim rate with reference to prior experiences and volumes of products sold. The amount of warranty is adjusted as required to reflect the actual costs incurred when information becomes available. In case where the actual future warranty expenses are less or more than expected, a material reversal or further recognition of warranty provision may arise, which would be recognised in profit or loss for the period in which such a reversal or further recognition takes place. As at 31 December 2018, the Group recognised provision for warranty amounted to RMB549,230,000 (2017: RMB449,158,000) and details are disclosed in note 30.

#### **Inventories**

Inventories are stated at the lower of cost and net realisable value. The cost of finished goods and work in progress comprises raw materials, direct labour, other direct costs and related production overheads. Net realisable value is the estimated selling price in the ordinary course of business, less all estimated costs of completion and costs necessary to make the sale.

The Group does not have a general provision policy on inventory based on aging given the nature of inventories that are not subject to frequent wear and tear and frequent technological changes. However, operational procedures have been in place to monitor this risk as majority of working capital is devoted to inventories. Procedurewise, the sales and the marketing managers review the inventory aging listing on a periodical basis to identify any aged inventories. The carrying value of the aged inventory items is then compared to the respective net realisable value in order to ascertain whether allowance is required to be made for any obsolete and slow-moving items.

In addition, physical count on all inventories are carried out on a periodical basis in order to determine whether allowance need to be made in respect of any obsolete and defective inventories identified. In this regard, the directors of the Company are satisfied that valuation risk is minimal and adequate allowance for obsolete and slow-moving inventories has been made in the consolidated financial statements. The management estimates the net realisable value for finished goods based primarily on the latest market prices and current market conditions. The net realisable value for finished goods will be affected if the actual market prices and market conditions are less than expected.

As at 31 December 2018, the carrying amount of inventories is approximately RMB3,130,048,000 (2017: RMB2,132,701,000), net of allowance of inventories of RMB15,836,000 (2017: RMB8,033,000), details of which are set out in note 21.

For the year ended 31 December 2018

# 4. Critical Accounting Judgements and Key Sources of Estimation Uncertainty (Continued)

Key sources of estimation uncertainty (Continued)

#### **Provision of ECL for trade receivables**

The Group uses provision matrix to calculate ECL for certain trade receivables. The provision rates are based on internal credit ratings as groupings of various debtors that have similar loss patterns. The provision matrix is based on the Group's historical default rates taking into consideration forward-looking information that is reasonable and supportable available without undue costs or effort. At every reporting date, the historical observed default rates are reassessed and changes in the forward-looking information are considered.

The provision of ECL is sensitive to changes in estimates. The information about the ECL assessment and the Group's trade receivables are disclosed in note 42 and note 22, respectively.

## 5. Revenue

#### Performance obligations for contracts with customers

#### Sales of goods (revenue recognised at one point in time)

The Group sells lead-acid battery products, recycled lead products, lithium battery products and other products to the wholesale market. Fixed price contracts are entered into between the Group and customers. The expected duration of the contracts are less than one year. Revenue is recognised when control of the goods has transferred, being when the goods have been shipped to the wholesaler's specific location for most of the customers. For the remaining, control of the goods has transferred when the goods have been loaded into shipper's trucks (delivery). Following delivery, the wholesaler has full discretion over the manner of distribution and price to sell the goods, has the primary responsibility when on selling the goods and bears the risks of obsolescence and loss in relation to the goods. For sales to distributors, they are normally required to make full prepayment before goods delivery. The normal credit term for customers other than distributors is normally 45 days upon delivery.

Sales-related warranties associated with lead-acid battery products and lithium battery products cannot be purchased separately and they serve as an assurance type of warranty that the products sold comply with agreed-upon specifications. Accordingly, the Group accounts for warranties in accordance with HKAS 37 *Provisions, Contingent Liabilities and Contingent Assets* consistent with its previous accounting treatment.

#### Trading of new energy materials (revenue recognised at one point in time)

The Group recognises revenue from trading of new energy materials when the control of new energy materials has transferred, being when customers collect the new energy materials at the warehouse. Customers has full discretion over the manner of distribution and price to sell the goods, has the primary responsibility when on selling the goods and bears the risks of obsolescence and loss in relation to the goods. Customers are normally required to make full prepayment before goods delivery. Fixed price contracts are entered into between the Group and customers. The expected duration of the contracts are less than one year.

#### Transaction price allocated to the remaining performance obligation for contracts with customers

All of the sales contracts are for periods of less than one year. As permitted under HKFRS15, the transaction price allocated to these unsatisfied contracts is not disclosed.

For the year ended 31 December 2018

## 5. Revenue (Continued)

Revenue (Continued)				
	2018 RMB'000	2017 RMB'000		
An analysis of revenue is as follows:				
Sales of batteries and battery related accessories				
Lead-acid battery products Electrical bicycle (tricycle) battery (note i)	26,290,151	21,706,836		
Micro electric vehicle battery	2,005,409	1,476,611		
Special-purpose battery (note ii)	447,660	577,130		
Renewable resources product	2,046,179	1,540,717		
Lithium battery products	552,504	1,222,933		
Others	492,921	379,674		
Trading of new energy materials	2,717,266	_		
	34,552,090	26,903,901		

#### Notes:

i. It includes battery products mainly for electrical bicycle and electrical tricycle.

ii. It includes battery products mainly for tubular battery, lead-acid starter battery, energy storage battery and standby battery.

# 6. Segment Information

The Group's operating and reportable segments are based on information prepared and reported to the chief operating decision makers ("CODM"), being the board of directors of the Company, for the purposes of resource allocation and performance assessment. During the year ended 31 December 2018, the Group commenced the business of trading of new energy materials along with the acquisition of 天能銀玥(上海)新能源材料有限公司 Tianneng Yinyue (Shanghai) New Energy Material Co., Ltd. ("Tianneng Yinyue"), which was a then associate of the Group, and it is considered as a new operating and reportable segment by the CODM. For the sales of batteries and battery related accessories operation, there were no further discrete financial information since the financial information provided to the CODM does not contain profit or loss information of each product line or each market segment and the CODM review the operating results of the sales of batteries and battery related accessories two single operating and reportable segments, (1) sales of batteries and battery related accessories two single operating and reportable segments, (1) sales of batteries and battery related accessories, (2) trading of new energy materials. The operation of the Group constitutes one single reportable segment, being the sales of batteries and battery related accessories for the year ended 31 December 2017.

These segments are the basis on which the Group reports its segment information.

The CODM makes decisions according to operating result of each segment. No analysis of segment assets and segment liabilities presented is as the CODM does not regularly review such information for the purpose of resources allocation and performance assessment. Therefore, only segment revenue and segment results are presented. The accounting policies of the operating and reportable segment are the same as the Group's accounting policies described in note 3. Segment results represent the profits earned by each segment and exclude certain other gains and losses, corporate administrative expenses and finance costs. Intersegment sales are charged at cost plus profit approach.

For the year ended 31 December 2018

6. Segment Information (Continued)

Segment revenues and results

The following is an analysis of the Group's revenue and results by operating and report	able segments for the ye	ar:
7	2018 RMB′000	201 RMB'000
Segment revenue		
Sales of batteries and battery related accessories		
– external sales	31,834,824	26,903,90
Trading of new energy materials		
– external sales	2,717,266	
– inter-segment sales	202,392	-
Segment revenue	34,754,482	26,903,90
Eliminations	(202,392)	20,700,70
Group revenue	34,552,090	26,903,90
Segment result		
Sales of batteries and battery related accessories	1,332,217	1,201,94
Trading of new energy materials	8,836	1,201,71
	1,341,053	1,201,94
Unallocated		
Offen gains and losses	(20,909)	(4,86
Corporate administrative expenses	(14,253)	(16,14
Financial costs	(5,094)	(10,14
Profit for the year	1,300,797	1,180,23

#### Other segment information

	Sales of batteries and battery related accessories RMB'000	Trading of new energy materials RMB'000	<b>Total</b> RMB′000
For the year ended 31 December 2018			
Depreciation of property, plant and equipment	387,485	117	387,602
Amortisation of prepaid lease payment	6,390	-	6,390
Recognition of allowance for inventories Write-off/loss on disposal of property,	8,138	-	8,138
plant and equipment	75,801	-	75,801
For the year ended 31 December 2017			
Depreciation of property, plant and equipment	342,706	-	342,706
Amortisation of prepaid lease payment	6,098	-	6,098
Reversal of allowance for inventories	(6,406)	_	(6,406)
Write-off/loss on disposal of property, plant and equipment	28,651	_	28,651

#### **Entity-wide disclosures**

All non-current assets and almost all sales are located and generated in the People's Republic of China (the "PRC"). No individual customer accounted for over 10% of the Group's total revenue for both years.

For the year ended 31 December 2018

# 7. Other Income

	2018 RMB'000	2017 RMB'000		
Government grants (note)	279,758	212,132		
Interest income	31,454	62,542		
Sales of scrapped materials	22,132	7,623		
Dividend income from equity instruments at FVTOCI	7,005	-		
Others	29,309	27,028		
	369,658	309,325		

Note: The government grants mainly represent unconditional subsidies from the relevant development zone administrative committees and the local governments of the PRC to encourage the operations of certain subsidiaries. The government grants are accounted for as immediate financial support with no future related costs expected to be incurred and are not related to any assets.

# 8. Other Gains and Losses

	2018 RMB′000	2017 RMB'000
Net gains (losses) on financial assets at FVTPL		
- structured bank deposits	82,327	_
– held-for-trading investments (note i)	(25,825)	9,679
- foreign currency forward contracts (note ii)	(2,281)	(15,722)
- commodity derivative contracts (note iii)	13,366	(28,525)
Write off/loss on disposal of property, plant and equipment	(75,801)	(28,651)
Net foreign exchange losses	(35,267)	(597)
	(43,481)	(63,816)

#### Notes:

- Net losses on held-for-trading investments included losses arising on changes in fair value of RMB25,825,000 (2017: gains of RMB9,679,000), which were earned on these investments in listed equity securities during the year ended 31 December 2018. Such losses (2017: gains) included realised losses of RMB16,290,000 (2017: realised gains of RMB8,493,000) and unrealised losses of RMB9,535,000 (2017: nil). No dividend income were received current year (2017: RMB1,186,000).
- ii. Net losses on foreign currency forward contracts represented realised losses of RMB2,281,000 (2017: RMB8,445,000) and nil unrealised losses (2017: unrealised losses of RMB7,277,000) on changes in fair value of foreign currency forward contracts.
- iii. Net gains on commodity derivative contracts represented realised gains of RMB13,215,000 (2017: realised losses of RMB28,241,000) and unrealised gains of RMB151,000 (2017: unrealised losses of RMB284,000) arising on changes in fair value of commodity derivative contracts.

For the year ended 31 December 2018

# 9. Impairment Losses, Net of Reversal

	2018 RMB′000	2017 RMB'000
Impairment losses, net of reversal, recognised on		
– Trade receivables	22,394	82,874
– Other receivables	613	(131)
	23,007	82,743

Details of impairment assessment for the year ended 31 December 2018 are set out in note 42.

# **10. Finance Costs**

	2018 RMB′000	2017 RMB'000
Interest on:		
- Borrowings	91,239	90,237
– Effective interest on long-term loan note	63,482	62,408
– Factorised bills	31,544	21,636
– Finance lease	· -	550
Total borrowing costs	186,265	174,831
Less: amounts capitalised in the cost of qualified assets	(8,530)	(21,826)
	177,735	153,005

Borrowing costs capitalised during the year arose on the general borrowing pool and are calculated by applying a capitalisation rate of 4.87% (2017: 5.32%) per annum to expenditures on qualifying assets.

# 11. Taxation

The charge comprises:

	2018 RMB′000	2017 RMB'000
Hong Kong		
– Current tax	-	2,723
PRC Enterprise Income Tax ("EIT"):		
– Current tax	290,584	239,908
– Under (over) provision in prior years	8,322	(28,360)
	298,906	211,548
Deferred tax charge (credit) (note 20):		
Current year	5,208	(18,770)
Attributable to a change in tax rate	_	31,855
	304,114	227,356

For the year ended 31 December 2018

## 11. Taxation (Continued)

The Company was incorporated in the Cayman Islands and is exempted from income tax.

On 21 March 2018, the Hong Kong Legislative Council passed The Inland Revenue (Amendment) (No. 7) Bill 2017 (the "Bill") which introduces the two-tiered profits tax rates regime. The Bill was signed into law on 28 March 2018 and was gazetted on the following day. Under the two-tiered profits tax rates regime, the first HK\$2 million of profits of the qualifying group entity will be taxed at 8.25%, and profits above HK\$2 million will be taxed at 16.5%. The profits of group entities not qualifying for the two-tiered profits tax rates regime will continue to be taxed at a flat rate of 16.5%.

The directors of the Company considered the amount involved upon implementation of the two-tiered profits tax rates regime as insignificant to the consolidated financial statements, since there is no tax assessable profit for the year ended 31 December 2018.

Under the Law of the People's Republic of China on Enterprise Income Tax (the "EIT Law") and Implementation Regulation of the EIT Law, the applicable tax rate of PRC subsidiaries is 25% during the year ended 31 December 2018 except that, Tianneng Battery Group Co., Ltd. ("Tianneng Battery"), Tianneng Battery Group (Anhui) Co., Ltd. ("Tianneng Battery Anhui"), Zhejiang Tianneng Energy Technology Co., Ltd. ("Zhejiang Tianneng Energy"), Zhejiang Tianneng Power Energy Co., Ltd. ("Zhejiang Tianneng Power"), Tianneng Battery (Wuhu) Co., Ltd. ("Tianneng Battery Wuhu"), Anhui Zhongneng Power Supply Co., Ltd. ("Anhui Zhongneng"), Tianneng Group (Henan) Energy Technology Co., Ltd. ("Tianneng Henan"), Jiyuan Wanyang Green Energy Co., Ltd. ("Jiyuan Wanyang"), Tianneng Battery Group Jiangsu Technology Co., Ltd. ("Tianneng Jiangsu Technology") and Anhui Hongda Power Supply Co., Ltd. ("Anhui Hongda") which were recognised as High-Tech companies and enjoyed a tax rate of 15% for the year ended 31 December 2018 (1.1.2017 to 31.12.2017: 15% applicable for Tianneng Battery, Tianneng Battery Anhui, Zhejiang Tianneng Energy, Zhejiang Tianneng Power, Tianneng Battery Wuhu, Anhui Zhongneng, Tianneng Henan, Jiyuan Wanyang and Tianneng Ijangsu Technology).

The taxation charge for the year can be reconciled to the profit before taxation per consolidated statement of profit or loss and other comprehensive income as follows:

	2018		2017	
	RMB'000	%	RMB'000	%
Profit before taxation	1,604,911		1,407,588	
Tax at the applicable income tax rate of 25%				
(2017: 25%)	401,228	25.0	351,897	25.0
Tax effect of expenses not deductible for tax purposes	13,565	0.8	6,870	0.5
Tax effect of tax losses not recognised	9,018	0.6	16,364	1.2
Tax effect of deductible temporary differences	.,	0.0	10,001	
not recognised	8,794	0.5	9,752	0.7
Utilisation of tax losses previously not recognised	(9,373)	(0.6)	(3,824)	(0.3)
Income tax at concessionary rates	(57,350)	(3.6)	(102,605)	(7.3)
Effect of change in tax rate	_	_	31,855	2.3
Under (over) provision in prior years	8,322	0.5	(28,360)	(2.0)
Tax effect of additional deduction related to research				
and development costs and certain staff costs	(114,650)	(7.1)	(70,665)	(5.0)
Effect of different tax rates of subsidiary operating				
in other jurisdiction	-	-	(1,403)	(0.1)
Tax effect in respect of Group restructuring (note)	10,560	0.7	_	_
Withholding tax on undistributed profits of				
PRC subsidiaries	34,000	2.1	17,475	1.2
Taxation charge and effective tax rate for the year	304,114	18.9	227,356	16.2

Note: it arose from the restructuring among certain subsidiaries in PRC within the Group during the year ended 31 December 2018.

For the year ended 31 December 2018

# 12. Profit for the Year

	2018 RMB′000	2017 RMB'000
Profit for the year has been arrived at after charging (crediting):		
Depreciation of property, plant and equipment	387,602	342,706
Amortisation of prepaid lease payments	6,390	6,098
Total depreciation and amortisation	393,992	348,804
Capitalised in inventories	(301,962)	(264,923)
	92,030	83,881
Auditor's remuneration	2,690	2,340
Recognition (reversal) of allowance for inventories (included in cost of sales)	8,138	(6,406)
Directors' emoluments (note 13)	4,408	4,603
Other staff retirement benefit scheme contributions	46,947	33,409
Other staff costs	1,576,796	1,344,472
Share-based payment expense for other staff	2,724	8,967
Total staff costs	1,630,875	1,391,451
Cost of inventories recognised as expense	30,458,229	23,403,029

Share-based payment expense of approximately RMB2,730,000 (2017: RMB8,987,000) were recognised in profit or loss during the year ended 31 December 2018 in respect of share options of the Company. Details of transactions are set out in note 36.

For the year ended 31 December 2018

# 13. Directors'/Chief Executive's and Employees' Emoluments

The emoluments paid or payable to each of the ten (2017: nine) directors for the year ended 31 December 2018 were as follows:

For the year ended 31 December 2018:

	Fees RMB'000	Salaries and other benefits RMB'000	Contributions to retirement benefit schemes RMB'000	Share-based payment RMB'000	Total RMB'000
Executive directors (note i)					
Zhang Tianren (note ii)	-	1,514	37	-	1,551
Zhang Aogen	-	528	-	-	528
Chen Minru (note iii)	-	131	4	-	135
Zhang Kaihong	-	500	-	-	500
Shi Borong	-	535	-	-	535
Zhou Jianzhong	-	576	12	-	588
Subtotal	-	3,784	53	-	3,837
Independent non-executive directors					
(note i)					
Huang Dongliang	200	-	-	6	206
Guo Konghui (note iv)	83	-	-	-	83
Wu Feng	200	-	-	-	200
Zhang Yong (note v)	82	-	-	-	82
Subtotal	565	_	-	6	571
Total	565	3,784	53	6	4,408

For the year ended 31 December 2017:

	Fees RMB'000	Salaries and other benefits RMB'000	Contributions to retirement benefit schemes RMB'000	Share-based payment RMB'000	Total RMB'000
Executive directors (note i)					
Zhang Tianren (note ii)	_	1,459	31	_	1,490
Zhang Aogen	_	512	11	_	523
Chen Minru(note iii)	_	508	11	-	519
Zhang Kaihong	_	441	11	-	452
Shi Borong	-	511	-	-	511
Zhou Jianzhong	-	477	11	-	488
Subtotal	-	3,908	75	-	3,983
Independent non-executive directors (note i)					
Huang Dongliang	200	-	-	20	220
Guo Konghui	200	-	-	-	200
Wu Feng	200	-	-	-	200
Subtotal	600	-	-	20	620
Total	600	3,908	75	20	4,603

For the year ended 31 December 2018

# 13. Directors'/Chief Executive's and Employees' Emoluments (Continued)

Notes:

- i. The executive directors' emoluments shown above were for their services in connection with the management of the affairs of the Company and the Group. The independent non-executive directors' emoluments shown above were for their services as directors of the Company.
- ii. Mr. Zhang Tianren is also the chief executive of the Company and his emoluments disclosed above include those for services rendered by him as the chief executive.
- iii. Mr. Chen Minru has tendered his resignation as the executive Director with effect from 18 May 2018.
- iv. Mr. Guo Konghui has retired as an independent non-executive director of the Company with effect from 18 May 2018.
- v. Mr. Zhang Yong has been appointed as an independent non-executive director of the Company with effect from 8 August 2018.

The five highest paid individuals included two (2017: one) directors of the Company, details of whose emoluments are set out above. The emoluments of the remaining three (2017: four) highest paid individuals during the year are as follows:

	2018 RMB′000	2017 RMB'000
Basic salaries and allowances	1,825	2,697
Retirement benefits scheme contributions	25	45
Share option expense	32	176
	1,882	2,918

The emoluments of the five highest paid individuals (including directors) whose remuneration fell within the following band is as below:

	Number	of employees
	2018	2017
Hong Kong dollars ("HK\$") Nil to HK\$1,000,000 HK\$1,500,001 to HK\$2,000,000	4	4
	5	5

During the year, no emoluments were paid by the Group to the directors or the five highest paid individuals as an inducement to join or upon joining the Group or as compensation for loss of office. None of the directors has waived or agreed to waive any emoluments during both years.

# 14. Dividends

	2018 RMB′000	2017 RMB′000
Dividends recognised as distribution during the year: 2018: 2017 final dividend of HK37.00 cents (equivalent to RMB30.93 cents) per ordinary share (2017: 2016 final dividend of HK25.60 cents		
(equivalent to RMB22.90 cents))	340,769	254,005

Subsequent to the end of the reporting period, a final dividend of HK38.00 cents (equivalent to RMB33.30 cents) (2017: HK37.00 cents (equivalent to RMB30.93 cents)) in respect of the year ended 31 December 2018 per ordinary share has been proposed by the directors and is subject to approval by the shareholders in the forthcoming annual general meeting.

For the year ended 31 December 2018

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# 15. Earnings Per Share

Editilitys Per Siture		
	2018 RMB'000	2017 RMB'000
Earnings for the purposes of calculating basic and diluted earnings per share – Profit for the year attributable to the owners of the Company	1,252,430	1,178,369
	2018	2017
Number of shares: Weighted average number of ordinary shares for the purpose of calculating basic earnings per share Effect of dilutive potential ordinary shares – share options	1,126,604,692 26,550,911	1,126,546,500 23,224,559
Weighted average number of ordinary shares for the purpose of calculating diluted earnings per share	1,153,155,603	1,149,771,059

For the year ended 31 December 2018

# 16. Property, Plant and Equipment

				Furniture, fixtures		
		Plant and	Motor	and	Construction	
	Buildings	machinery	vehicles	equipment	in progress	Total
	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000
COST						
At 1 January 2017	2.041.187	2,100,731	56,063	209,144	586.054	4,993,179
Acquired on acquisition	2,0 11,107	_,,.	00,000	207,111	000,001	.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
of a subsidiary (note 35)	60,042	39,439	240	372	673	100,766
Additions	64,380	161.060	11,232	13,837	204,167	454,676
Transfer	77,507	99,692	41	1,420	(178,660)	
Disposal/write-off	(7,560)	(92,937)	(4,320)	(14,058)	-	(118,875)
At 31 December 2017	2,235,556	2,307,985	63,256	210,715	612,234	5,429,746
Acquired on acquisition	2,200,000	2,007,700	00,200	210,710	012,201	0,127,710
of subsidiaries (note 35)	57,218	45,769	30	647	1,650	105,314
Additions	37,156	148,810	9,283	13,883	340,056	549,188
Transfer	107,729	557,464	1,012	3,505	(669,710)	547,100
Disposal/write-off	(25,552)	(185,570)	(3,859)	(2,721)	(009,710)	(217,702
	(25,552)	(103,370)	(0,007)	(2,721)		(217,702)
At 31 December 2018	2,412,107	2,874,458	69,722	226,029	284,230	5,866,546
DEPRECIATION AND IMPAIRMENT						
At 1 January 2017	411,438	601,463	38,810	147,708	5,917	1,205,336
Provided for the year	104,683	204,366	5,591	28,066	_	342,706
Transfer	5,860	57	-	-	(5,917)	-
Eliminated on disposal/write-off	(3,236)	(49,284)	(3,166)	(11,994)	_	(67,680
At 31 December 2017	518,745	756,602	41,235	163,780	_	1,480,362
Provided for the year	111,631	245,044	8,146	22,781	-	387,602
Eliminated on disposal/write-off	(2,034)	(107,737)	(3,540)	(1,719)	-	(115,030)
At 31 December 2018	628,342	893,909	45,841	184,842	-	1,752,934
CARRYING VALUES						
At 31 December 2018	1,783,765	1,980,549	23,881	41,187	284,230	4,113,612
At 31 December 2017	1,716,811	1,551,383	22,021	46,935	612,234	3,949,384

The above items of property, plant and equipment, except for construction in progress, are depreciated on a straight-line basis at the following rates per annum:

Buildings	4.8%
Plant and machinery	9.5%
Motor vehicles	19%
Furniture, fixtures and equipment	9.5% – 19%

As at 31 December 2018, included in buildings held for own use are buildings with aggregate carrying amount of approximately RMB441,483,000 (2017: RMB591,841,000) whose property certificates are in the process of obtaining.

During the year ended 31 December 2018, the Group received government grants of approximately RMB42,336,000 (2017: RMB20,325,000) in relation to encouraging the Group's purchase of certain property, plant and equipment of the Group. The Group recognised the amount as a deduction from the carrying amount of the relevant assets and will transfer this to profit or loss over the useful lives of the assets.

For the year ended 31 December 2018

# 16. Property, Plant and Equipment (Continued)

During the year ended 31 December 2018, the Group carried out a review of the recoverable amount of a manufacturing plant and its machinery and determined that no assets were impaired. Based on the review, no impairment loss has been recognised in profit and loss for both years. The recoverable amounts of the relevant assets have been determined on the basis of their value in use.

The net book value of plant and machinery of RMB1,551,383,000 included an amount of RMB17,700,000 in respect of assets held under finance leases as at 31 December 2017.

# 17. Prepaid Lease Payments

	2018 RMB'000	2017 RMB'000
Non-current Current	324,615 9,497	240,449 7,219
	334,112	247,668

As at 31 December 2018, included in prepaid lease payments are land use rights of RMB35,487,000 (2017: RMB16,856,000) whose land use rights certificates are in process of obtaining.

The amount represents prepayment for land use rights situated in the PRC for a period within 50 years.

# 18. Interest in an Associate

	2018 RMB′000	2017 RMB'000
Cost of unlisted investment in an associate	_	9.000
Share of post-acquisition results	-	9,000 6,574
	-	15,574

Particulars of the investee at the end of the reporting period are as follow:

Name of entity	Country of incorporation/ registration	Principal place of business	Proportion ownershi interest held by the C	p	Proportion voting rig held by the	Ihts	Principal activity	
			2018	2017	2018	2017		
Tianneng Yinyue	PRC	PRC	51%	45%	51%	45%	Trading of new energy materials	

At 31 December 2017, the Group held 45% of total equity interest of Tianneng Yinyue and accounted for the investment as interest in an associate since the Group had significant influence on Tianneng Yinyue. In August 2018, the Group acquired an additional 6% of total equity interest of Tianneng Yinyue from an independent third party with consideration of RMB2,081,000. Since the Group had control over Tianneng Yinyue by controlling the composition of the board of directors, Tianneng Yinyue became a subsidiary of the Group then. Details of the acquisition are set out in note 35(ii).

For the year ended 31 December 2018

Equity Instruments at FVTOCI/Available-for-sale Inve	stments
Equity instruments at FVTOCI	
	2018 RMB'000
Equity securities listed on the Hong Kong Stock Exchange	297,357
Available-for-sale investments	
	2017 RMB'000
Equity securities listed on the Hong Kong Stock Exchange	226,000

The above listed equity investments represent ordinary shares of an entity listed on the Hong Kong Stock Exchange and are measured at fair value at the end of the reporting period by using the quoted bid prices in an active market. These investments are not held for trading, instead, they are held for long-term strategic purposes. The directors of the Company have elected to designate these investments in equity instruments as at FVTOCI as they believe that recognising short-term fluctuations in these investments' fair value in profit or loss would not be consistent with the Group's strategy of holding these investments for long-term purposes and realising their performance potential in the long run.

# 20. Deferred Taxation

The following are the major deferred tax assets (liabilities) recognised and movements thereon during the current and prior years:

	Asset-related government grants R/MB'000		Fair values adjustments on property, plant and equipment and prepaid lease payments arising from acquisition of subsidiaries RMB'000	Interest capitalisation RMB'000	Fair value change of held-for-trading investments RNB1000	Provision for inventories, trade and other receivables RMB'000	Fair value change of derivative financial instruments RMB'000	Fair value changes of equity investments at FVTOCI RMB'000	Fair value changes of debt instruments at FVTOCI R/MB'000	Accrued warranty RMB'000	Accrued expenses RMB'000	Impairment loss on property, plant and equipment RMB'000	Tax Iosses RMB'000	Others RMB'000	Total RMB'000
At 1 January 2017	69,804	(7,900)	(1,594)	(30,671)	(147)	23,930	(2,913)	-	-	76,864	112,125	4,631	45,651	(5,170)	284,610
Credit /(charge) to profit or loss	5,127	(17,475)	(295)	(2,062)	147	9,818	4.005	-	-	17,797	(4,647)	(261)	6,358	258	18,770
Charge to other comprehensive income	-	-	-	-	-	-	-	(2,775)	-	-	-	-	-	-	(2,775)
Effect of change in tax rate	(12,168)	-	-	-	-	-	-		-	(12,400)	(5,492)	(1,795)	-	-	(31,855)
Acquisition of a subsidiary	-	-	(11,448)	-	-	-	-	-	-	-	-	-	-	-	(11,448)
Reversal on payment of withholding tax on distribution of earnings from	I														
PRC subsidiaries	-	6,565	-	-	-	-	-	-	-	-	-	-	-	-	6,565
At 31 December 2017	62,763	(18,810)	(13,337)	(32,733)	-	33,748	1,092	(2,775)	-	82,261	101,986	2,575	52,009	(4,912)	263,867
Adjustments (note 2)	-	-	-	-	-	3,290	-	-	2,773	-	-	-	-	-	6,063
At 1 January 2018 (restated)	62,763	(18.810)	(13.337)	(32,733)	-	37,038	1.092	(2,775)	2.773	82.261	101,986	2,575	52,009	(4,912)	269,930
Credit/(charge) to profit or loss	4,510	(34,000)	230	2,356	-	4,525	(1,092)		-,	4,850	17,737	(9)	(4,573)	258	(5,208)
Credit/(charge) to other	.,210		200	_,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		.,	1.y-7.ml			.,		121	1.9-1-1		(-/*)
comprehensive income	-	-	-	-	-	-	-	2,775	(1,446)	-	-	-	-	-	1,329
Acquisition of subsidiaries	-	-	(1,661)	-	-	-	-	-	-	-	-	-	-	-	(1,661)
At 31 December 2018	67,273	(52,810)	(14,768)	(30,377)	-	41,563	-	-	1,327	87,111	119,723	2,566	47,436	(4,654)	264,390

For the year ended 31 December 2018

## 20. Deferred Taxation (Continued)

The following is the analysis of the deferred tax balance for financial report presentation purposes.

	2018 RMB′000	2017 RMB'000
Deferred tax assets Deferred tax liabilities	366,999 (102,609)	336,434 (72,567)
	264,390	263,867

At the end of the year ended 31 December 2018, the Group had unused tax losses of approximately RMB153,786,000 (2017: RMB155,206,000) available to offset against future profits, in respect of which no deferred tax assets been recognised, due to the unpredictability of future profit streams. Such unrecognised losses will expire at various dates up to and including 2029 (2017: 2022).

At the end of the reporting period, the Group has deductible temporary differences of RMB74,239,000 (31 December 2017: RMB39,062,000). No deferred tax asset has been recognised in relation to such deductible temporary differences as it is not probable that taxable profit will be available against which the deductible temporary differences can be utilised.

Under the EIT Law, starting from 1 January 2008, 10% withholding income tax is imposed on dividends declared in respect of profits earned in year 2008 onwards and distributed to foreign investors for companies established in the PRC. For investors incorporated in Hong Kong, a preferential rate of 5% will be applied where appropriate. Other than the PRC withholding income tax provided in respect of undistributed profits of PRC subsidiaries as above, no deferred taxation has been provided for the remaining accumulated profits of approximately RMB4,164 million as at 31 December 2018 (2017: RMB3,287 million), which was derived from the PRC subsidiaries since 1 January 2008 as the Group has set aside such sum for non-distributable purpose, and is able to control the timing of the reversal of the temporary differences and it is probable that the temporary differences will not reverse in the foreseeable future.

# 21. Inventories

	2018 RMB′000	2017 RMB′000
Raw materials Work-in-progress Finished goods	399,838 2,301,102 429,108	175,673 1,901,831 55,197
	3,130,048	2,132,701

For the year ended 31 December 2018

## 22. Bills, Trade and Other Receivables

	2018	2017
	RMB'000	RMB'000
Bills receivables		1,186,894
Trade receivables	974,577	906,569
Less: Allowance for credit losses	(205,500)	(181,947)
	769,077	724,622
Other receivables	219,454	242,257
Less: Allowance for credit losses	(19,210)	(18,597)
	200,244	223,660
Prepayments	197,813	126,254
PRC value added tax receivables	82,876	131,062
	1,250,010	2,392,492

As at 31 December 2018 and 1 January 2018, trade receivables from contracts with customers amounted to RMB769,077,000 and RMB715,643,000 respectively.

The following is an aged analysis of trade receivables net of allowance for credit losses presented based on the invoice dates.

	2018 RMB'000	2017 RMB'000
	400.000	500 715
0 to 45 days	432,993	508,715
46 to 90 days	175,356	163,153
91 to 180 days	56,431	24,564
181 to 365 days	45,231	28,190
1 year to 2 years	59,066	-
	769,077	724,622

As at 31 December 2018, included in the Group's trade receivables balance are debtors with aggregate carrying amount of RMB336,084,000 which are past due as at the reporting date. Out of the past due balances, RMB135,326,000 has been past due 90 days or more and is not considered as in default since these trade receivables are contributed by reputable electrical bicycle manufacturers and new energy vehicle producers which have no default history and are of good credit quality. There has not been a significant change in credit quality and amounts are considered recoverable at the year end.

As at 31 December 2017, the trade receivable balances of RMB508,715,000 are neither past due nor impaired at the end of the reporting period for which the Group has not provided for impairment loss since they have no default history and of good credit quality.

As at 31 December 2017, included in the Group's trade receivable balance are debtors with aggregate carrying amount of approximately RMB215,907,000 which are past due at the end of the reporting period for which the Group has not provided for impairment loss.

For the year ended 31 December 2018

## 22. Bills, Trade and Other Receivables (Continued)

The following is an aged analysis of trade receivables which are past due but not impaired:

163,153
163,153 24,564 28,190

#### Movement in the allowance for doubtful debts - trade receivables

	<b>2017</b> RMB'000
1 January	103,245
Allowance for bad and doubtful debts	82,906
Reversal of bad and doubtful debts	(32)
Amounts written off as uncollectible	(4,172)
31 December	181,947

Other receivables are unsecured and interest-free.

#### Movement in the allowance for doubtful debts - other receivables

	<b>2017</b> RMB'000
1 January	18,733
Allowance for bad and doubtful debts	-
Reversal of bad and doubtful debts	(131)
Amounts write off as uncollectible	(5)
31 December	18,597

Details of impairment assessment of trade and other receivables for the year ended 31 December 2018 are set out in note 42.

For the year ended 31 December 2018

## 23. Debt Instruments at FVTOCI

On 1 January 2018, the Group adopted HKFRS 9. As part of the Group's cash flow management, the Group will discount some of the bills to financial institutions and endorse some of them to suppliers before the bills are due for payment, and derecognise the bills discounted and endorsed on the basis that the Group has transferred substantially all risks and rewards to the relevant counterparties. Thus, the bills receivables held by the Group are managed within a business model whose objective is both to collect the contractual cash flows and to sell. Therefore, these bills receivables were subsequently classified as debt instruments at FVTOCI upon adoption of HKFRS 9.

The following is an aged analysis of debt instruments at FVTOCI, net of fair value remeasurement under the requirement of HKFRS 9, at the end of the reporting period:

	2018 RMB'000
0 to 180 days	969,300

The debt instruments at FVTOCI are all issued by reputable banks of good credit quality. The management of the Group considered the credit risk of these bank issued bills is insignificant and no impairment was provided on them at the year end.

## 24. Transfers of Financial Assets

At 31 December 2018 and 31 December 2017, the Group has discounted bank issued bills receivables to banks and transferred bank issued bills receivables to its suppliers to settle its payables through endorsing the bank issued bills to its suppliers. The Group has limited exposure in respect of the settlement obligation of these bank issued bills receivable under relevant PRC rules and regulations should the issuing bank failed to settle the bills on maturity date. The Group considered the issuing banks of the bills are of good credit quality and the risk of non-settlement by the issuing banks on maturity is insignificant. In the opinion of these bank issued bills. Accordingly, the Group has derecognised these bank issued bills receivables and the payables to suppliers in their entirety.

As at 31 December 2018, the Group's maximum exposure to loss, which is the same as the amount payable by the Group to banks or the suppliers in respect of the discounted bank issued bills and endorsed bank issued bills, should the issuing banks fail to settle the bills on maturity, amounted to RMB994,180,000 (2017: RMB646,450,000) and RMB2,011,057,000 (2017: RMB903,629,000), respectively.

All the bank issued bills receivables discounted to banks or endorsed to suppliers of the Group have a maturity date of less than one year from the end of the reporting period.

## 25. Financial Assets at FVTPL/Derivative Financial Instruments

	2018 RMB′000	2017 RMB'000
Financial assets mandatorily measured at FVTPL:		
Structured bank deposits Held-for-trading investments	1,074,380	-
Equity securities listed in Mainland China	14,342	-
Equity securities listed in Hong Kong	11,976	-
Commodity derivative contracts	151	-
	1,100,849	-

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## 25. Financial Assets at FVTPL/Derivative Financial Instruments (Continued)

#### **Derivative financial instruments**

	2017	
	Assets RMB'000	Liabilities RMB'000
Foreign currency forward contracts	_	7,277
Commodity derivative contracts	-	284
	-	7,561

The foreign currency forward contracts and commodity derivative contracts were entered into by the Group for the purpose of reducing its exposure to foreign currency risk and commodity price risk respectively. These foreign currency forward contracts and commodity derivative contracts were not accounted for under hedge accounting.

## 26. Pledged Bank Deposits/Bank Balances and Cash

Pledged bank deposits represented bank deposits pledged to banks to secure short-term banking facilities granted to the Group. The pledged deposits at 31 December 2018 carried an interest rate which ranged from 0.35% to 4.2% (2017: 0.35% to 2.10%) per annum.

Bank balances and cash comprise cash and short-term deposits with an original maturity of three months or less which are held with banks and carry interest at prevailing market rate. At 31 December 2018, bank balances carry interest at market rates which ranged from 0.01% to 0.35% (2017: 0.01% to 0.35%) per annum.

## 27. Bills, Trade and Other Payables

	2018 RMB'000	2017 RMB'000
Trade payables Bills payables Other payables and accrued charges	2,100,189 2,062,703 1,968,238	2,386,628 1,079,484 2,504,505
	6,131,130	5,970,617

The Group normally receives credit terms of 5 days to 90 days (2017: 5 days to 90 days) from its suppliers. The following is an aged analysis of trade payables at the end of the reporting period, presented based on the invoice date:

	2018 RMB'000	2017 RMB'000
0 to 90 days	1,869,304	1,888,639
91 to 180 days	117,791	208,838
181 to 365 days	64,973	201,448
1 to 2 years	22,387	67,095
Over 2 years	25,734	20,608
	2,100,189	2,386,628

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## 27. Bills, Trade and Other Payables (Continued)

The following is an aged analysis of bills payables at the end of the reporting period:

	2018 RMB′000	2017 RMB'000
0 to 180 days	2,062,703	1,079,484

## 28. Amounts due to/from Related Parties

Details of the amounts due to related parties are as follows:

Name of related parties	2018 RMB′000	2017 RMB'000
浙江長興欣欣包裝有限公司		
Zhejiang Changxing Xin Xin Packaging Co., Ltd.		
("Xin Xin Packaging") (note i)	124	209
濟源市萬洋冶煉(集團)有限公司		
Jiyuan City Wangyang Smelting (Group) Co., Ltd.		
("Wanyang Group") (note ii)	25,426	21,129
Tianneng Yinyue (note iii)	-	40,804
	25,550	62,142

Details of the amounts due from related parties are as follows:

Name of related parties	2018 RMB′000	2017 RMB′000
Tianneng Yinyue Wanyang Group	_ 8,901	659 16,437
	8,901	17,096

Notes:

- i. Xin Xin Packaging is beneficially owned by Ms. Chen Pingping and Ms. She Fangli, who are the cousin and niece respectively of Mr. Zhang Tianren ("Mr. Zhang"). As at 31 December 2018, 410,355,650 shares of the Company (approximately 36.42% of the total issued shares of the Company as at 31 December 2018) are held by Prime Leader Global Limited which is incorporated in the British Virgin Islands and is whollyowned by Mr. Zhang. Mr. Zhang is also a director of the Company.
- ii. Wanyang Group is a party which holds 49% interest of Jiyuan Wanyang Green Energy Co., Ltd., a 51% owned subsidiary of the Company.
- iii. Tianneng Yinyue became a subsidiary of the Company during the year ended 31 December 2018 (31 December 2017: an associate).

The amounts due to/from Xin Xin Packaging, Wanyang Group and Tianneng Yinyue are trade nature and have no fixed repayment terms and ageing less than 180 days.

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## **29. Borrowings**

Borrowings		
	2018 RMB'000	2017 RMB'000
Bank borrowings	1,831,650	1,335,561
Other borrowings	93,800	118,800
	1,925,450	1,454,361
Secured	679,530	391,600
Unsecured	1,245,920	1,062,761
	1,925,450	1,454,361
Carrying amounts repayable:		
Within one year	1,856,650	1,324,561
Within a period of more than one year but not exceeding two years	25,000	61,000
Within a period of more than two years	23,000	01,000
but not exceeding five years	43,800	68,800
	1,925,450	1,454,361
Less: Amounts due within one year shown under current liabilities	(1,856,650)	(1,324,561)
Amounts shown under non-current liabilities	68,800	129,800

At 31 December 2018, the bank borrowings of RMB1,393,550,000 (2017: RMB1,168,379,000) carry fixed and variable interest rates ranging from 4.35% to 5.68% (2017: 3.85% to 4.79%) per annum, and the bank borrowings of HK\$500,000,000 (approximately equivalent to RMB438,100,000) carry variable interest rates ranging from 3.49% to 4.24% (2017: HK\$200,000,000 (approximately equivalent to RMB167,182,000) carried variable interest rates ranging from 2.44% to 3.19%) per annum.

At 31 December 2018, other borrowings amounted to RMB93,800,000 (2017: RMB118,800,000) carry variable interest rate at 10% up floating of benchmark interest rate of The People's Bank of China, approximately 4.73% per annum (2017: 4.73% per annum).

Details of assets pledged by the Group at the end of the reporting period are set out in note 38.

## **30. Provisions**

	2018 RMB'000	2017 RMB'000
At 1 January Provision in the year Utilisation of provision	449,158 911,522 (811,450)	468,426 598,697 (617,965)
At 31 December	549,230	449,158

The Group provided a warranty of up to fifteen months on all lead-acid motive battery products. For lead-acid motive battery products found to be defective under the terms of the warranty, the Group undertakes to replace the battery free of charge for products returned within eight months from the date of sale, and to repair the battery free of charge for products returned between the ninth month and the fifteenth month after the date of sale. A warranty provision is estimated and accrued at the time of sale and is based upon various factors including the actual warranty claims, unit sales history, the estimated replacement cost and repair cost for returned products, predicted future warranty claim rate with reference to prior experiences and volumes of products sold. The amount of accrued warranty is adjusted as required to reflect the actual costs incurred when information becomes available.

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## **31. Contract Liabilities**

	31 December 2018 RMB'000	1 January 2018* RMB'000
Sales of goods	1,124,451	804,919

\* The amount in this column is after the adjustment from the application of HKFRS 15.

The contract liabilities as at 1 January 2018, amount of RMB804,919,000 were recognised as revenue during the year ended 31 December 2018.

## 32. Long-Term Loan Notes

	2018 RMB′000	2017 RMB'000
Guaranteed loan notes	777,096	774,341
Carrying amounts repayable:		
Within one year Within a period of more than one year but not exceeding two years More than two years but not more than five years	378,588 398,508 –	- 377,924 396,417
	777,096	774,341
Less: Amounts due within one year shown under current liabilities	(378,588)	-
Amounts shown under non-current liabilities	398,508	774,341

Notes:

i. On 11 March 2014, Tianneng Battery issued long-term loan notes with principal amount of RMB400,000,000 at a discount and received proceed of RMB392,400,000. The long-term loan notes bear interest at 7.31% per annum and are repayable on 11 March 2019.

On 11 March 2017, the Company redeemed part of the issued loan notes with principal amount of RMB20,000,000. At 31 December 2018 and 2017, the amount is stated at amortised cost with effective interest rate at 7.81% per annum.

ii. On 9 October 2014, Tianneng Battery issued long-term loan notes with principal amount of RMB400,000,000 at a discount and received proceed of RMB395,400,000. The long-term loan notes bear interest at 8% per annum and are repayable on 9 October 2020.

On 29 September 2017, the Company redeemed part of the issued loan notes with principal amount of RMB367,000. At 31 December 2018 and 31 December 2017, the amount is stated at amortised cost with effective interest rate at 8.25% per annum.

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## 33. Share Capital

	Number	of shares		ount ilent to
	2018	2017	2018 RMB′000	2017 RMB'000
Shares of the Company with nominal value of HK\$0.1 each				
Authorised: At 1 January 2017, 31 December 2017, and 31 December 2018	2,000,000,000	2,000,000,000	212,780	212,780
Issued and fully paid: At beginning of year Exercise of share options	1,126,546,500 180,000	1,126,546,500 _	109,889 16	109,889 -
At end of year	1,126,726,500	1,126,546,500	109,905	109,889

## 34. Reserves

#### **Special reserve**

The special reserve of the Group represents the difference between the nominal amount of the shares issued by Tianneng International Investment Holdings Limited ("Tianneng BVI") and the aggregate amount of paid-in capital of the subsidiaries acquired by Tianneng BVI pursuant to the group reorganisation which took place in 2004 as more fully explained in the prospectus of the Company dated 29 May 2007.

#### **Capital reserve**

	2018 RMB'000	2017 RMB'000
	57.010	57.010
Share-based payment (note i)	57,010	57,010
30% interest in Anhui Zhongneng (note ii)	4,194	4,194
Acquisition of additional interests in subsidiaries (note iii)	12,460	12,460
Reduction of equity interest in Zhejiang Tianneng Energy (note iv)	64,600	64,600
Acquisition of additional interests in Zhejiang Tianneng Energy (note v)	(112,237)	-
	26,027	138,264

#### Notes:

(i) The capital reserve of the Group of RMB57,010,000 arose in June 2003 when the substantial shareholder and Executive Director, Mr. Zhang transferred 26.3% of his shares in Tianneng Battery to the key management personnel of the Group. The Group recognised the share-based payment expenses of approximately RMB57,010,000 on 15 June 2003 which represented the difference between the fair value of those shares of approximately RMB71,388,000 and the consideration received by Mr. Zhang from the key management personnel of approximately RMB14,378,000.

(ii) The increase of RMB4,194,000 was related to the acquisition of the remaining 30% interest in Anhui Zhongneng in 2013.

(iii) The capital reserve of the Group of RMB12,460,000 arose from the difference between the consideration paid for acquisitions of additional interests in subsidiaries from non-controlling shareholders who are associates of Mr. Zhang and the non-controlling interests' share of net assets of the subsidiaries at the date of the acquisition.

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### 34. Reserves (Continued)

#### **Capital reserve (Continued)**

#### Notes: (Continued)

- (iv) As set out in the Company's announcement dated 23 November 2015, the Group is considering and exploring the possibility of a possible spin-off and quotation of the shares of a subsidiary, Zhejiang Tianneng Energy, on the 全國中小企業股份轉讓系統 National Equities Exchange and Quotation System ("NEEQ", commonly known as the New Third Board 新三板) in the PRC (the "Proposed NEEQ Quotation"). A subscription agreement was entered into on 18 January 2016, pursuant to which a group comprising, among others, Mr. Zhang and other management and employees of the Group (the "Management Group") agreed to subscribe 40% of the enlarged total equity interests of Zhejiang Tianneng Energy at a total consideration of RMB114,241,000. The Group's interests in Zhejiang Tianneng Energy is accordingly reduced from 100% to 60% upon the completion of the subscription by the Management Group. Details of the subscription by the Management Group is set out in the Company's announcement dated 18 January 2016. The reduction of the Group's equity interests from 100% to 60% is treated as a deemed disposal. The changes in the Group's equity interests in Zhejiang Tianneng Energy do not result in the Group losing control over Zhejiang Tianneng Energy and are accordingly accounted for as equity transactions. The surplus of RMB64,600,000, representing the difference between the consideration of RMB114,241,000 and the amount of non-controlling interests approximately RMB49,641,000, is credited to the capital reserve. As set out in the Company's announcement dated 17 August 2016, having considered the recent capital market situation, Zhejiang Tianneng Energy and the Company have decided to postpone the application for the Proposed NEEQ Quotation to a later stage.
- (v) As set out in the Company's announcement dated 10 August 2018, the equity transfer agreements were entered into, pursuant to which Tianneng Battery agrees to acquire additional 40% of the equity interest in a subsidiary, Zhejiang Tianneng Energy from the non-controlling shareholders, a group comprising, among others, Mr. Zhang and other management and employees of the Group, at considerations of approximately RMB74,864,000, RMB7,719,000 and RMB43,977,000, representing 24%, 2% and 14% of the equity interest, respectively. The Group's interests in Zhejiang Tianneng Energy is accordingly increased from 60% to 100% upon the completion of the transaction. Details of the transaction is set out in the Company's announcement dated 10 August 2018. The increase of the Group's equity interests in Zhejiang Tianneng Energy from 60% to 100% do not result in any changes of the Group's control over Zhejiang Tianneng Energy and is accordingly accounted for as equity transaction. The surplus of approximately RMB112,237,000, representing the difference between the consideration of RMB126,560,000 and the amount of non-controlling interests approximately RMB14,323,000, is debited to the capital reserve.

#### Statutory surplus reserve fund/Discretionary surplus reserve fund

As stipulated by the relevant laws and regulations in the PRC, the Group's PRC subsidiaries are required to maintain two reserves, being a statutory surplus reserve fund and a discretionary surplus reserve fund which are non-distributable. Appropriations to such reserves are made out of profit after taxation of the statutory financial statements of the PRC subsidiaries while the amount and allocation basis are decided by their board of directors annually. Pursuant to the relevant laws and regulations in the PRC, it requires the appropriation to the statutory surplus reserve fund until the balance reaches 50% of the registered share capital. The statutory surplus reserve fund can be used to make up its prior year losses, if any, and can be applied in conversion into capital by means of capitalisation issue.

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## **35. Acquisition of Subsidiaries**

Year ended 31 December 2018:

(i) On 21 November 2018, the Group acquired 100% equity interest of Tianneng Group (Guizhou) Energy Technology Co., Ltd. ("Guizhou Energy") for cash consideration of RMB30,000,000 from independent third parties. The acquisition has been accounted for as acquisition of assets and assumption of liabilities since Guizhou Energy has ceased operation and the purpose of the acquisition is to purchase Guizhou Energy's existing land and buildings in the PRC for the expansion of production capacity of the Group.

On 30 August 2018, the Group acquired 19% and 81% of total equity interest of Zhejiang Haoyang New Energy Technology Co., Ltd. ("Haoyang New Energy") from Mr. Zhang and independent third parties for cash consideration of RMB950,000 and RMB450,000 respectively. The acquisition has been accounted for as acquisition of assets and assumption of liabilities since the purpose of the acquisition is to purchase Haoyang New Energy's existing property in the PRC for the expansion of production capacity of the Group.

#### Net assets of Guizhou Energy and Haoyang New Energy acquired are as follows:

	Guizhou Energy RMB'000	Haoyang New Energy RMB'000	Total RMB′000
Non-current assets			
Property, plant and equipment	49,901	1,650	51,551
Prepaid lease payments	37,375	_	37,375
Deposit for acquisition of prepaid lease payment	-	21,767	21,767
Current assets			
Bank balances and cash	63	13,995	14,058
Inventories	124	-	124
Current liabilities			
Other payables	(57,463)	(36,012)	(93,475)
Net assets attributed to the Group	30,000	1,400	31,400
Satisfied by:			
Consideration transferred	30,000	1,400	31,400

Net cash outflow (inflow) on acquisition of the subsidiaries:

	Haoyang New		
	Guizhou Energy RMB'000	Energy RMB'000	Total RMB'000
Total cash consideration transferred	30,000	1,400	31,400
Less: cash and cash equivalent balances acquired	(63)	(13,995)	(14,058)
Total consideration transferred	29,937	(12,595)	17,342

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## 35. Acquisition of Subsidiaries (Continued)

Year ended 31 December 2018: (Continued)

(ii) On 29 November 2018, the Group acquired 100% equity interest of Anhui Hongda for cash consideration of RMB119,052,000, from independent third parties. Anhui Hongda is engaged in manufacturing of electrode plates, being one of the essential materials of the Group's lead acid motive battery products and was acquired so as to continue the expansion of the Group's production capacity of electrode plates and to facilitate its quality control of raw materials.

On 18 August 2018, the Group acquired an additional 6% equity interest of Tianneng Yinyue for cash consideration of RMB2,081,000, from an independent third party. Tianneng Yinyue is engaged in trading of new energy material and was acquired so as to expand the purchasing channel.

Both acquisitions have been accounted for using the acquisition method.

#### Assets acquired and liabilities recognised at the date of acquisition are as follows:

	Anhui Hongda RMB'000	Tianneng Yinyue RMB'000	Total RMB'000
Non-current assets			
Property, plant and equipment	53,385	378	53,763
Prepaid lease payments	9,591	-	9,591
Current assets	7,371		7,571
Inventories	36,594	8,444	45,038
Trade and other receivables	157,891	461,594	619,485
Financial assets at FVTPL	-	15,417	15,417
Bank balances and cash	31,393	91,327	122,720
Current liabilities	01,070	71,027	122,720
Trade and other payables	(168,141)	(542,148)	(710,289)
Non-current ligbilities	(100,141)	(342,140)	(/10,207)
Deferred tax liabilities	(1,661)	_	(1,661)
Non-controlling interests	(1,001)	(17,155)	(17,155)
		(17,133)	(17,133)
Net assets attributed to the Group	119,052	17,857	136,909
Satisfied by:			
Consideration paid and payable	119,052	17,857	136,909

The fair value of trade and other receivables at the date of acquisition amounted to RMB619,485,000. The best estimate at acquisition date of the contractual cash flows not expected to be collected was not significant.

The non-controlling interests (49%) in Tianneng Yinyue recognised at the acquisition date was measured by reference to the proportionate share of the recognised amounts of the acquiree's identifiable net assets and amounted to RMB17,155,000.

Net cash outflow (inflow) on acquisition of the subsidiaries

	Anhui Hongda RMB'000	Tianneng Yinyue RMB'000	Total RMB'000
Total consideration transferred	119,052	17,857	136,909
Less: consideration recorded in liabilities	(16,637)	(2,081)	(18,718)
Less: fair value of previously held interest	-	(15,776)	(15,776)
Cash consideration transferred	102,415	-	102,415
Less: cash and cash equivalent balances acquired	(31,393)	(91,327)	(122,720)
	71,022	(91,327)	(20,305)

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## 35. Acquisition of Subsidiaries (Continued)

Year ended 31 December 2018: (Continued)

#### Impact of acquisition on the results of the Group

Included in the profit for the year is loss of approximately RMB14,105,000 attributable to Anhui Hongda, and profit of approximately RMB8,836,000 attributable to Tianneng Yinyue. The revenue for the year includes approximately RMB79,879,000 in respect of Anhui Hongda and RMB2,769,072,000 in respect of Tianneng Yinyue.

Had the acquisition been completed on 1 January 2018, total group revenue for the year would have been RMB40,792 million, and profit for the year would have been RMB1,273 million. The pro forma information is for illustrative purposes only and is not necessarily an indication of revenue and results of operations of the Group that actually would have been achieved had the acquisition been completed on 1 January 2018, nor is it intended to be a projection of future results.

In determining the 'pro-forma' revenue and profit of the Group had the above entities been acquired at the beginning of the current year, the directors of the Company have calculated depreciation of plant and equipment and amortisation of prepaid lease payments acquired on the basis of the fair values arising in the initial accounting for the business combination rather than the carrying amounts recognised in the pre-acquisition financial statements. The transaction cost arising from the above transactions is immaterial.

#### Year ended 31 December 2017:

On 25 November 2017, the Group acquired 81.67% of equity interest of Henan Jingneng Power Co., Ltd. ("Henan Jingneng") for a consideration of RMB34,000,000 from independent third parties. The acquisition has been accounted for using the acquisition method. Henan Jingneng is engaged in the manufacture of lead-acid motive battery products. Henan Jingneng was acquired so as to continue the expansion of the Group's production capacity of lead-acid motive battery products.

#### Assets acquired and liabilities recognised at the date of acquisition are as follows:

	25 November 2017 RMB'000
	KIND 000
Non-current assets	
Property, plant and equipment	100,766
Prepaid lease payments	74,143
Current assets	
Inventories	63,014
Trade and other receivables	34,244
Bank balances and cash	5,941
Current liabilities	
Trade and other payables	(106,230)
Other borrowings	(118,800)
Non-current liabilities	
Deferred tax liabilities	(11,448)
	41,630
Non-controlling interests	(7,630)
Net assets attributed to the Group	34,000
Satisfied by:	
Consideration paid and payable	34,000

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## 35. Acquisition of Subsidiaries (Continued)

Year ended 31 December 2017: (Continued)

Net cash outflow on acquisition of the subsidiary

	Year ended 31 December 2017 RMB'000
Total consideration	34,000
Less: consideration recorded in liabilities	(15,500)
Cash consideration transferred	18,500
Less: cash and cash equivalent balances acquired	(5,941)
	12,559

#### Impact of acquisition on the results of the Group

Included in the profit for the year is a loss of RMB150,000 attributable to Henan Jingneng. Revenue for the year includes RMB51,454,000 in respect of Henan Jingneng.

Had the acquisition been completed on 1 January 2017, total group revenue for the year would have been RMB27,055 million, and profit for the year would have been RMB1,131 million. The pro forma information is for illustrative purposes only and is not necessarily an indication of revenue and results of operations of the Group that actually would have been achieved had the acquisition been completed on 1 January 2017, nor is it intended to be a projection of future results.

In determining the 'pro-forma' revenue and profit of the Group had Henan Jingneng been acquired at the beginning of the current year, the directors of the Company have calculated depreciation of plant and equipment and amortisation of prepaid lease payments acquired on the basis of the fair values arising in the initial accounting for the business combination rather than the carrying amounts recognised in the pre-acquisition financial statements.

### 36. Share Option Schemes

The Company has a share option scheme (the "Scheme") for eligible directors of the Company, eligible employees of the Group and other selected participants. According to the terms of the Scheme, options granted must be taken up within 28 days from the date of grant, upon payment of HK\$1.00. The options may be exercised in accordance with the terms of the Scheme at any time during the exercise period determined by the board of directors which shall in any event not be more than ten years from the date of grant. Share options are vested over a period up to a maximum of four years after the date of grant.

The total number of shares issued and which may fall to be issued upon exercise of the options granted pursuant to the Scheme to an eligible participant in any 12-month period shall not exceed 1% of the number of shares in issue unless approved by shareholders in a general meeting. The maximum number of shares in respect of which options may be granted under the Scheme shall not in aggregate exceed 10% of the shares in issue on the date on which dealings in the shares first commence on the Hong Kong Stock Exchange, i.e. a total of 100,000,000 shares (the "Option Limit"). Pursuant to an annual general meeting held on 16 May 2014, the Option Limit has been refreshed to 10% of the shares in issue on the date of the annual general meeting, i.e. a total of 111,190,800 shares.

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## 36. Share Option Schemes (Continued)

All holders of options granted under the Scheme may only exercise their options in the following manner:

Maximum percentage of options exercisable	Vesting period
10% of the options	From the date of grant to the first anniversary of the date of grant
Additional 20% of the options	From the date of grant to the second anniversary of the date of grant
Additional 30% of the options	From the date of grant to the third anniversary of the date of grant
Additional 40% of the options	From the date of grant to the fourth anniversary of the date of grant

No share option was granted during the year ended 31 December 2017 and 31 December 2018.

The following tables disclosed movements of the Company's options granted under the Scheme during the year ended 31 December 2018 and 2017:

Option	Name of grantee	Date of grant	Exercisable period	Exercise price HK\$	Outstanding as at 1.1.2018	Granted during the year	Exercised during the year	Forfeited during the year	Outstanding as at 31.12.2018
Option C Option C Option C	<b>Directors</b> Huang Dongliang Ho Tso Hsiu Wang Jingzhong	16.6.2014 16.6.2014 16.6.2014	16.6.2015 - 15.6.2024 16.6.2015 - 15.6.2024 16.6.2015 - 15.6.2024	HK\$2.90 HK\$2.90 HK\$2.90	90,000 90,000 90,000	-	- -	-	90,000 90,000 90,000
Option C Option B	<b>Employees</b> Employees Employees	16.6.2014 22.11.2010	16.6.2015 - 15.6.2024 22.11.2011 - 21.11.2020	HK\$2.90 HK\$3.18	39,901,500 680,000	-	(180,000) -	(1,017,000) -	38,704,500 680,000
					40,851,500	-	(180,000)	(1,017,000)	39,654,500
	Exercisable at the end	of the year							39,654,500
	Weighted average exe	ercise price			HK\$2.90	-	-	HK\$2.90	HK\$2.90
Option	Name of grantee	Date of grant	Exercisable period	Exercise price HK\$	Outstanding as at 1.1.2017	Granted during the year	Exercised during the year	Forfeited during the year	Outstanding as at 31.12.2017
Option C Option C Option C	<b>Directors</b> Huang Dongliang Ho Tso Hsiu Wang Jingzhong	16.6.2014 16.6.2014 16.6.2014	16.6.2015 - 15.6.2024 16.6.2015 - 15.6.2024 16.6.2015 - 15.6.2024	HK\$2.90 HK\$2.90 HK\$2.90	90,000 90,000 90,000	- - -	- - -	- - -	90,000 90,000 90,000
Option C Option B	<b>Employees</b> Employees Employees	16.6.2014 22.11.2010	16.6.2015 – 15.6.2024 22.11.2011 – 21.11.2020	HK\$2.90 HK\$3.18	42,435,000 680,000	-	- -	(2,533,500) –	39,901,500 680,000
					43,385,000	-	-	(2,533,500)	40,851,500
	Exercisable at the end	of the year							16,707,500
	Weighted average exe	ercise price			HK\$2.90	-	-	HK\$2.90	HK\$2.90

At 31 December 2018, the total number of shares in respect of which options under the Scheme had been granted and remained outstanding was 39,654,500 (2017: 40,851,500), representing 3.52% (2017: 3.63%) of the shares of the Company in issue at that date.

During the year ended 31 December 2018, the weighted average closing price of the Company's shares immediately before the dates on which the options were exercised was HK\$7.46 per share. No options were exercised during the year ended 31 December 2017.

During the year ended 31 December 2018, the Group recognised total expenses of RMB2,730,000 (2017: RMB8,987,000) in relation to share options granted by the Company.

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. Operating Leases		
The Group as lessee		
	2018 RMB'000	201 RMB'000
Minimum lease payments paid for the year under operating leases for premises	14,285	16,50

At the end of the reporting period, the Group had commitments for future minimum lease payments under non-cancellable operating leases which fall due as follows:

	2018 RMB′000	2017 RMB'000
Within one year In the second to fifth year inclusive Over five years	11,839 23,385 553	7,907 12,545 3,273
	35,777	23,725

Operating lease payments represent rentals payable by the Group for certain of its properties. Leases are negotiated for terms ranging from one to seven years.

## 38. Pledge of Assets

At the end of the reporting period, the Group has pledged the following assets to secure the general banking facilities granted to the Group.

	2018	2017
	RMB'000	RMB'000
Bank deposits	1,068,449	727,562
Financial assets at FVTPL – Structured bank deposits	1,074,380	-
Debt instruments at FVTOCI/bills receivables	453,340	675,996
Property, plant and equipment	186,181	107,357
Prepaid lease payments	115,565	34,675
	2,897,915	1,545,590

## **39. Capital Commitments**

	2018 RMB′000	2017 RMB'000
Contracted for but not provided in the consolidated		
financial statements in respect of the acquisition of		
property, plant and equipment	337,858	302,297

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## **40. Retirement Benefit Schemes**

The Group's full-time employees in the PRC are covered by a government-sponsored defined contribution pension scheme, and are entitled to a monthly pension from their retirement dates. The PRC Government is responsible for the pension liability to these retired employees. The Group is required to make annual contributions to the retirement plan at an average rate of 20% of employees' salaries, which are charged as an expense when the employees have rendered services entitling them to the contributions and the contributions are due.

The Group operates a Mandatory Provident Fund scheme for all qualifying employees in Hong Kong. The assets of the scheme are held separately from those of the Group in funds under the control of the trustee. The Group basically contributes 5% of the relevant payroll costs to the scheme.

As at 31 December 2018, all of the contributions due in respect of the year had been paid over to the plans (31 December 2017: RMB2,432,000 were paid subsequent to the end of the reporting period).

## 41. Capital Risk Management

The Group manages its capital to ensure that entities in the Group will be able to continue as a going concern while maximising the return to shareholders through the optimisation of the debt and equity balance. The Group's overall strategy remains unchanged from prior year.

The capital structure of the Group consists of net debts, which includes borrowings and loan notes as disclosed in notes 29 and 32, net of bank balances and cash, and equity attributable to equity holders of the Company, comprising issued share capital, reserves and accumulated profits.

The directors of the Company review the capital structure on a semi-annual basis. As part of this review, the directors consider the cost of capital and the risks associated with each class of capital. Based on the recommendations of the directors, the Group will balance its overall capital structure through the payment of dividends, new share issues and share buy-backs as well as the issue of new debt or the redemption of existing debt.

For the year ended 31 December 2018

42. Financial Instruments

	2018 RMB'000	201 RMB'00
Financial assets		
Financial assets at FVTPL		
Mandatorily measured at FVTPL		
- Structured bank deposits	1,074,380	
<ul> <li>Held-for-trading investments</li> <li>Equity securities listed in Mainland China</li> </ul>	14,342	
– Equity securities listed in Hong Kong	11,976	
– Commodity derivative contracts	151	
Equity instruments at FVTOCI	297,357	
Debt instruments at FVTOCI	969,300	
Available-for-sale investments	-	226,00
Financial assets at amortised cost (including cash and cash equivalents)	5,880,422	
Loans and receivables (including cash and cash equivalents)	-	6,752,22
Financial liabilities		
Amortised cost	7,612,678	6,420,90
Financial liabilities at FVTPL		
– Foreign currency forward contracts	-	7,27
<ul> <li>Commodity derivative contracts</li> </ul>	-	284

#### Financial risk management objectives and policies

The Group's major financial instruments include equity instruments at FVTOCI/available-for-sale investments, bills, trade and other receivables, amounts due from related parties, debt instruments at FVTOCI, financial assets at FVTPL, pledged bank deposits, bank balances and cash, bills, trade and other payables, amounts due to related parties, loan notes, borrowings and derivative financial instruments. Details of these financial instruments are disclosed in the respective notes. The risks associated with these financial instruments include market risk (currency risk, interest rate risk and other price risk), credit risk and liquidity risk. The policies to mitigate these risks are set out below. The management manages and monitors these exposures to ensure appropriate measures are implemented on a timely and effective manner. The risks associated with these financial instruments and the management policies remain unchanged from prior year.

#### **Market risk**

#### Currency risk

The Group collects most of its revenue in RMB and most of the expenditures as well as capital expenditures are also denominated in RMB. The Group's sales are denominated in RMB and the disbursements were also mainly settled in RMB, which is the functional currency of the relevant subsidiaries. The Group's exposure to foreign currency risk is arising mainly from certain bank balances, certain financial assets at FVTPL, certain equity instrument at FVTOCI/available-for-sale investments, certain trade receivables, certain bank borrowings, and certain other payables which are denominated in foreign currencies. Except for the above items denominated in foreign currencies, the group entities did not have any other monetary assets or liabilities denominated in foreign currencies as at the end of the reporting period.

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## 42. Financial Instruments (Continued)

Financial risk management objectives and policies (Continued)

#### Market risk (Continued)

#### Currency risk (Continued)

The carrying amounts of the Group's foreign currency denominated monetary assets and monetary liabilities at the end of reporting date are as follows:

	Assets		Liabilities	
	2018	2017	2018	2017
	RMB′000	RMB'000	RMB'000	RMB'000
United States dollars ("US\$")	7,665	12,914	83,183	_
HK\$	179,715	240,642	442,181	170,171

The Group has set up policy to strike a balance between uncertainty and the risk of opportunity loss due to the growing significance of its exposures to fluctuations in foreign currencies. Foreign currency forward contracts can be used to eliminate the currency exposures. During the year, the Group has entered into certain foreign currency forward contracts and closely monitored the movement of foreign currency rate.

#### Sensitivity analysis

The Group is mainly exposed to the currency risk on US\$ and HK\$ against RMB.

The following table details the Group's sensitivity to a 5% (2017: 5%) increase and decrease in RMB against the relevant foreign currencies. 5% (2017: 5%) is the sensitivity rate used when reporting foreign currency risk internally to the key management personnel and represents management's assessment of the reasonably possible change in foreign exchange rates. The sensitivity analysis includes only outstanding foreign currency denominated monetary items and adjusts their translation at the end of the reporting date for a 5% (2017: 5%) change in foreign currency rates. The analysis illustrates the impact for a 5% (2017: 5%) strengthening of RMB against the relevant currency. For a 5% (2017: 5%) weakening of RMB against the relevant currency, there would be an equal and opposite impact on the profit.

	US\$ impact (i)		HK\$ impact (ii)	
	2018 RMB'000	2017 RMB'000	2018 RMB′000	2017 RMB'000
Increase (decrease) in post-tax profit for the year as a result of a 5% strengthening of RMB against the foreign currency	3,215	(549)	20,648	(3,523)

(i) This is mainly attributable to the exposure outstanding on US\$ denominated bank balances and cash and other payables of the Group at the end of the reporting period.

(ii) This is mainly attributable to the exposure to outstanding HK\$ denominated bank balances, financial assets at FVTPL, bank borrowings of the Group at the end of the reporting period.

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2. Financial Instruments (Continued)		
Financial risk management objectives and policies (Continued)		
Market risk (Continued)		
Currency risk (Continued)		
Sensitivity analysis (Continued)		
	HK\$ impa	ct
	2018 RMB′000	20 RMB'00

(7,524)	(11,300)
	(7,524)

This is mainly attributable to the exposure to outstanding HK\$ denominated equity instrument at FVTOCI of the Group at the end of the reporting period.

#### Interest rate risk

The Group is exposed to fair value interest rate risk in relation to pledged bank deposits, bank balances and bank and other borrowings (see notes 26 and 29 for details of these pledged bank deposits, bank balances and bank and other borrowings, respectively). The Group is also exposed to cash flow interest rate risk in relation to variable- rate bank balances (see note 26 for details), variable-rate bank borrowings (see note 29 for details). The directors of the Company monitor interest rate exposures and will consider hedging significant interest rate risk should the need arise.

Total interest income from financial assets that are measured at amortised cost (2017: loans and receivables) is as follows:

	2018 RMB'000
Other income	
Financial assets at amortised cost (including bank balances and cash)	31,454
	2017
	RMB'000
Other income	
Loans and receivables (including bank balances and cash)	62,542

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## 42. Financial Instruments (Continued)

#### Financial risk management objectives and policies (Continued)

#### Market risk (Continued)

#### Interest rate risk (Continued)

Interest expense on financial liabilities not measured at fair value through profit or loss:

	2018 RMB′000	2017 RMB'000
Financial liabilities at amortised cost	177,735	153,005

#### Sensitivity analysis

The sensitivity analysis below has been determined based on the exposure to interest rates for financial instruments (including bank balances and borrowings) at the end of the reporting period and the stipulated changes taking place at the beginning of the financial year and held constant throughout the reporting period in the case of bank balances and borrowings.

A 10 basis point (2017: 10 basis point) increase or decrease in interest rates on variable-rate bank balances, and a 100 basis point (2017: 100 basis point) increase or decrease in interest rates on variable-rate borrowings represent managements' assessment of the reasonably possible changes in interest rates.

If interest rates on variable-rate bank balances had been 10 basis points (2017: 10 basis points) higher and all other variables were held constant, a positive number below indicates an increase in post-tax profit.

	Year ended	31 December
	2018 RMB′000	2017 RMB'000
Increase in post-tax profit for the year	3,353	3,194

The post-tax profit for the year would be decreased by the same amount as mentioned above if interest rates on variable-rate bank balances had been 10 basis points (2017: 10 basis points) lower and all other variables were held constant.

If the interest rate on variable-rate borrowings had been 100 basis points higher and all other variables were held constant, a positive number below indicates a decrease in post-tax profit for the year.

	Year ended	31 December	
	2018 RMB′000	2017 RMB'000	
in post-tax profit for the year	4,994	4,306	

The post-tax profit for the year would be increased by the same amount as mentioned above if the interest rate on variable-rate borrowings had been 100 basis points lower and all other variables were held constant.

For the year ended 31 December 2018

## 42. Financial Instruments (Continued)

#### Financial risk management objectives and policies (Continued)

#### Market risk (Continued)

#### Other price risk

The Group is exposed to equity price risk through its investments in listed equity securities measured at FVTPL and FVTOCI (2017: available-for-sale investments measured at fair value). For equity securities measured at FVTPL quoted in the Stock Exchange, the management manages this exposure by maintaining a portfolio of investments with different risks. In addition, the Group also invested in certain quoted equity securities for investees operating in battery industry sector for long term strategic purposes which had been designed as FVTOCI (2017: available-for-sale investments measured at fair value). The Group has appointed a special team to monitor the price risk and will consider hedging the risk exposure should the need arise. The Group mitigates its price risk by performing detailed due diligence analysis of the investment.

#### Sensitivity analysis

The sensitivity analyses below have been determined based on the exposure to equity price risks at the reporting date. For sensitivity analysis purpose, the sensitivity rate is 10% (2017:10%) in current year as a result of the volatile financial market.

If the prices of the respective equity instruments had been 10% (2017: 10%) higher/lower:

- post-tax profit for the year ended 31 December 2018 would increase/decrease by RMB2,096,000 as a result of the changes in fair value of financial assets at FVTPL (2017: nil); and
- investment revaluation reserve would increase/decrease by RMB29,691,000 (2017: RMB32,913,000) for the Group as a result
  of the changes in fair value of equity instruments at FVTOCI (2017: available-for-sale investments).

#### Credit risk and impairment assessment

The Group's maximum exposure to credit risk which will cause a financial loss to the Group is arising from the amount of each class of financial assets as disclosed in the consolidated statement of financial position. The Group does not hold any collateral or other credit enhancements to cover its credit risks associated with its financial assets.

#### Trade receivables arising from contracts with customers

In order to minimise the credit risk, the management of the Group has delegated a team responsible for determination of credit limits and credit approvals. Before accepting any new customer, the Group uses an internal credit scoring system to assess the potential customer's credit quality and defines credit limits by customer. Limits and scoring attributed to customers are reviewed twice a year. Other monitoring procedures are in place to ensure that follow-up action is taken to recover overdue debts. In addition, the Group performs impairment assessment under ECL model upon application of HKFRS 9 (2017: incurred loss model) on trade balances based on provision matrix for other debtors. In this regard, the directors of the Company consider that the Group's credit risk is significantly reduced.

#### Debts instruments at FVTOCI

Debt instruments at FVTOCI were all bank-issued notes. Since the issuers were reputable banks of good credit quality, the management of the Group considered the credit risk of these bank issued bills is insignificant and no impairment was provided on them at the year end.

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## 42. Financial Instruments (Continued)

Financial risk management objectives and policies (Continued)

#### Credit risk and impairment assessment (Continued)

#### Pledged bank deposits and bank balances

There is concentration of credit risk on pledged bank deposits and bank balances for the Group as at 31 December 2018 and 31 December 2017. As at 31 December 2018, balances with the four largest banks accounted for 60% (2017: 35%) of total pledged bank deposits and bank balances of the Group. The credit risk on liquid funds is limited because the majority of counterparties are banks with high credit-ratings assigned by international credit-rating agencies and state-owned banks with good reputation.

The Group's internal credit risk grading assessment comprises the following categories:

Internal credit rating	Description	Trade receivables and trade-related amounts due from related parties	Other financial assets
Grade A	The counterparty has a low risk of default and does not have any past- due amounts or the counterparty is a new customer as a large producer with good reputation and credit rating based on internal assessment	Lifetime ECL – not credit-impaired	12-month ECL
Grade B	Debtor frequently repays after due dates but usually settle after due date or the counterparty is a new customer other than those grouped in grade A counterparties	Lifetime ECL – not credit-impaired	12-month ECL
Grade C	The counterparty delays its payment after due dates with no settlement yet or there have been significant increases in credit risk since initial recognition through information developed internally or external resources	Lifetime ECL – not credit-impaired	Lifetime ECL – not credit-impaired
Grade D	The counterparty has been charged by the Group or could not settle the receivables according to the contracts or there is other evidence indicating the asset is credit-impaired	Lifetime ECL – credit-impaired	Lifetime ECL – credit-impaired
Grade E	There is evidence indicating that the debtor is in severe financial difficulty and the Group has no realistic prospect of recovery	Amount is written off	Amount is written off

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## 42. Financial Instruments (Continued)

#### Financial risk management objectives and policies (Continued)

#### Credit risk and impairment assessment (Continued)

The tables below detail the credit risk exposures of the Group's financial assets, which are subject to ECL assessment:

2018	Notes	External credit rating	Internal credit rating	12-month or lifetime ECL	Gross carry	ing amount
					RMB'000	RMB'000
Financial assets at amortised cost						
Bank balances	26	N/A	note i	12-month ECL	3,832,717	3,832,717
Pledged bank deposits	26	N/A	note i	12-month ECL	1,068,449	1,068,449
Debt instruments at FVTOCI	23	N/A	note i	12-month ECL	969,300	969,300
Other receivables	22	N/A	note ii	12-month ECL Lifetime ECL (not credit impaired) Credit impaired	200,244 4,361 14,849	219,454
Trade-related amounts due from related parties	28	N/A	note iii	Lifetime ECL (not credit impaired)	8,901	8,901
Trade receivables	22	N/A	note iii	Lifetime ECL (provision matrix) Credit impaired	756,971 217,606	974,577

#### Notes:

i. For bank balances and pledged bank deposits, the management considered the credit risk has not increased significantly since the initial recognition. According to the historical observed default rates of these debtors, the average loss rate is immaterial.

For debt instruments at FVTOCI, since they are all issued by reputable banks of good credit quality, the management of the Group considered the credit risk of these bank issued bills is insignificant and no impairment was provided on these receivables at the year end.

- ii. For other receivables, the Group has applied 12m ECL assessment in accordance with HKFRS 9 to measure the loss allowance except for those balances that the management considered the credit risk has increased significantly and/or those balances that are considered to be credit impaired. The ECL on other receivables are assessed individually based on historical settlement records, adjusted for factors that are specific to the debtors, general economic conditions and an assessment of both the current as well as the forecast direction of conditions at the end of reporting period.
- iii. For trade receivables and trade-related amounts due from related parties, the Group has applied the simplified approach in accordance with HKFRS 9 to measure the loss allowance at lifetime ECL. Except for debtors with significant outstanding balances or credit-impaired, the Group determines the expected credit losses on these receivables by using a provision matrix, grouped by internal credit rating.

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### 42. Financial Instruments (Continued)

#### Financial risk management objectives and policies (Continued)

#### Credit risk and impairment assessment (Continued)

As part of the Group's credit risk management, the Group applies internal credit rating for its customers. The following table provides information about the exposure to credit risk and loss allowance for trade receivables which are assessed collectively based on provision matrix as at 31 December 2018 within lifetime ECL (not credit impaired). As at 31 December 2018, the credit-impaired debtors with gross carrying amounts of RMB217,606,000 were assessed individually.

Internal credit rating	Average loss rate	Gross carrying amount RMB'000	Impairment loss allowance RMB'000
Grade A	*	430,721	-
Grade B	4.76%	281,744	13,411
Grade C	14.21%	44,506	6,323
		756,971	19,734

\* According to the historical observed default rates of the expected life of the Grade A debtors, the average loss rate is immaterial.

The estimated loss rates are estimated based on historical observed default rates over the expected life of the debtors and are adjusted for forward-looking information that is available without undue cost or effort. The grouping is regularly reviewed by management to ensure relevant information about specific debtors is updated.

During the year ended 31 December 2018, the Group provided RMB19,734,000 impairment allowance for trade receivables, based on the provision matrix. Impairment allowance of RMB185,766,000 were made on credit impaired debtors, which have been charged by the Group or have been included in the name list of entities, which couldn't pay back money according to their contracts, published on the website of the Supreme People's Court of the PRC.

The following table shows the movement in lifetime ECL that has been recognised for trade receivables under the simplified approach.

	Lifetime ECL (not credit- impaired) RMB'000	Lifetime ECL (credit-impaired) RMB'000	<b>Total</b> RMB'000
As at 1 January 2018 – As restated Changes due to financial instruments recognised as at 1 January:	21,983	168,943	190,926
– Transfer to credit-impaired	(1,800)	1,800	-
– Write-offs	_	(7,820)	(7,820)
New financial assets originated			
– Impairment losses recognised, net of reserval	(449)	22,843	22,394
As at 31 December 2018	19,734	185,766	205,500

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The following tables show reconciliation of loss allowances that has been recognised for other receivables.

	Lifetime ECL (not credit- impaired) RMB'000	Lifetime ECL (credit-impaired) RMB'000	<b>Total</b> RMB'000
As at 1 January 2018 – As restated Changes due to financial instruments recognised as at 1 January:	3,748	14,849	18,597
– Impairment losses recognised	613	_	613
As at 31 December 2018	4,361	14,849	19,210

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## 42. Financial Instruments (Continued)

#### Financial risk management objectives and policies (Continued)

#### Liquidity risk

The Group's objective is to maintain a balance between the continuity of funding and the flexibility through the use of bank and other borrowings. In addition, banking facilities have been put in place for contingency purposes.

The following table details the remaining contractual maturity for the Group's financial liabilities based on the agreed repayment terms. The table has been drawn up based on the undiscounted cash flows of financial liabilities based on the earliest date on which the Group can be required to pay. The table includes both interest and principal cash flows.

	Weighted average interest rate %	On demand and less than 3 months RMB'000	3 months to 1 year RMB'000	Over 1 year RMB'000	Total undiscounted cash flows RMB'000	Carrying amounts at 31.12.2017 RMB'000
2018						
Non-derivative financial liabilities						
Non-interest bearing	_	3,788,798	848,148	273,186	4,910,132	4,910,132
Fixed rate instruments	5.74%	690,306	403,373	424.356	1,518,035	1,444,146
Variable rate instruments	4.16%	533,795	677,291	77,044	1,288,130	1,258,400
		5,012,899	1,928,812	774,586	7,716,297	7,612,678
2017						
Non-derivative financial liabilities						
Non-interest bearing	-	2,838,013	1,011,860	342,697	4,192,570	4,192,570
Fixed rate instruments	7.05%	113,575	87,274	874,874	1,075,723	943,974
Variable rate instruments	4.13%	551,586	657,501	109,538	1,318,625	1,284,361
Obligations under finance leases	4.75%	2,244	2,093	-	4,337	4,275
		3,505,418	1,758,728	1,327,109	6,591,255	6,425,180
Derivatives – net settlement						
Commodity derivative contracts		284	-	-	284	284
Derivatives – gross settlement						
Foreign currency forward contracts						
- inflow		-	(126,523)	-	(126,523)	(126,523)
– outflow		-	133,800	-	133,800	133,800
		_	7,277	_	7,277	7,277

In addition to the amounts shown in the above table as at 31 December 2018, the Group may also be required to settle the maximum exposure to loss arising from discounted bills and endorsed bills arrangements with full recourse as detailed in note 24 on maturity, amounting to RMB994,180,000 (2017: RMB646,450,000) and RMB2,011,057,000 (2017: RMB903,629,000), respectively if the issuing banks fail to settle the bills on maturity.

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## 42. Financial Instruments (Continued)

#### Fair value

The fair value of financial assets and financial liabilities are determined as follows:

- the fair value of financial assets and liabilities with standard terms and conditions and traded in active liquid markets are
  determined with reference to quoted market bid prices and ask prices respectively; and
- the fair value of other financial assets and financial liabilities are determined in accordance with generally accepted pricing models based on discounted cash flow analysis.

The directors of the Company consider that the carrying amounts of financial assets and financial liabilities recognised in the consolidated financial statements approximate to their fair values at the end of reporting period.

#### Fair value measurements recognised in the consolidated statement of financial position

The Group's financial instruments that are measured subsequent to initial recognition at fair value are grouped into levels 1 to 3 based on the degree to which the fair value is observable.

- Level 1 fair value measurements are those quoted prices (unadjusted) in active market for identical assets;
- Level 2 fair value measurements are those derived from inputs other than quoted prices included within Level 1 that are
  observable for the asset or liability, either directly (i.e. as prices) or indirectly (i.e. derived from prices); and
- Level 3 fair value measurements are those derived from valuation techniques that include inputs for the asset or liability that are not based on observable market data (unobservable inputs).

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## 42. Financial Instruments (Continued)

#### Fair value (Continued)

#### Fair value measurements recognised in the consolidated statement of financial position (Continued)

The held-for-trading investments with carrying amount of RMB26,318,000 (2017: nil) and equity instruments at FVTOCI with carrying amount of RMB297,357,000 (2017: available-for-sale investments measured at fair value of RMB226,000,000) were level 1 measurement at 31 December 2018; commodity derivative contracts with carrying amount of assets of RMB151,000 (2017: liabilities of RMB284,000) and foreign currency forward contracts with carrying amount of nil (2017: RMB7,277,000) were level 2 measurement at 31 December 2018; and debt instruments at FVTOCI with carrying amount of RMB969,300,000 and structured bank deposits at FVTPL with carrying amount of RMB1,074,380,000 were level 3 measurement at 31 December 2018. The details are as follows:

Financial assets	Fair value as at 31.12.2018	31.12.2017	Fair value hierarchy	Basis of fair value measurement	Relationship of Significant unobservable input	Unobservable inputs to fair value
Listed equity securities classified as held-for-trading investments in the consolidated statement of	Listed equity securities in Mainland China: Building material industry RMB14,342,000	Nil	Level 1	Quoted bid prices in an active market.	N/A	N/A
financial position	Listed equity securities in Hong Kong Technology industry RMB11,976,000	Nil				
Equity instrument at FVTOCI/ available-for-sale investments	Listed equity securities in Hong Kong Manufacturing Industry RMB297,357,000	Listed equity securities in Hong Kong Manufacturing Industry RMB226,000,000	Level 1	Quoted bid prices in an active market	N/A	N/A
Commodity derivative contracts classified as held-for-trading investments	Assets: RMB151,000	Liabilities: RMB284,000	Level 2	The fair value of the commodity derivative contracts is estimated by reference to the quoted bid prices of similar standardised commodity derivative contracts at the end of the reporting period.	N/A	N/A
Foreign currency forwards contracts at FVTPL	Nil	Liabilities: RMB7,277,000	Level 2	Future cash flows are estimated based on forward exchange rates (from observable forward exchange rates at the end of the reporting period) and contract forward rates.	N/A	N/A
Debt instruments at FVTOCI	RMB969,300,000	N/A	Level 2	Discounted cash flow method was used to capture the present value of the expected future economic benefits to be derived from the ownership of the debt instruments at FVTOCI	N/A	N/A
Structured bank deposits at FVTPL	RMB1,074,380,000	N/A	Level 3	Discounted cash flow method was used to capture the present value of the expected future economic benefits to be derived from the ownership of the structured bank deposits	An increase in the discount rate would result in a decrease in the fair value measurement of the financial assets at FVTPL, and vice versa.	Estimated return

There were no transfers among level 1, level 2 and level 3 during both years.

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## 43. Reconciliation of Liabilities arising from Financing Activities

The table below details changes in the Group's liabilities arising from financing activities, including both cash and non-cash changes. Liabilities arising from financing activities are those for which cash flows were, or future cash flows will be, classified in the Group's consolidated statement of cash flows as cash flows from financing activities.

			Obligations under	
			finance	
	Borrowings	Loan notes	leases	Total
	(note 29)	(note 32)		
	RMB'000	RMB'000	RMB'000	RMB'000
At 1 January 2018	1,454,361	774,341	4,275	2,232,977
Financing cash flows	471,089	_	(4,275)	466,814
Amortisation of unsettled financial charges	-	2,755	-	2,755
At 31 December 2018	1,925,450	777,096	-	2,702,546
At 1 January 2017	1,199,692	792,358	19,281	2,011,331
Financing cash flows	135,869	(20,367)	(15,006)	100,496
Acquired on acquisition of a subsidiary	118,800	-	-	118,800
Amortisation of unsettled financial charges	-	2,350	-	2,350
At 31 December 2017	1,454,361	774,341	4,275	2,232,977

## 44. Related Party Transactions

(a) During the year, the Group had the following transactions with its related companies:

Name of related company	Nature of transaction	2018 RMB′000	2017 RMB'000
Changxing Jin Ling Hotel (note i)	Hotel expenses	2,193	1,965
Xin Xin Packaging	Purchase of consumables	448	510
Wanyang Group	Purchase of materials	1,353,854	1,242,116
Wanyang Group	Sales of materials	146,737	459,889
Wanyang Group	Rental expenses	2,226	2,195
Tianneng Yinyue (note ii)	Purchase of materials	972,911	1,689,870

Notes:

- i. Changxing Jin Ling Hotel (長興金陵大酒店) is controlled by Mr. Zhang.
- ii. The amount represented the transactions from between Tianneng Yinyue and the Group from January to August 2018, before Tianneng Yinyue became the subsidiary of the Group as described in note 18.
- (b) Details of the remuneration of directors and other members of key management during the year are set out in note 13.
- (c) Details of the balances with related parties are set out in note 28.

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## 45. Particulars of Principal Subsidiaries of the Company

Particulars of the Company's principal subsidiaries at 31 December 2018 and 2017 are as follows:

Name of subsidiary	Place/Country of incorporation/ establishment and operations	Issued and fully paid share/ registered capital	Effective proportion of nominal value of issued share/ registered capital held by the Company		Principal activities	
			2018	2017		
Tianneng International Investment Holdings Limited (note i)	British Virgin Islands/ Hong Kong 15 November 2004	Share – US\$1 (2017: US\$1)	100%	100%	Investment holding	
浙江省長興天能電源有限公司 Zhejiang Changxing Tianneng Power Supply Co., Ltd.	PRC – Limited liability company 11 March 1998	Registered capital – RMB108,000,000 (2017: RMB108,000,000)	100%	100%	Manufacture and sales of lead-acid batteries	
天能電池集團有限公司 Tianneng Battery (previously known as 浙江天能電池有限公司 Zheijang Tianneng Battery Co., Ltd.)	PRC – Limited liability company 13 March 2003	Registered capital – RMB618,090,500 (2017: RMB615,000,000)	100%	100%	Investment holding, research and development, manufacture and sales of lead-acid batteries and battery related accessories	
浙江天能能源科技股份有限公司 Zhejiang Tianneng Energy	PRC – Limited liability company 1 July 2004	Registered capital – RMB226,666,000 (2017: RMB226,666,000)	100%	60%	Manufacture and sales of lithium batteries	
長興天能汽車運輸有限公司 Changxing Tianneng Vehicle Transport Co., Ltd.	PRC – Limited liability company 30 May 2005	Registered capital – RMB450,000 (2017: RMB450,000)	100%	100%	Provision of transportation service to group companies	
天能電池(蕪湖)有限公司 Tianneng Battery Wuhu	PRC – Limited liability company 21 October 2005	Registered capital – RMB230,000,000 (2017: RMB230,000,000)	100%	100%	Manufacture and sales of lead-acid batteries	
浙江天能電池(江蘇)有限公司 Zhejiang Tianneng Battery (Jiangsu) Co., Ltd.	PRC – Limited liability company 9 May 2005	Registered capital – RMB200,000,000 (2017: RMB200,000,000)	100%	100%	Manufacture and sales of lead-acid batteries	
浙江天能電池(江蘇)新能源有限公司 Zhejiang Tianneng Battery (Jiangsu) New Energy Co., Ltd.	PRC – Limited liability company 8 January 2008	Registered capital – RMB120,000,000 (2017: RMB120,000,000)	100%	100%	Manufacture and sales of storage batteries	
浙江天能動力能源有限公司 Zhejiang Tianneng Power	PRC-Limited liability company 2 July 2009	Registered capital — RMB300,000,000 (2017: RMB300,000,000)	100%	100%	Manufacture and sale of lead-acid batteries	

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## 45. Particulars of Principal Subsidiaries of the Company (Continued)

Name of subsidiary	Place/Country of incorporation/ establishment and operations	of incorporation/ Issued and establishment fully paid share/		oportion Il value share/ capital Company	Principal activities	
			2018	2017		
浙江天能電源材料有限公司 Zhejiang Tianneng Power Supply Material Co., Ltd.	PRC-Limited liability company 2 July 2009	Registered capital – RMB300,000,000 (2017: RMB100,000,000)	100%	100%	Research and development of recycled batteries	
浙江天能物資貿易有限公司 Zhejiang Tianneng Material Trading Co., Ltd.	PRC-Limited liability company 25 March 2009	Registered capital – RMB80,000,000 (2017: RMB80,000,000)	100%	100%	Sales of metal materials	
天能電池集團(安徽)有限公司 Tianneng Battery Anhui	PRC-Limited liability company 4 November 2010	Registered capital – RMB200,000,000 (2017: RMB200,000,000)	100%	100%	Sales of metal materials	
長興新天物資經營有限公司 Changxing Xintian Material Trading Co., Ltd.	PRC-Limited liability company 27 July 2009	Registered capital – RMB20,000,000 (2017: RMB20,000,000)	100%	100%	Sales of metal materials	
濟源市萬洋綠色能源有限公司 Jiyuan Wanyang	PRC-Limited liability company 27 October 2010	Registered capital – RMB102,160,000 (2017: RMB102,160,000)	51%	51%	Manufacture and sale of lead-acid batteries	
安徽中能電源有限公司 Anhui Zhongneng	PRC-Limited liability company 17 April 2008	Registered capital – RMB100,000,000 (2017: RMB100,000,000)	100%	100%	Manufacture and sale of electrode plates	
浙江赫克力能源有限公司 Zhejiang Hercules Energy Co., Ltd.	PRC-Limited liability company 10 November 2009	Registered capital – RMB60,000,000 (2017: RMB60,000,000)	100%	100%	Manufacture and sales of lead-acid batteries and re-cycled batteries	
河南晶能電源有限公司 Henan Jingneng Energy Co., Ltd.	PRC-Limited liability company 13 March 2009	Registered capital – RMB45,000,000 (2017: RMB45,000,000)	81.67%	81.67%	Manufacture and sales of lead-acid batteries	
安徽轟達電源有限公司 Anhui Hongda	PRC-Limited liability company 26 March 2010	Registered capital – RMB50,000,000 (2017: NA)	100%	NA	Manufacture and sales of electrode plates	
安徽天暢金屬材料有限公司 Anhui Tianchang Metal Material Supply Co., Ltd.	PRC-Limited liability company 14 May 2018	Registered capital – RMB100,000,000 (2017: NA)	51%	NA	Research and development of recycled batteries	

Note:

(i) Directly held by the Company.

The above table lists the subsidiaries of the Group which, in the opinion of the Company's directors, principally affected the results or assets of the Group. To give details of other subsidiaries would, in the opinion of the Company's directors, result in particulars of excessive length.

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## 45. Particulars of Principal Subsidiaries of the Company (Continued)

At the end of the reporting period, the Company has other subsidiaries that are not material to the Group. A majority of these subsidiaries operate in the PRC. The principal activities of these subsidiaries are summarised as follows:

Principal activities	Principal place of business	Number of wholly-owne	ed subsidiaries
		2018	2017
Manufacture and sales of			
lead-acid motive batteries	PRC	17	8
Batteries recycling	PRC	1	1
Investment holding	Hong Kong	1	1
Investment holding	PRC	2	
Security investment	PRC	1	1
Sales of lead-acid motive batteries	Hong Kong	1	-

During the year, the Group has non-controlling interests in six (2017: three) subsidiaries, namely Jiyuan Wanyang, Henan Jingneng, Tianneng Yinyue, Anhui Tianchang Metal Material Supply Co., Ltd., Zhejiang Tianchang Supply Chain Management Co., Ltd., and Changxing Wangjia New Energy Technology Co., Ltd. shown under particulars of principal subsidiaries of the Company above (2017: Jiyuan Wanyang, Zhejiang Tianneng Energy and Henan Jingneng). The non-controlling interests in the subsidiaries are not material to the Group.

Tianneng Battery issued unlisted long-term loan notes of RMB400 million in March 2014 and RMB400 million in October 2014, respectively. Details of which are set out in note 32. All other subsidiaries had not issued any debt securities at the end of the year.

## 46. Statement of Financial Position and Reserves of the Company

Financial information of the Company at the end of the reporting period includes:

	2018 RMB′000	2017 RMB′000
Non-current assets		
Property, plant and equipment	23	22
Investments in and amounts due from subsidiaries	1,292,488	1,050,594
	1,292,511	1,050,616
Current asset		
Bank balances and cash	13,396	5,269
	13,396	5,269
		0,207
Current liabilities		
Other payables	111,228	105,971
Borrowings	262,860	-
	374,088	105,971
Net current liabilities	(360,692)	(100,702)
Total assets less current liabilities	931,819	949,914
Capital and reserves		
Share capital	109,905	109,889
Reserves	821,914	840,025
Total equity	931,819	949,914

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## 46. Statement of Financial Position and Reserves of the Company (Continued)

The Group measured the loss allowance of amounts due from subsidiaries equal to 12m ECL. As there is no significant increase in credit risk since initial recognition and those subsidiaries are profitable and of good credit records, which also maintain good cashflow, the management of the Group were of the opinion that the impairment loss was insignificant and no loss allowance was provided.

#### **Movement in reserves**

	Share premium RMB'000	Share options reserve RMB'000	Accumulated profits (losses) RMB'000	<b>Total</b> RMB'000
At 1 January 2017	782,734	34,128	26,669	843,531
Profits for the year	_	_	241,512	241,512
Forfeiture of share options	-	(2,640)	2,640	-
Recognition of equity-settled share based payments	-	8,987	-	8,987
Dividend recognised as distribution	-	-	(254,005)	(254,005)
At 31 December 2017	782,734	40,475	16,816	840,025
Profits for the year	_	_	319,491	319,491
Issue of new shares upon exercise of share options	669	(232)	_	437
Forfeiture of share options	-	(1,326)	1,326	-
Recognition of equity-settled share based payments	-	2,730	-	2,730
Dividend recognised as distribution	_	-	(340,769)	(340,769)
At 31 December 2018	783,403	41,647	(3,136)	821,914

# FINANCIAL SUMMARY

		Year ended 31 December					
	2014 RMB'000	2015 RMB'000	2016 RMB'000	2017 RMB'000	2018 RMB'000		
RESULTS							
Revenue	14,043,731	17,804,068	21,480,891	26,903,901	34,552,090		
Loss)/profit before taxation	(407,102)	745,629	1,145,083	1,407,588	1,604,911		
Taxation	114,115	(117,832)	(239,561)	(227,356)	(304,114)		
Loss)/profit for the year	(292,987)	627,797	905,522	1,180,232	1,300,797		
		As at 31 December					
	2014	2015	2016	2017	2018		
	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000		
ASSETS AND LIABILITIES							
Total assets	8,713,603	10,546,091	12,129,825	13,981,698	16,641,291		
Total liabilities	5,967,963	7,078,950	8,023,225	8,918,212	10,868,011		
Net assets	2,745,640	3,467,141	4,106,600	5,063,486	5,773,280		