2020迪拜世博会中国馆官方合作伙伴
CHINA PAVILION EXPO 2020 DUBAI UAE OFFICIAL PARTNER

2019 ANNUAL REPORT

Shanghai Electric Group Company Limited

(A joint stock limited company incorporated in the People's Republic of China with limited liability)

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Performance Highlights

Revenue for 2019 was

¥ 127,509 million

an increase of

26.05%

year-on-year

Profit attributable to owners of the Company for 2019 reached

¥ 3,720 million

an increase of

24.81%

year-on-year

Basic earnings per share for 2019 were

¥ 25 cents

an increase of

25%

year-on-year

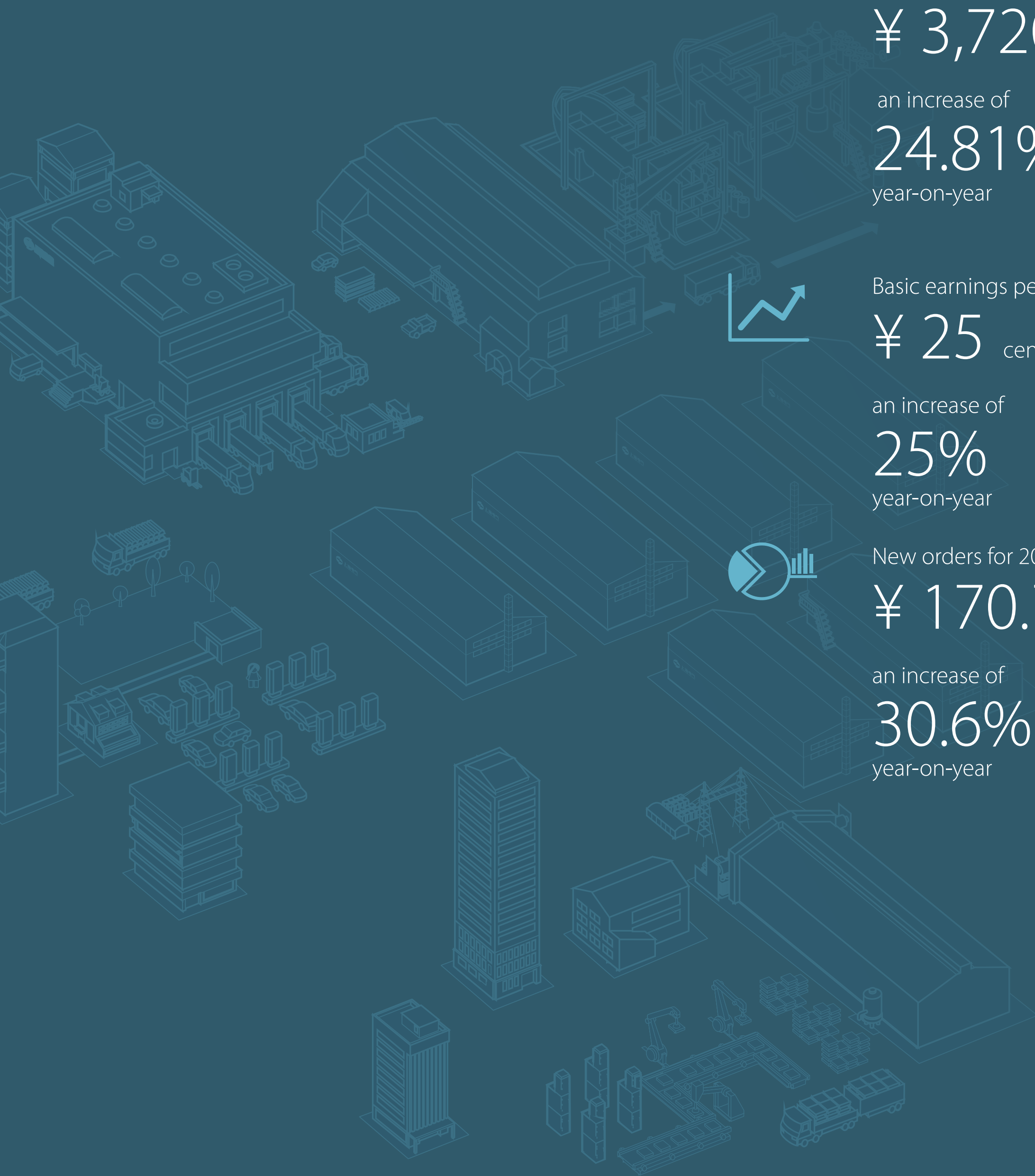
New orders for 2019 amounted to

¥ 170.79 billion

an increase of

30.6%

year-on-year



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Chairman's Statement

Chairman and CEO Zheng Jianhua

In 2019, as the complicated and tough global environment continued, most developed or emerging economies experienced a slowdown facing a sustained downward pressure. Amid slow global growth and Sino-U.S. trade disputes, etc., the PRC economy has managed to maintain an overall stable development in continuing the supply-side structural reform. In 2019, in line with the "three steps forward" strategy and playing the role of serving the national strategy as mainstay, Shanghai Electric continued to adjust and improve the industrial structure to accelerate the changes in growth driving forces. It also continued to promote reform and innovation of the institutional mechanism. With the above, the Company has achieved the business goals it set at the beginning of the year to deliver a stable and healthy development. Capitalizing on the important opportunities when our country is strongly promoting 5G networks and industrial internet, we are based on the advantages and characteristics of equipment manufacturing to "reshape" digitalization, intelligentization, internationalization, and servitization of traditional industries, and by actively exploring new format of digital economy, the intelligent development of industries was being further transformed. During the reporting period, the Group achieved revenue of RMB127,509 million, representing a year-on-year increase of 26.0%, which was attributable to a steady year-on-year increase in the revenue from various business segments resulting from the effective implementation of the strategies of the Group during the reporting period. During the reporting period, the gross profit ratio of the Group stood at 17.2%, representing a year-on-year decrease of 1 percentage point, primarily due to lower order price caused by fierce competition of coal-fired power equipment business and the adoption of the pricing strategy designed to further expand the market share of the elevator business. During the reporting period, the Group's net profit attributable to owners of the Company amounted to RMB3,720 million, representing a year-on-year increase of 24.8%. The earnings per share were RMB25 cents for 2019, representing a year-on-year increase of 25%. The weighted average return on net assets was 6.14%, representing a slight increase from the previous year.

During the reporting period, the core technological strength of Shanghai Electric was further enhanced while its independent technological research and development projects have won a number of provincial and ministerial awards. Development and application of coal-fired power equipment 620℃ high efficiency ultra supercritical 1000MW steam turbine Unit (《620℃等級高效超超臨界1000MW汽輪機組研製及應用》) won first progress prize of the 2019 China Machinery Industry Science and Technology Award. Six research and development projects, including the development of nuclear power nuclear island equipment AP1000 control rod drive mechanism (《AP1000控制棒驅動機構研製》), development and industrialization of lightweight large-scale wind turbines based on dynamic load precise control technology (《基於動態載荷精確控制技術的輕量化大型風電機組開發及產業化》), development and manufacturing of the world's first 300Mvar smart phase modifier island (《世界首創300Mvar智能調相機島開發與研製》), key technologies and complete equipment for environmentally friendly islands of power station based on efficient removal of multiple pollutants from coal-fired flue gas (《基於燃煤煙氣多種污染物高效脫除的電站環保島關鍵技術與成套裝備》), technology and application of non-stationary sound source identification for mechanical system in strong interference environment (《強干擾環境下機械系統非平穩聲源辨識技術及應用》), and research and application of anti-corrosion technology for offshore wind power equipment (《海上風電電器設備腐蝕防護技術研究及應用》) won second progress prizes of the 2019 China Machinery Industry Science and Technology Award. Four R&D projects including 660MW supercritical tower boiler for fully burned Xinjiang high alkali coal (《全燒新疆高堿煤的660MW超臨界塔式鍋爐》) won third progress prizes of the 2019 China Machinery Industry Science and Technology Award.

With the development trend of China's manufacturing industry, the Company is accelerating a transformation from traditional energy equipment to new energy equipment, and from high power consumption manufacturing to intelligent manufacturing. In recent years, the Company has built up an intelligent industrialization cluster based on diversified industrial ecosystem and accumulation of experience in big data applications. Shanghai Electric's manufacturing business has developed in a high-end and intelligent manner. The development and application of network information technology and industrial internet in the energy and industry fields both broaden applications in energy industry and empower intelligent manufacturing. At the same time, the Company integrated manufacturing and services by shifting from production-oriented manufacturing to service-oriented manufacturing, and is committed to improving the Company's core competitiveness. Based on industrial clusters and intelligent operation and maintenance, Shanghai Electric is becoming a system solution provider and data operator for smart city, smart energy, smart transportation and smart manufacturing.

At present, the Company seizes the opportunity of industrial intelligent development and focuses on three major areas: energy equipment, industrial equipment and integrated services. With the accumulated expertise in high-end equipment manufacturing, it strongly promotes the digitalization and informationization of energy and industry development for increasing manufacturing efficiency. To accelerate the Company's strategic transformation by integrating internal and external resources, we re-integrate and divide the subdivisions of original four segments, i.e. new energy and environmental protection equipment, high-efficiency clean energy equipment, industrial equipment and modern services into three major segments, energy equipment, industrial equipment and integrated services. The specific adjustments to the segments are as follows:

The energy equipment segment includes coal-fired power generation and corollary equipment, gas-fired power generation equipment, wind power equipment, nuclear power equipment, energy storage equipment, high-end vessels for chemical industry as well as power grid and industrial intelligent power supply system solutions;

The industrial equipment segment includes elevators, large and medium-sized electric motors, intelligent manufacturing equipment, industrial basic parts, environmental protection equipment and construction industrialization equipment;

The integrated services segment includes energy, environmental protection and automation engineering and services, covering traditional and new energy, comprehensive use of solid wastes, sewage treatment, flue gas treatment, rail transit and etc.; industrial internet services; financial services, covering financing leases and insurance brokerage; international trade services; high-end property services and etc.

During the reporting period, the Company obtained new orders in the amount of RMB170.79 billion, representing a year-on-year increase of 30.6%. In particular, new orders for energy equipment, industrial equipment and integrated services accounted for 33.2%, 26.7% and 40.1% of the total new orders, respectively. As at the end of the reporting period, our orders on hand amounted to RMB240.86 billion (with orders in the aggregate amount of RMB69.59 billion not yet coming into effect), an increase of 16.3% from the end of the preceding year. Within the order backlog by the end of the reporting period, orders for energy equipment, industrial equipment and integrated services accounted for 48.1%, 3.1% and 48.8% of the total orders on hand, respectively.

Energy Equipment

Shanghai Electric is the only nuclear power equipment manufacturing conglomerate with a complete industry chain covering main and auxiliary equipment for nuclear and conventional islands and heavy forgings for nuclear power plants while it maintains a leading market share in respect of nuclear island main equipment. During the reporting period, by implementing the technology development strategy of “mastering current generation technologies, developing next-generation technologies and exploring next-next-generation technologies (掌握一代，研製一代，跟踪開發一代)”, Shanghai Electric systematically proceeded with the production of nuclear island equipment for on-hand orders. During the reporting period, we obtained an order for six main pumps from Cangnan Nuclear Power Plant (蒼南核電站); we won the bid for two projects from the State Key Science and Technology Infrastructure, namely, the prototypes of main equipment and some of auxiliary system and the integrated test prototypes of spallation target LBE heat exchanger for reactors of accelerator-driven transmutation research device project of Institute of Modern Physics, the Chinese Academy of Science (中科院近代物理研究所), laying a solid foundation for the improvement of the nuclear power group's design capabilities and integrated project management capabilities. During the reporting period, we delivered a total of 43 sets/units of pressure vessels, steam generators, reactor vessel internals, control roddrive mechanisms and nuclear secondary and tertiary pumps. SEC - KSB Nuclear Power Pump & Valve Co., Ltd. (上海電氣凱士比核電泵閥有限公司) cooperated with State Power Investment Group Co., Ltd. (國家電力投資集團有限公司), taking 8 years to complete appraisal and test of the CAP1400 wet winding motor main pump prototype project, and solved the "bottleneck" of the key equipment of the CAP1400 demonstrative project. During the reporting period, Shanghai Electric Nuclear Power Equipment Co., Ltd. (上海電氣核電設備有限公司) was recognized as a qualified supplier of nuclear-grade main equipment from Westinghouse of the United States, which played a positive role in further promoting Shanghai Electric to become an international nuclear power equipment manufacturer. During the reporting period, we signed the first batch of Sino-Italian decommissioning and cooperation projects with Italy Ansaldo Nuclear Power Company and China Nuclear Environmental Protection Co., Ltd. (中核環保有限公司).This is an innovative measure for Shanghai Electric's nuclear power business to extend from the front-end market of the nuclear fuel cycle to the back-end market. We have reached a consensus with State Power Investment Group Co., Ltd. and Italy Ansaldo Nuclear Power Company, pursuant to which, we will keep practical cooperation around nuclear power market development, R&D, design and engineering construction, operation management and life cycle services, decommissioning and discharge. We are making active efforts to develop intelligent nuclear power equipment and innovate our business model, and are cultivating our innovative capabilities in design, equipment and service integration through setting up a technological R&D platform, so as to transform from an equipment vendor to a provider of “equipment integration + technical services”. In addition, we strive to upgrade our production mode for nuclear power products from “traditional discrete manufacturing” to “digital high-end equipment manufacturing” through building a collaborative management platform for digital manufacturing.

During the reporting period, we received new orders for nuclear power equipment of RMB1.48 billion, representing a year-on-year increase of 5.5%. Our orders on hand for nuclear power equipment by the end of the reporting period amounted to RMB18.08 billion, representing a year-on-year decrease of 16.8%.

In the field of wind power equipment, as China's largest offshore wind power equipment manufacturer, we take "the commitment to create promising energy" as our mission, and "becoming the world's leading wind power life cycle service provider" as our goal to create greater value for our customers. In the field of onshore wind power, during the reporting period, we won the order for 1.40GW wind turbine units for 6GW demonstrative project in the first phase of Inner Mongolia's Wulanchabu wind power base, the first wind power grid parity demonstration base in China. This is the largest onshore wind power order ever in the world. We won orders for 39 sets of 4MW onshore wind turbines and towers from the NORINCO International Croatia project, marking our formal entry into the European wind power market. In the field of offshore wind power, we continued to maintain our leading position in the domestic market. We have won successively the bids of State Power Investment Guangdong Jieyang Shenquan (國家電投廣東揭陽神泉) 200MW project, Three Gorges New Energy Jiangsu Rudong (三峽新能源江蘇如東) 800MW project and other offshore wind power projects. During the reporting period, China's first 8MW offshore wind turbine undertaken by Shanghai Electric was put into operation at the Shantou intelligent manufacturing base of Shanghai Electric. We have signed the first procurement framework agreement in relation to long-term support services for spare parts of offshore (intertidal) wind power batch project in China with Jiangsu Offshore Longyuan Wind Power Co., Ltd. (江蘇海上龍源風力發電有限公司), which provides an example of innovative business model for the offshore operation and maintenance market. Shanghai Electric's internally developed “Feng Yun” system, a remote management platform based on cloud computing and big data, has gained data access to almost 200 wind farms, aiming to improve the operating

quality of wind turbines with digital technology. The Company is advancing the spin-off of wind power business for listing on the SSE Star Market. With this spin-off, the development and innovation of our wind power business will further accelerate.
During the reporting period, we received new orders for wind power equipment of RMB22.38 billion, representing a year-on-year increase of 72.2%. Our orders on hand for wind power equipment by the end of the reporting period amounted to RMB29.81 billion, representing a year-on-year increase of 49.8%. Among orders for wind power equipment, new orders for offshore wind power equipment during the reporting period amounted to RMB12.25 billion, representing a year-on-year increase of 66.1%; the orders on hand for offshore wind power equipment at the end of the year amounted to RMB16.99 billion, representing a year-on-year increase of 40.7%.

With the further elimination of backward thermal power capacity and the continuous progress with the power system reform in China, our coal-fired power equipment business continued to improve product technology and service levels and maintained leading in the domestic market for high-efficiency coal-fired units. With simultaneous efforts in going global strategy, the Group obtained more orders in overseas market, partially offsetting the impact of the declining demand in domestic coal-fired power market. During the reporting period, we obtained orders of supplying three major equipment for Huaneng Jiangxi Ruijin (華能江西瑞金) 2×1000MW ultra supercritical secondary reheating boiler-turbine-generator set, HDPI Hunan Pingjiang (華電湖南平江) 2×1000MW ultra supercritical primary reheating steam turbine and turbine generator equipment, major equipment for boiler, steam turbine, and generator of Huaneng Dongjiakou Power Plant (華能董家口電廠) 2×350MW project successively. During the reporting period, Yangxi Power Plant Units 5 and 6, the world 's largest capacity coal-fired thermal power unit with the longest single-shaft system we have undertaken completed construction and were put into operation. Indonesia's Chiraza Phase III 1×1000MW project unit was formally put into commercial operation. This unit is the first 1000MW coal-fired power equipment exported from China for commercial operation overseas, counting much for increasing the influence of Shanghai Electric in overseas market.
During the reporting period, we acquired new orders for coal-fired power equipment of RMB9.01 billion, representing a year-on-year decrease of 13.7%. At the end of the reporting period, our orders on hand for coal-fired power equipment amounted to RMB50.41 billion, representing a year-on-year decrease of 24.1%.

In the field of gas turbines, we are committed to becoming a provider of integrated services covering the whole life cycle of gas turbines, with first-mover advantage in the domestic gas turbine market. During the reporting period, we signed supply contracts with Bengang Group for one AE94.2K gas turbine and syngas compressor unit. This is the first time that a gas turbine manufacturer in China has taken an order for ultra-low calorific value gas turbines. We signed gas turbine equipment contracts with Datang Group for 2 F-class gas turbine major equipment of Wanning (萬寧) natural gas power generation project. We signed contracts for the purchase of turbine islands and boiler island equipment for Guangdong Shante (廣東汕特) 2×460MW generating units for the gas-fired cogeneration power project. During the reporting period, we established the industrial gas turbine technology center of Shanghai Electric, which will focus on the development of independent technology and industrial gas turbine, carry out basic, cutting-edge and key generic technology research in response to national heavy-duty gas turbine projects, so as to promote the development of Shanghai Electric's gas turbine industry and improve product mix. Besides, we actively expanded to the gas turbine maintenance market, and secured orders in relation to the long-term support services for 12 gas turbines by the end of 2019. The Kushl Gas Turbine Long-term Service Contract in Bangladesh, as our first independent gas turbine long-term support service project we have undertaken overseas, came into effect officially.
During the reporting period, we acquired new orders for gas turbines of RMB6.55 billion, representing a year-on-year increase of 630.7%. At the end of the reporting period, our orders on hand for gas turbines amounted to RMB10.50 billion, representing a year-on-year increase of 41.9%.

In the field of energy storage, with the goal of becoming a leader in the domestic energy storage industry, we have captured further market share with strategic layout based on our technical research results for years in the field. During the reporting period, the core energy management system of Daxing International Airport was officially put into use, which was equipped with a lithium iron phosphate battery independently developed and manufactured by Shanghai Electric Gotion New Energy Technology Co., Ltd.（上海電氣國軒新能源科技有限公司）("Electric Gotion"). The mobile energy storage system in Xiong'an New District is connected to the grid. The system uses a mobile energy storage battery system independently developed and produced by Electric Gotion. In addition, Electric Gotion and Beiqi Foton Motor Co., Ltd.（北汽福田汽車股份有限公司）("Beiqi Foton Motor") have reached a long-term strategic cooperation agreement. Beiqi Foton Motor has launched a new energy mini logistics vehicle using Electric Gotion high-safety lithium iron phosphate battery, which has comprehensively improved security, charging time, endurance mileage and other performances. During the reporting period, the Company completed the acquisition of Shenzhen Yinghe Technology Co., Ltd（深圳市赢合科技股份有限公司） ("Yinghe Technology"), one of the earliest domestic companies engaged in the R&D, production and sales of lithium battery production equipment. Yinghe Technology has mastered the core technology of all aspects of lithium battery equipment, and is the only lithium battery company integrating front, mid- and back-end that can provide complete solutions, just fitting in the strategic layout of Shanghai Electric in the field of new energy. This acquisition will facilitate the rapid transformation of Shanghai Electric's scientific research achievements in the field of energy storage, and further optimize the industrial layout. During the reporting period, we received orders for power battery system of new energy bus from Nantong city, and will provide a total of 120 power battery systems for three models of vehicles of Zhong Tong Bus, Xiamen Golden Dragon and Higer Bus.

In the field of grid and industrial intelligent power supply system solutions, we actively promoted the development of new markets from power business to engineering, from traditional grid business to new grid technology. During the reporting period, we acquired Zhangjiagang Twentsche Cable Co., Ltd. (張家港特恩馳電纜有限公司), a domestic leading data cable manufacturer under Dutch TKH Group, which is in line with our development in the industrial customer market, especially the data center, 5G communication and commercial building. That is also conducive to enriching and broadening Shanghai Electric's data cable product portfolio, including special cable category. We provided a micro-grid power supply module for the "Lianmin Village Smart Energy First Village (連民村智慧能源第一村)" demonstrative project in Pudong, Shanghai. This project will promote applications of new energy in rural areas. Application promotion will be made in different scenarios. During the reporting period, we passed the verification for cable supply project of Shentong Metro, successively securing cable orders from Wuhan Metro and Shijiazhuang Metro, with metro operation and maintenance services to be engaged in.

During the reporting period, we acquired new orders for grid and industrial intelligent power supply system solutions of RMB13.02 billion, representing a year-on-year increase of 18.2%. At the end of the reporting period, our orders on hand for grid and industrial intelligent power supply system solutions amounted to RMB3.29 billion, representing a year-on-year increase of 33.6%.

During the reporting period, the energy equipment segment achieved revenue of RMB45,944 million, representing a year-on-year increase of 12.1%, which was mainly attributable to a faster growth of wind power business and consolidation of Suzhou Thvow Technology Co., Ltd. （蘇州天沃科技股份有限公司） ("Thvow Technology") acquired in late 2018. During the reporting period, gross profit ratio of the segment reached 13.7%, representing a year-on-year decrease of 1.4 percentage points, primarily due to lower gross profit ratio of coal-fired power equipment resulting from decreasing order price caused by fierce competition of coal-fired power equipment business.

Industrial Equipment

During the reporting period, the demand was driven by the continuous advancement of construction of rental housing and new urbanization, as well as the retrofit of obsolete elevators and the installation of elevators in old buildings. Nevertheless, due to the impact of factors such as rising prices of raw materials and overcapacity, China's elevator industry experienced all-round competition in terms of price, quality, delivery time and services. In response to the market situation and the trend of increasing concentration of strategic customers, Shanghai Mitsubishi Elevator Co., Ltd. （上海三菱電梯有限公司） ("SMEC") made greater effort in maintaining and developing relationships with major strategic customers during the reporting period. In particular, SMEC continued to work closely with core strategic partners such as Evergrande, China Overseas, Greenland, Country Garden, Longfor and Forte, and increased its effort in tracking core and major projects in the second-tier and third-tier cities. The rapidly increasing concentration of strategic customers has placed higher requirements on the full-process service capabilities from sales, installation, repairs andmaintenance, and the extended coverage of marketing service network. The demand for the retrofit of obsolete elevators is being released year by year. Aiming for “user needs and experience”, we apply the cutting-edge technology and energy saving and environmental protection concepts to the retrofit of obsolete elevators. During the reporting period, the number of retrofit of obsolete elevators by SMEC increased by more than 50% year-on-year. In terms of installing elevators in old buildings, we actively explore and launch “one-stop elevator installation services”, that is, “providing the whole life cycle one-stop services for residents in need of elevator installation covering ‘front-end agency procedures, mid-term installation design and construction, and later-stage elevator installation, repairs and maintenance'.” By the end of 2019, SMEC has established 30 one-stop service centers nationwide. During the reporting period, the installation of elevators in old buildings by SMEC increased by more than 30%. In addition, we continued to develop and expand our services on elevators, having built new service center, logistics center and training center. We established and improved effective operation model in engineering human resource management, process management, and service quality assurance. Upholding the philosophy of "service-based marketing", SMEC took the retrofit of obsolete elevators and the installation of elevators in old buildings as the key to create a new growth area for its services. SMEC promoted the application of the Internet of Things in its engineering services to increase the informatization of installation project management and sampling inspection on maintenance quality. Through the analysis and application of big data of customer information, the Group improved its operation efficiency and management control capability.

In the field of intelligent manufacturing, Shanghai Electric, under the three-year "Made in Shanghai" action plan, focuses on innovation-driven and industrial transformational development, and equips intelligent manufacturing with digital, network, and intelligent means. It aims to build an industrial cluster serving smart city and establish the intelligence and wisdom of Shanghai Electric. We have selected ten smart manufacturing demonstrative projects within the group, including smart factory, smart operation and maintenance, and smart supply chain projects. During the reporting period, the “power equipment (thermal and nuclear power) large-scale turbine generator smart factory” project of our turbine generator plant has passed the acceptance and assessment by experts organized by the Shanghai Economic and Information Commission (上海市經濟與信息委員會). The project is among the first batch of demonstrative projects for intelligent manufacturing standardization and new model application of MIIT, and also a state-level “smart factory”. We cooperated with the State Grid Shanghai Electric Power Company (國網上海市電力公司) in the Minhang Industrial Zone smart energy demonstrative project. This project aims to build a large-scale intelligent, green, and low-carbon “wind-solar energy storage and power charging” comprehensive energy model project for the industrial park. It consists of distributed power source, energy storage device, integrated charging pile for wind-solar energy storage and power-charging, and comprehensive energy intelligent management platform. The comprehensive energy intelligent management platform can realize industrial use of renewable energy, peak load shifting of electricity utilization, and demand control, for the purpose of saving energy and increasing utilisation efficiency in the park. During the reporting period, for Xiongan New Area, we participated in compiling the framework system of intelligent infrastructure, compiled the application systems, sensory sensing and data fusion, and joined the independent research and development of the first intelligent access device — X-Hub intelligent gateway, laying a foundation for the intelligent and digital construction of Xiongan New Area. During the reporting period, Germany Broetje Company won the bid of large-scale turnkey engineering order for the Russia United Airlines MS-21 second phase expansion project, this project is our first order in the Russian aircraft manufacturing industry.

During the reporting period, we acquired new orders for intelligent manufacturing of RMB10.53 billion, representing a year-on-year increase of 35.7%. At the end of the reporting period, our orders on hand for intelligent manufacturing amounted to RMB1.91 billion, representing a year-on-year increase of 41.1%.

In the field of construction industrialization, we focus on providing the full industry chain service covering prefabricated construction design, production equipment manufacturing, and PC component production. Shanghai Electric Matechstone Construction Technology Group Co., Ltd.（上海電氣研砼建築科技集團有限公司）("Matechstone") is a leader in the modernization of China's construction industry. In addition, Matechstone has been constructing an “intelligent manufacturing + industrial internet platform”, through which we are capable of integrating industry resources with management expertise while realizing intelligent operation of our own business.

During the reporting period, the industrial equipment segment achieved revenue of RMB46,409 million, representing a year-on-year increase of 11.6%, which was mainly attributable to the growth of elevator and electric motor business. During the reporting period, gross profit ratio of the segment reached 17.3%, representing a year-on-year decrease of 1.3 percentage points, primarily due to the adoption of the pricing strategy designed to further expand the market share of the elevator business.

Integrated Services

In the field of energy engineering and services, we actively promote the global strategy. Shanghai Electric has actively implemented the "One Belt and One Road" initiative and continued to cultivate overseas markets and markets in countries along the initiative. We have established an overseas engineering information sharing platform for the Group, sharing overseas engineering information resources of business segments such as thermal power, photovoltaics power generation, power transmission and distribution and wind power. Through the integration of resources to form a synergy, we leveraged the integrated brand advantages of Shanghai Electric and laid a solid foundation for accelerating global operations. During the reporting period, we undertook general contracting project for the largest single ground photovoltaic power station in southern Australia, the Kutana project, this is the first order for the Group to enter the Australian new energy market; we undertook a general contracting order for a 25.5MW photovoltaic power generation project in Greece; and won the bid for a 15MW Soyang Onodake (蘇陽尾之嶽) wind power general contracting project in Kyushu, Japan. In addition, we have undertook the general contracting project for an 800MW gas turbine combined cycle power plant in Rupsa, Bangladesh, and the general contracting project for a 2×400MW combined cycle gas power plant in Bali Island, Indonesia. During the reporting period, Suncore No. 1 (英國太陽芯一號) photovoltaic power generation engineering general contracting project contracted by Shanghai Electric was completed and put into operation, and we have successively obtained the general contract of Suncore No.2, No.3 and No.4 projects, and the total installed capacity of the above photovoltaic power generation projects reached 97MW. During the reporting period, we won the EPC general contract for an open-pit coal mine project in Block 1 of THAR Coalfield (塔爾煤田) in Pakistan. This is a key energy cooperation project for the "China-Pakistan Economic Corridor", marking that Shanghai Electric has officially entered the field of open-pit coal mine construction. During the reporting period, we acquired Qingdao Huachen Weiye Power Technology Engineering Co., Ltd.(青島華晨偉業電力科技工程有限公司), which is conducive for us to the formation of the entire industry chain supply and lifetime service capabilities in the energy industry from project development, design and consultation, equipment manufacturing, engineering construction to after-sales service, operation and maintenance, and to accelerate the transformation to the entire industry chain services.

During the reporting period, we acquired new orders for energy engineering and services of RMB55.62 billion, representing a year-on-year increase of 27.1%; among which, the overseas orders amounted to RMB13.71 billion, representing a year-on-year decrease of 54.5%, mainly due to our successful bid for the world's largest CSP project in Dubai in 2018 with a contract value of USD 3.3 billion, causing value of 2018 new orders for power plant engineering from overseas much bigger than those in normal years. At the end of the reporting period, our orders on hand for energy engineering and services amounted to RMB106.63 billion, representing a year-on-year increase of 41.0%; among which, the overseas orders amounted to RMB60.44 billion, representing a year-on-year decrease of 0.4%.

In the field of environmental protection engineering and services, we have maintained rapid development momentum, and achieved technological and market breakthroughs in various fields such as power plant environmental protection, solid waste treatment and water treatment. During the reporting period, the Company undertook the equipment procurement contract for the boiler, turbine and generator of the waste-to-energy project of Shanghai Pudong Haibin Resource Recycling Center（上海浦東海濱資源再利用中心）. This is currently the largest single-machine waste-to-energy project for boiler, turbine and generator in terms of power generation capacity in China, and has been listed as a key project of Shanghai, the project will effectively alleviate the problem of garbage disposal in Pudong, Shanghai. We won the order for the 1×35MW steam turbine generator units for Huangyan Waste-to-Energy Plant in Taizhou, Zhejiang Province, and achieved the first breakthrough in the medium-sized equipment in the waste-to-energy field. We also won the bid for the reconstruction (incineration power generation) project of the waste treatment plant (with a daily treatment capacity of 1,500 tons) in Dandong City, Liaoning Province, and officially entered the waste treatment market in northern China. During the reporting period, Nantong Hai'an Hazardous Waste Treatment Center（南通海安危廢處置中

心）invested by us in Jiangsu Province, was formally put into operation; we also obtained a general contracting project for the construction (with a hazardous waste treatment capacity of 193,000 tons/year) of Guizhou Xinghe Comprehensive Treatment and Recycling Center for Environmentally Hazardous Waste (貴州星河環境危險廢物綜合處置與循環再利用中心). In addition, we are actively cultivating dry anaerobic fermentation treatment technology and harmless treatment technology for industrial waste salt, etc., in order to expand the waste classification and treatment business and the industrial waste salt treatment business layout. During the reporting period, we won a bid for a soil remediation project in Shanghai, and we will use technologies such as ectopic chemical oxidation remediation to remediate about 17,000 square meters of contaminated sites (Phase II) on Huangshan Road, Jing'an District. Our water treatment business focuses on rural distributed water treatment business and regional comprehensive water environmental improvement projects. During the reporting period, we successively signed the comprehensive water environment improvement project in Qidong City, Jiangsu Province, the rural domestic sewage treatment project of Shanghai Chongming Farm Co., Ltd., Bright Food Group (光明食品集團上海崇明農場有限公司), and the wastewater treatment system project of the 5Gwh Energy Storage System Base of Shanghai Electric Guoxuan Nantong (上海電氣國軒南通5Gwh儲能系統基地).
During the reporting period, we acquired new orders for environmental protection engineering and services of RMB10.15 billion, representing a year-on-year increase of 111.3%. At the end of the reporting period, our orders on hand for environmental protection engineering and services amounted to RMB7.16 billion, representing a year-on-year increase of 60.2%.

Based on the industrial internet exploration in elevator, wind power, thermal power and other fields, we officially released the "SEunicloud" industrial internet platform in 2019 to realize the transformation of the business into a phase of digitization, networking and intelligentization of products, production, services, management within the group. SEunicloud integrates emerging technologies such as artificial intelligence, big data, and cloud computing, and aims to build a multi-enabling digital ecology inside and outside Shanghai Electric, realizes the networking and cloud computing of industrial equipment, and promotes the upgrading and rebuilding of industrial modes, operating modes and value modes. We are committed to using 5G, artificial intelligence and other emerging technologies to build our capabilities of industrial internet and to empower industrial development. After forming mature industrial internet capabilities, we will further expand the industrial chain, to build a development ecosystem for industrial internet with characteristics of Shanghai Electric that focuses on equipment and energy, drive the external output of the Group's integrated solutions, and empower the China manufacturing. During the reporting period, we accelerated the cloud-based application of business systems, and established the smart supply chain platform of Shanghai Electric. By using technologies such as network collaboration and big data, the digitalized procurement empowered the overall procurement segment and processes. We have also actively participated in the construction of the Yangtze River Delta Industrial Internet Integrated Development Demonstration Zone. During the reporting period, we won the bid for the Smart Energy Big Data Platform Project in Yancheng, Jiangsu Province. This project is to provide multi-directional data access and support for various energy projects in Yancheng to realize intelligent management of the entire energy chain, and it is the first urban smart energy big data platform project we have obtained, marking the formal entry of Shanghai Electric into the field of industrial digitalization.

In the field of automation engineering and services, we are committed to helping customers build a streamlined, rationalized, standardized, automated and unmanned manufacturing system. During the reporting period, we won the bid for the first aquatic deep processing intelligent factory project in China, to provide a comprehensive solution for aquatic deep processing intelligent factory for Wuhan Lumiai Intelligent Technology Co., Ltd. (武漢盧米艾智慧科技有限公司), a subsidiary of Jiangsu Canhu Group (江蘇餐虎集團), and to build a digital demonstration factory as an industry benchmark in the aquatic processing industry. We also won the bid for the intelligent manufacturing demonstration line project of Zhejiang Wonly Security Technology Co., Ltd. (浙江王力安防科技股份有限公司), a global leader in the security industry. This project is aimed to drive innovation in the industrial model through effective information sharing. In the field of rail transit, during the reporting period, we won the bid for the Huinan smart station project of Line 16 of Shanghai Rail Transit (上海市轨道交通16线惠南站智慧车站项目). This project is one of the first batch of Shanghai Rail Transit Smart Station Pilot Stations, in which, remote control functions such as escalators and shielded doors, as well as station operation are planned to achieve intelligent management. During the reporting period, we also won the bid for Line 4 interconnection project of Hefei Rail Transit (合肥轨道交通4号

线互联互通项目). This project enables trains to achieve cross-line operations without speed reduction and degradation, and supports vehicles on other lines to enter current line to meet the interconnection needs of urban rail transit, it is of great significance to save passengers' travel time and improve the operation efficiency of urban rail transit.

During the reporting period, in order to coordinate execution of our group strategy, our financial business accelerated the development at three levels of "managing treasury, promoting product sales and project contracting, and supporting the development of new businesses and introduction of new technologies", and evolved towards a comprehensive financial service provider with presence in both domestic and overseas markets. During the reporting period, we enhanced efforts on cooperation with financial institutions to move forward the integration between business and finance, providing funding for the equipment sales and project contracting of the Group by way of fueling development through investments. Our financial leasing company leverages the “vendor leasing model” to play a role in boosting the industry by financing leases, supporting the development of new energy businesses such as seawater desalination, energy storage, environmental protection, solar photovoltaic, solar thermal and distributed energy. During the reporting period, we started cooperation with Eland (a Spain company) to expand the channel for the Group to obtain European new energy projects. Focusing on energy, environmental protection and other fields, we have initiated and established a number of industrial investment funds in cooperation with professional institutions. During the reporting period, the funds we invested have signed a number of agreements to participate in project investments in biomass power, wind power, photovoltaic power and other new energy. During the reporting period, we obtained the approval from the Hong Kong Insurance Authority and established China's first professional captive insurance company under equipment manufacturing enterprise group. The insurance company will become Shanghai Electric's insurance management platform, risk management tool and cost management center. It also will help the Group integrate domestic and international reinsurance market resources, and provide risk management and insurance services in the whole life cycle for the Group's “One Belt and One Road” projects, guaranteeing the Group's execution of "going global" strategy.

During the reporting period, the integrated services segment achieved revenue of RMB44,316 million, representing a year-on-year increase of 83.5%, which was mainly attributable to faster growth of environment protection engineering and services business as well as consolidation of the engineering services business of Thvow Technology. During the reporting period, gross profit ratio of the segment reached 16.7%, representing a year-on-year decrease of 1.6 percentage points, primarily due to change in gross profit margin structure of our environment protection engineering business.

Looking forward, we will devote efforts to accelerate the adjustment and optimization of industrial structure, cultivate and enter strategic emerging industries, and expand the innovation of institutional mechanisms. We will seize the opportunities for technical and industrial transformation, and based on 5G, big data, cloud computing and other technologies, to promote digital, informational, networking, and intelligent transformation to achieve improvements in the level of technology, services, and management. Through continuous enhancement and expansion of our core competitiveness, the potential for new and rapid development of Shanghai Electric will be inspired. We will continue to struggle forward for a great blueprint of “Electric Dream”, and achieve the grand goal of forging Shanghai Electric into a respected and global top-teir company.

Lastly, I would like to take this opportunity to express my gratitude to our shareholders for their support to and care for the Group over the past year. I would also like to thank our directors, supervisors, management and staff for their efforts and dedication over the past year.

Let's join hands and work hard together to achieve a new record of brilliant results!

Zheng Jianhua
Chairman and CEO
Shanghai, the PRC,
15 April 2020

Corporate Profile

Corporate Information

Legal name of the Company (Chinese)	上海電氣集團股份有限公司
Abbreviated legal name of the Company (Chinese)	上海電氣
Legal name of the Company (English)	Shanghai Electric Group Company Limited
Abbreviated legal name of the Company (English)	Shanghai Electric
Company's legal representative	Zheng Jianhua
Company's authorized representatives	Zheng Jianhua, Huang Ou
Company's alternative authorized representative	Li Chung Kwong Andrew (FCCA, FCPA, FCA, CIA)
Company Secretary	Li Chung Kwong Andrew (FCCA, FCPA, FCA, CIA)

Contact Person and Contact Details

	Secretary to the Board
Name	Fu Rong
Correspondence address	No. 110 Sichuan Middle Road, Huangpu District, Shanghai
Telephone, fax and email	+86 (21) 33261888/+86 (21) 34695780 /ir@shanghai-electric.com

Summary of Basic Information

Registered address	30/F, Maxdo Center, No.8 Xingyi Road, Shanghai (zip code: 200336)
Business address	No. 110 Sichuan Middle Road, Huangpu District, Shanghai (zip code: 200002)
Company website	http://www.shanghai-electric.com
Company email	service@shanghai-electric.com

Information Disclosure and Place for Inspection of Annual Report of the Company

Company's designated newspapers for information disclosure	China Securities Journal, Shanghai Securities News, Securities Times
The Company's annual reports available at	Office of the Board of the Company
Website designated for publishing annual report required by China Securities Regulatory Commission	www.sse.com.cn
Website designated for publishing annual report required by The Stock Exchange of Hong Kong Limited	www.hkexnews.hk

Summary of the Company's Shares

Class of Shares	Place of Listing of Shares	Abbreviation of Shares	Stock Code
A shares	The Shanghai Stock Exchange	上海電氣	601727
H shares	The Stock Exchange of Hong Kong Limited	SH Electric	02727

Registrar and Transfer Office

A Shares: Shanghai Branch of China Securities Depository and Clearing Corporation Limited

H Shares: Computershare Hong Kong Investor Services Limited

Other Relevant Information

Date of incorporation of the Company	1 March 2004
Place of incorporation of the Company	Shanghai, PRC
Name of domestic auditors appointed by the Company	PricewaterhouseCoopers Zhong Tian LLP
Business address of domestic auditors appointed by the Company	11/F PricewaterhouseCoopers Center, Link Square 2, 202 Hu Bin Road, Huangpu District, Shanghai, PRC
Name of international auditors appointed by the Company:	PricewaterhouseCoopers
Business address of international auditors appointed by the Company:	20/F, Prince Building, Central, Hong Kong
Legal advisers appointed by the Company as to PRC laws:	Grandall Law Firm (Shanghai)
Legal advisers appointed by the Company as to Hong Kong laws and U.S. laws:	Clifford Chance
Legal advisers appointed by the Company as to Japanese laws:	Anderson Mori & Tomotsune

Five-year Financial Summary

(In accordance with the Hong Kong Financial Reporting Standards ("HKFRS"))

Unit: '000,000 Currency: RMB

	2015 (Restated)	2016 (Restated)	2017	2018	2019
Revenue and Profit					
Revenue	87,441	88,507	79,544	101,158	**127,509**
Profit before tax	6,484	5,925	5,365	6,008	**7,263**
Tax	(1,434)	(1,283)	(522)	(677)	**(1,279)**
Profit for the year	5,050	4,642	4,843	5,331	**5,984**
Attributable to:					
Owners of the Company	2,314	2,355	2,627	2,980	**3,720**
Non-controlling interests	2,736	2,287	2,216	2,351	**2,264**
Dividend			1,354	905	
Earnings per share attributable to ordinary equity holders of the Company					
Basic Profit for the year (cents)	18.04	17.14	18.72	20.24	**24.95**
Assets and Liabilities					
Non-current assets	40,285	48,927	54,989	66,794	**81,323**
Current assets	135,943	137,674	144,357	151,728	**199,201**
Current liabilities	(102,985)	(106,375)	(111,320)	(119,623)	**(164,061)**
Net current assets	32,958	31,299	33,037	32,105	**35,140**
Total assets less current liabilities	73,243	80,226	88,026	98,899	**116,463**
Non-current liabilities	(16,219)	(17,807)	(17,304)	(25,262)	**(24,873)**
Net assets	57,024	62,419	70,722	73,637	**91,589**
Equity attributable to owners of the Company	42,450	47,900	55,537	57,290	**63,346**
Non-controlling interests	14,574	14,519	15,185	16,347	**28,243**

Comparative figures for the years 2015 and 2016 have been restated in accordance with the reporting requirements for business combination under common control.

Key Accounting Data and Financial Indicators

Key accounting data and financial indicators of the Company at the end of the reporting period for the past two years

(in accordance with the HKFRS)

Unit: '000 Currency: RMB

Key accounting data	2019	2018	Year-on-year increase/decrease (%)
Revenue	127,508,964	101,157,525	26.05
Profit before tax	7,263,034	6,008,116	20.89
Net profit attributable to owners of the Company	3,719,804	2,980,460	24.81
Net cash flows generated from operating activities	10,505,138	5,806,585	80.92
	At the end of 2019	At the end of 2018	Year-on-year increase/decrease (%)
Total assets	280,523,589	218,521,865	28.37
Equity attributable to owners of the Company	63,345,856	57,290,196	10.57
Key financial indicators	2019	2018	Year-on-year increase/decrease (%)
Basic earnings per share (RMB/share)	0.25	0.20	25.00
Diluted earnings per share (RMB/share)	0.25	0.20	25.00
Weighted average return on net assets (%)	6.14	5.26	An increase of 0.88 percentage point
Net cash flows per share generated from operating activities (RMB/share)	0.70	0.39	79.49
	At the end of 2019	At the end of 2018	Year-on-year increase/decrease (%)
Net assets per share attributable to shareholders of the Company (RMB/share)	4.18	3.89	7.46

Note: For details about the annual report prepared under the PRC GAAP, please refer to the website designated by the China Securities Regulatory Commission at http://www.sse.com.cn.

Differences between the PRC and the international accounting standards

Differences in net profit and net assets represented in the financial reports prepared under the HKFRSs and the PRC GAAP

Unit: '000 Currency: RMB

	Net profit attributable to owners of the Company		Net assets attributable to owners of the Company	
	For the year ended 31 December 2019	**For the year ended 31 December 2018**	**31 December 2019**	**1 January 2019**
Amounts under the PRC GAAP	3,501,037	3,016,525	63,345,856	57,290,196
Adjustments under the HKFRSs				
Employee reward and welfare fund	(41,046)	(45,053)		
Work safety expenses	399	8,988		
Policy-based relocation compensation for subsidiaries	259,414			
Amounts under the HKFRSs	3,719,804	2,980,460	63,345,856	57,290,196

Share Capital Structure

As at 31 December 2019	Number of shares	Approximate percentage of issued share capital
A shares	12,179,550,418	80.38%
H shares	2,972,912,000	19.62%
Total	15,152,462,418	100.00%

Disclosure of Interests

Substantial shareholders' and other persons' interests and short positions in shares and underlying shares

The followings are interests and short positions of substantial shareholders as at 31 December 2019 as recorded in the register required to be kept by the Company pursuant to Section 336 of the Securities and Futures Ordinance, Hong Kong ("SFO") and as to the knowledge of the Company:

Name of Substantial Shareholder	Class of shares	Capacity	Note	Number of shares	Nature of Interest	Approximate percentage of shareholding in the relevant class of shares (%)	Approximate percentage of shareholding in the total issued share capital of the Company (%)
State-owned Assets Supervision and Administration Commission of Shanghai Municipal Government	A	Interest of controlled corporation	1	9,053,771,599	Long position	74.34	59.75
	H	Interest of controlled corporation	1	303,642,000	Long position	10.21	2.00
Shanghai Electric (Group) Corporation	A	Beneficial owner	1	8,662,879,405	Long position	71.13	57.17
	H	Beneficial owner	1	270,708,000	Long position	9.11	1.79
	H	Interest of controlled corporation	1,2	32,934,000	Long position	1.11	0.22
Shenergy Group Company Limited	A	Beneficial owner	1	390,892,194	Long position	3.21	2.58
Sarasin & Partners LLP	H	Investment manager		189,238,000	Long position	6.37	1.25

Notes

(1) Shanghai Electric (Group) Corporation (上海電氣(集團)總公司) and Shenergy (Group) Company Limited (申能(集團)有限公司) were wholly owned by State-owned Assets Supervision and Administration Commission of Shanghai Municipal Government (上海市國有資產監督管理委員會) and accordingly, their interests in the A shares and H shares of the Company were deemed to be the interests of State-owned Assets Supervision and Administration Commission of Shanghai Municipal Government.

(2) Shanghai Electric (Group) Corporation (上海電氣(集團)總公司) through its wholly-owned subsidiary, Shanghai Electric Group Hongkong Company Limited (上海電氣集團香港有限公司), held H shares of the Company.

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Save as disclosed above, the Company is not aware of any other person having any interests or short positions in the shares or underlying shares of the Company as at 31 December 2019 required to be recorded in the register kept by the Company pursuant to Section 336 of the SFO.

Directors', supervisors' and chief executives' interests and short positions in shares, underlying shares and debentures

As at 31 December 2019, the interests and short positions of the directors, supervisors and chief executives of the Company (as defined in the Rules Governing the Listing of Securities on the Stock Exchange of Hong Kong Limited (the "Hong Kong Listing Rules")) of the Company in the shares, underlying shares and debentures of the Company and its associated corporations (as defined in the SFO) as recorded in the register of interests required to be kept by the Company pursuant to Section 352 of the SFO, or as otherwise notified to the Company and the Hong Kong Stock Exchange pursuant to the "Model Code for Securities Transactions by Directors of Listed Issuers" (the "Model Code") set out in Appendix 10 of the Hong Kong Listing Rules were as follows:

Name of director	Class of shares	Capacity	No. of shares	Nature of interests	Approximate percentage of the relevant class of shares (%)	Approximate percentage of the total share capital of the Company (%)
Huang Ou	A	Beneficial owner	765,000	Long position	0.006	0.005

Save as disclosed above, as at 31 December 2019, none of the directors, supervisors or chief executives of the Company had any interest or short position in the shares, underlying shares or debentures of the Company or its associated corporations as recorded pursuant to Section 352 of the SFO, or as otherwise notified to the Company and the Hong Kong Stock Exchange pursuant to the Model Code.

Disclosure of Interests

Directors, Supervisors, Senior Management and Staff

Interests in shares and remuneration of current Directors, Supervisors and Senior Management as well as Directors, Supervisors and Senior Management resigned during the reporting period

Name	Position	Gender	Age	Current term of office commencing on	Current term of office ending on	Number of shares held at the beginning of the year	Number of shares held at the end of the year	Changes in the number of shares for the year	Reason for the change	Total payable remuneration received from the Company during the reporting period (RMB in ten thousand) (before tax)
Zheng Jian-hua	Chairman of the Board and Chief Executive Officer	Male	59	18 September 2018	17 September 2021					117.50
Huang Ou	Executive Director and President	Male	48	18 September 2018	17 September 2021		765,000	765,000	Note	136.77
Zhu Zhaokai	Executive Director	Male	51	18 September 2018	17 September 2021					71.80
Zhu Bin	Executive Director	Male	58	18 September 2018	17 September 2021					104.78
Yao Minfang	Non-executive Director	Female	52	18 September 2018	17 September 2021					
Li An	Non-executive Director	Female	58	18 September 2018	17 September 2021					
Chu Junhao	Independent Non-executive Director	Male	74	18 September 2018	17 September 2021					25.00
Xi Juntong	Independent Non-executive Director	Male	56	18 September 2018	17 September 2021					25.00
Xu Jianxin	Independent Non-executive Director	Male	64	14 November 2019	17 September 2021					4.17
Zhou Guox-iong	Chairman of the Supervisory Committee	Male	62	18 September 2018	17 September 2021					
Hua Xing-sheng	Vice Chairman of the Supervisory Committee	Male	59	18 September 2018	17 September 2021					103.24
Han Quanzhi	Supervisor	Male	55	18 September 2018	17 September 2021					
Zhang Yan	Supervisor (employee representative)	Female	44	20 May 2019	17 September 2021					29.21
Yuan Sheng-zhou	Supervisor (employee representative)	Male	54	20 May 2019	17 September 2021					29.76
Lv Yachen	Vice president	Male	59	18 September 2018	17 September 2021					107.46

Name	Position	Gender	Age	Current term of office commencing on	Current term of office ending on	Number of shares held at the beginning of the year	Number of shares held at the end of the year	Changes in the number of shares for the year	Reason for the change	Total payable remuneration received from the Company during the reporting period (RMB in ten thousand) (before tax)
Dong Jianhua	Vice president	Male	54	18 September 2018	17 September 2021		594,000	594,000	Note	153.05
Zhang Ke	Vice president	Male	59	18 September 2018	17 September 2021					107.46
Chen Ganjin	Vice president	Male	51	18 September 2018	17 September 2021		594,000	594,000	Note	129.63
Gu Zhiqiang	Vice president	Male	55	18 September 2018	17 September 2021		594,000	594,000	Note	126.17
Jin Xiaolong	Vice president	Male	52	18 September 2018	17 September 2021		594,000	594,000	Note	106.65
Hu Kang	Chie Financial Officer	Male	56	18 September 2018	17 September 2021		594,000	594,000	Note	111.08
Tong Liping	Chief Legal Officer	Female	48	18 September 2018	17 September 2021		396,000	396,000	Note	159.89
Fu Rong	Secretary to the Board	Female	49	18 September 2018	17 September 2021		396,000	396,000	Note	135.42
Zhang Ming-jie	Chief Investment Officer	Male	56	18 September 2018	17 September 2021		396,000	396,000	Note	87.65
Li Bin	Supervisor (employee representative) (resigned)	Male	58	18 September 2018	21 February 2019					15.70
Zhu Xi	Supervisor (employee representative) (resigned)	Female	55	18 September 2018	19 May 2019					79.21
Kan Shun Ming	Independent Non-executive Director (resigned)	Male	62	18 September 2018	13 November 2019					22.92
Total	/	/	/	/	/		4,923,000	4,923,000	/	1,989.52

Note:The reason for the change of number of shares during the reporting period was that the Company granted the above-mentioned directors and senior managers restricted A shares under the share incentive scheme.

Major work experience

Zheng Jianhua

Mr. Zheng currently serves as the secretary of CPC Party Committee, the Chairman of the Board and the chief executive officer of the Company. He is also the chairman of the board of directors of Shanghai Electric (Group) Corporation. Mr. Zheng Jianhua has over 30 years of experience in equipment manufacturing business. Mr. Zheng was formerly the president of Shanghai Turbine Generator Co., Ltd., the general manager of Shanghai Electric Group Shanghai Electric Machinery Co., Ltd., the president of Shanghai Electric Power Generation Group, the chairman of the board of directors of Shanghai Electric Power Generation Equipment Co., Ltd., the vice president of Shanghai Electric (Group) Corporation, an executive director and the president of Shanghai Electric Group Company Limited, and the vice chairman of Shanghai Electric (Group) Corporation. Mr. Zheng Jianhua has obtained a master's degree in business administration from China Europe International Business School. He is a professor-level senior economist.

Huang Ou

Mr. Huang currently serves as a Director, the president and the deputy secretary of CPC Party Committee of the Company. Mr. Huang has extensive experience in the power generation equipment manufacturing industry. He formerly served as the president of Shanghai Turbine Co., Ltd. from 2004 to 2006, the vice president of Shanghai Electric Power Generation Equipment Co., Ltd. from 2007 to 2009, the executive vice president of Shanghai Electric Power Generation Group from 2006 to 2013, the chief technology officer of Shanghai Electric Group Company Limited from 2011 to 2015, the vice president of Shanghai Electric Group Company Limited from 2015 to 2016 and the deputy director of Shanghai Municipal Commission of Economy and Informatization from 2016 to 2018. Mr. Huang Ou graduated from Shanghai Jiao Tong University with a master's degree in engineering and is a senior engineer of professorial level.

Zhu Zhaokai

Mr. Zhu currently serves as a Director and the deputy secretary of CPC Party Committee. Mr. Zhu Zhaokai has extensive experience in the power generation equipment manufacturing industry. He served as the deputy secretary of CPC Party Committee and secretary of Commission for Discipline Inspection of the turbine factory of Shanghai Electric Power Generation Equipment Co., Ltd. and Shanghai Turbine Works Co., Ltd. from 2001 to 2009, and the secretary of CPC Party Committee and an executive director of the turbine factory of Shanghai Electric Power Generation Equipment Co., Ltd. and Shanghai Turbine Works Co., Ltd. from 2009 to 2011. He served as head of the human resources department of Shanghai Electric (Group) Corporation from 2011 to 2018 and the secretary of CPC Party Committee of Shanghai Electric Power Generation Group from 2013 to 2018. Mr. Zhu graduated from Hefei University of Technology with a bachelor's degree in engineering and from Shanghai Jiao Tong University with a master's degree in business administration. He is a senior economist.

Zhu Bin

Mr. Zhu currently serves as a Director and the chairman of labor union of the Company, the chairman of Shanghai Mechanical and Electrical Union, and a director of Shanghai Electric (Group) Corporation. Mr. Zhu has extensive experience in the power generation equipment manufacturing industry. Since he joined the group in 1983, Mr. Zhu successively served as the assistant to president and the vice president of Shanghai Turbine Works Co., Ltd., an executive director, the general manager and the deputy secretary of CPC Party Committee of Shanghai Power Station Auxiliary Equipment Works., Ltd., the vice chairman, the president and the deputy secretary of CPC Party Committee of Shanghai Power Equipment Co., Ltd., the executive vice president of Shanghai Electric Power Generation Group, the vice chairman and president of Shanghai Electric Power Generation Equipment Co., Ltd., and the assistant to president and chief operation officer of Shanghai Electric Group Company Limited. Mr. Zhu graduated from Xi'an Jiao Tong University with a master's degree in business administration. He is a senior engineer.

Yao Minfang

Ms. Yao currently serves as a non-executive Director of the Company. Ms. Li served as the deputy chief economist and director of the Technical Innovation Center of Shenergy (Group) Company Limited, director of Shenergy Company Limited, secretary of the Party Committee and chairman of Shanghai LNG Company Limited. Ms. Yao was the principal and then deputy manager of the investment department of Shenergy Company Limited from 2000 to 2006. She has been the deputy manager and then the manager of the investment department, a deputy chief engineer of Shenergy (Group) Company limited from September 2006. Ms. Yao graduated from the dynamics department of the University of Shanghai for Science and Technology with a master's degree and is a senior engineer of professorial level.

Li An

Ms. Li currently serves as a non-executive Director of the Company, the vice president and a director of Shanghai Guosheng Group Company Limited (上海國盛（集團）有限公司), and a director of each of Arcplus Group PLC (華東建築集團股份有限公司), Shanghai Tunnel Engineering Co. Ltd. (上海隧道工程股份有限公司) and Shanghai Pharmaceuticals Holding Co., Ltd. and Shanghai Lingang Economic Development (Group) Co., Ltd.. Ms. Li served as the director of the Property Rights Division and the Center of Property Rights of Shanghai Municipal State owned Assets Supervision and Administration Commission from November 2009 to August 2014. She was the vice president of Shanghai Guosheng Group Company Limited from August 2014 to January 2017, and has served as the vice president and director of Shanghai Guosheng Group Company Limited since January 2017. Ms. Li holds a Bachelor's Degree in Engineering and is an engineer.

Chu Junhao

Mr. Chu is an academician of the Chinese Academy of Sciences. He currently serves as an independent non-executive Director of the Company, a researcher of Shanghai Institute of Technical Physics, the deputy director of the Academic Committee of East China Normal University, the director of Shanghai Solar Cells Research and Development Center ,and an independent director of Shanghai Cambridge Technology Co., Ltd. (上海劍橋科技股份有限公司), Hengtong Optic-Electric Co,.Ltd. (江蘇亨通光電股份有限公司) and Shanghai Tunnel Engineering Co. Ltd. (上海隧道工程股份有限公司). Mr. Chu is mainly engaged in scientific and technological research of infrared optoelectronic physics and semiconductors. He has won the National Natural Science Award (國家自然科學獎) three times, Provincial Technological Progress Award and Natural Science Award (省部級科技進步獎和自然科學獎) 12 times, Outstanding Individual Award on the State Key Laboratory Scheme (國家重點實驗室計劃先進個人獎), and Outstanding Individual Award on the State 973 Program (國家973計劃先進個人獎). In recent years, Mr. Chu has chaired the "Modern Infrared Optoelectronic Physics and Focal Plane Device Physics" (現代紅外光電子物理和焦平面器件物理) (2003-2011) of National Natural Science Foundation's Innovative Research Group Project, and presided over "Spin Quantum Control in Semiconductor Quantum Structures" (半導體量子結構中的自旋量子調控) (2007-2011) and "Solid-state Quantum Devices and Circuits" (固態量子器件和電路) (2013-2017) of the Quantum Control Projects under the Major National Scientific Research Program (known as the "973 Program"). Mr. Chu and his colleagues established the Key Laboratory of Polar Materials and Devices under the Ministry of Education (極化材料和器件教育部重點實驗室), Shanghai Key Laboratory for Multidimensional Information Processing (多維度信息處理上海市重點實驗室), and Shanghai Solar Cells Research and Development Center (上海太陽能電池研發中心). Mr. Chu obtained a doctoral degree from Shanghai Institute of Technical Physics of the Chinese Academy of Sciences.

Xi Juntong

Mr. Xi is a professor of Mechanical Manufacture and Automation and at the State Key Laboratory of Mechanical System and Vibration and a doctoral supervisor of Shanghai Jiao Tong University. He currently serves as an independent non-executive Director of the Company, the acting dean of Shanghai Intelligent Manufacturing Institute (上海智能製造研究院) and the head of Shanghai Key Laboratory of Network-based Manufacturing and Enterprise Informatization(上海市網絡化製造與企業信息化重點實驗室), independent director of Shanghai Hi-tech Control System Co., Ltd., independent director of Shanghai Friendess Electronics Technology Co., Ltd. and general manager of Shanghai Jiaotong University-Lingang Group Intelligent Manufacturing Innovation Technology Co., Ltd. (上海交大臨港智能製造創新科技有限公司). Mr. Xi is primarily engaged in research in the fields of digital manufacturing and intelligent manufacturing technologies. He was honored with 6 awards including the second prize of the National Science and Technology Progress Award and the scientific and technological progress and technological invention awards of Shanghai. His major concurrent academic posts mainly include deputy director of the Special Committee of Manufacturing Automation of Chinese Mechanical Engineering Society, a member of the Special Committee of Additive Manufacturing of Chinese Mechanical Engineering Society, an executive member of China Intelligent Manufacturing Industry Innovation Alliance (中國智能製造產業技術創新聯盟), the vice president of Shanghai Mechanical Engineering Society (上海機械工程學會), and the secretary general of Shanghai Intelligent Manufacturing Industry Innovation Alliance (上海智能製造產業技術創新聯盟).

Xu Jianxin

Mr. Xu currently serves as an independent non-executive Director of the Company, the senior vice president of Shanghai Purest Investment Management Co., Ltd., an independent director of Bank of Shanghai Co., Ltd. and Shanghai Shunho New Materials Technology Co., Ltd. From February 1982 to November 1997, Mr. XU served as a lecturer and associate professor of accounting at Shanghai University of Finance and Economics. From November 1997 to December 2014, he served as the deputy chief accountant, director, chief financial officer, and chief economist of Orient International (Holding) Co., Ltd. Since January 2015, he has served as the senior vice president of Shanghai Purest Investment Management Co., Ltd. Mr. XU graduated from Shanghai University of Finance and Economics with a doctorate. He is a professor-level senior accountant and a Chinese certified public accountant.

Zhou Guoxiong

Mr. Zhou currently serves as the chairman of the supervisory committee of the Company and the chairman of the supervisory committee of Shanghai Tunnel Engineering Co., Ltd. (上海隧道工程股份有限公司). Before joining the Company, Mr. Zhou served as member of the standing committee under Shanghai Huangpu District Party Committee, head of Shanghai Public Security Bureau Huangpu Branch, deputy secretary of the party committee and deputy director general of Shanghai Public Security Bureau, secretary of the Party Committee of Shanghai Putuo District, party secretary of Working Committee of Economy and Informatisation of Shanghai Municipality (上海市經濟和信息化工作委員會), chairman of the supervisory committee of Shanghai Urban Construction (Group) Co., Ltd. (上海 城建（集團）公司) and chairman of the supervisory committee of Shanghai Electric (Group) Corporation. Mr. Zhou holds a doctorate degree in management and is a distinguished professor, a researcher and a master's supervisor.

Hua Xingsheng

Mr. Hua currently serves as the deputy chairman of the supervisory committee of the Company and secretary of the commission for discipline inspection of the Company, the supervisor of Shanghai Supervisory Committee in Shanghai Electric Group Co., Ltd. Mr. Hua has extensive experience in automotive industry. He has served as Secretary of Youth League Committee of SAIC Motor, deputy head of SAIC Forging Plant (上海 汽車鍛造總廠), head of the president office of SAIC Motor, secretary of the party committee and deputy general manager of SAIC Sales Co., Ltd. (上海汽車工業銷售總公司), chairman of SAIC Materials Co., Ltd. (上海汽車工業物 資公司), secretary of the party committee of Shanghai Huizhong Automobile Manufacturing Co., Ltd., propaganda department manager of the party committee of SAIC Motor and secretary of the commission for discipline inspection and deputy chairman of the supervisory committee of Shanghai Electric (Group) Corporation. Mr. Hua has a master's degree in management engineering and an EMBA and is a senior economist and a senior business operator (高級經營師).

Han Quanzhi

Mr. Han currently serves as a supervisor of the Company. He has successively served as a salesman and chief salesman of engineering and construction department of Shanghai Hongqiao Economic & Technological Development Zone United Development Co., Ltd., a deputy manager, the assistant to general manager, deputy general manager, deputy director and director of general office, director of foreign affairs office, deputy general manager of the project management department of the real estate branch and a member of CPC Party Committee and deputy general manager of Shanghai Land Minhong (Group) Co., Ltd. Mr. Han graduated from the Department of Architectural Engineering of Shanghai Institute of Urban Construction, majoring in industrial and civilian construction. Mr. Han is an engineer.

Zhang Yan

Ms. Zhang currently serves as an employee representative of the supervisory committee, the head of the risk management department and the internal audit department of the Company, a director of Shanghai Mechanical and Electrical Industry Co., Ltd., the chairman of the supervisory committee office of Suzhou Thvow Technology Co., Ltd., the chairman of the supervisory committee of Shanghai Prime Machinery Co., Ltd. and Shanghai Electric Wind Power Group Co., Ltd., a supervisor of Shanghai Electric Transmission and Distribution Group Co., Ltd. and Shanghai Electric Group Finance Co., Ltd. Ms. Zhang served as the deputy director of general office of Shanghai Electric Development Co., Ltd., the assistant of the head and then deputy head of investment management department of Shanghai Electric Asset Management Co., Ltd., the deputy head of financial budget department of Shanghai Electric (Group) Corporation, the deputy director of secretary office of board of directors and the executive deputy director of risk management department of Shanghai Electric Group Co., Ltd. Ms. Zhang obtained an EMBA degree.

Yuan Shengzhou

Mr. Yuan currently serves as an employee representative of the supervisory committee, the vice chairman of labor union of the Company and the vice chairman of labor union of Shanghai Mechanical and Electrical Union. Mr. Yuan served as the secretary of the Youth League Committee, the director of general office and the deputy secretary of CPC Party Committee, the secretary of the commission for discipline inspection, the chairman of labor union, the chairman of supervisory committee office, the secretary of CPC Party Committee, and an executive director (legal representative) of Shanghai Institute of Mechanical & Electrical Engineering Co., Ltd., the deputy secretary of CPC Party Committee and the vice president of Shanghai Electric Environmental Protection Group, and a supervisor of the supervisory committee of Shanghai Electric (Group) Corporation. Mr. Yuan obtained a master's degree and is a senior political affairs specialist.

Lv Yachen

Mr. Lv is currently a vice president of the Company. He formerly served as the deputy chief engineer and deputy general manager of China First Heavy Industries, the chairman, general manager and deputy secretary of CPC Party Committee of Shanghai Heavy Machinery Plant Co., Ltd., the president and deputy secretary of CPC Party Committee of Shanghai Electric Heavy Industry Group, and the vice president of Shanghai Electric (Group) Corporation. Mr. Lv obtained his PhD degree in engineering science from Yanshan University. Mr. Lv is a senior engineer of professorial level.

Dong Jianhua

Mr. Dong is currently a vice president of the Company and the chairman of the board of directors of Shanghai Highly (Group) Co., Ltd. He was formerly the vice president and chief financial officer of Shanghai Electric (Group) Corporation and chairman of the supervisory committee of the Company. Mr. Dong has extensive experience in corporate internal audit and supervision. Prior to joining the parent group of the Company, Mr. Dong was the assistant to the head and the deputy head of Infrastructure Office of Shanghai Municipal Audit Bureau, the deputy head and head of the Fixed Assets Investment and Audit Office, as well as the head of the Audit Office between 1987 and 2008. Mr. Dong has been involved in professional auditing for more than 25 years. Mr. Dong graduated from Shanghai Tongji University with a bachelor's degree in engineering. He also obtained a master's degree in business administration from Shanghai Jiao Tong University. Mr. Dong is a professor-level senior economist.

Zhang Ke

Mr. Zhang is currently a vice president of the Company. He has in-depth knowledge about boiler technologies and extensive experience in corporate operation and management. He was formerly the chairman of Shanghai Industrial Boiler Research Institute, and the chief economist and deputy chief engineer of Shanghai Electric (Group) Corporation. Mr. Zhang has obtained a bachelor's degree in engineering and is a senior engineer of professorial level.

Chen Ganjin

Mr. Chen is currently a vice president of the Company. He has extensive experience in corporate management and was formerly the secretary of CPC Party Committee and chairman of Shanghai Boiler Works, Ltd., the general manager of Shanghai Diesel Engine Co., Ltd., the secretary of CPC Party Committee and general manager of Shanghai Rail Traffic Equipment Development Co., Ltd., the president of Shanghai Electric Heavy Industry Group, the chairman of Shanghai Heavy Machinery Plant Co., Ltd., the vice president and chief operation officer of Shanghai Electric Group Company Limited, and the secretary of CPC Party Committee and general manager of Shanghai Zhangjiang (Group) Company Limited. Mr. Chen Ganjin graduated from Xi'an Jiaotong University with a bachelor's degree in Engineering, majoring in thermal energy and power engineering of power stations. Mr. Chen obtained a master's degree in business administration from China Europe International Business School and a master's degree in professional accounting from The Chinese University of Hong Kong.

Gu Zhiqiang

Mr. Gu is currently a vice president of the Company, the secretary of CPC Party Committee of Shanghai Electric Environmental Protection Group, an executive director and the secretary of CPC Party Committee of Shanghai Institute of Mechanical & Electrical Engineering Co., Ltd. He served as the assistant to the general manager and deputy general manager of SEC Power Generation Environment Protection Engineering Co., Ltd., representative of Shanghai Electric (Group) Corporation in Europe, head of the environmental protection department of Shanghai Electric Group Company Limited, the chairman and general manager of Shanghai Electric (Anhui) Investment Co., Ltd. Mr. Gu graduated from Shanghai Jiao Tong University with a bachelor's degree in engineering and obtained an EMBA degree from Shanghai National Accounting Institute and Arizona State University, United States of America. Mr. Gu is a senior engineer.

Jin Xiaolong

Mr. Jin is currently a vice president of the Company, and the chairman of the board of directors and the secretary of CPC Party Committee of Shanghai Electric Wind Power Group Co., Ltd. He served as the operation manager of Maxon Combustion Equipment (Shanghai) Co., Ltd (麥克森燃燒設備（上海）有限公司), the secretary of CPC Party Committee and deputy general manager of Shanghai Faiverley Transport Co., Ltd., the secretary of CPC Party Committee and deputy general manager of Lingang Factory of Shanghai Electric Power Generation, the vice president of Shanghai Electric Power Generation Group, an executive director and the general manager of Shanghai Electric Wind Power Equipment Co., Ltd, the vice chairman and general manager of Shanghai Electric Wind Energy Co., Ltd. and Siemens Wind Power Turbines (Shanghai) Co., Ltd. Mr. Jin Xiaolong graduated from Harbin Institute of Technology with a bachelor's degree in engineering and obtained a master's degree in business administration from Webster University. Mr. Jin is a professor-level senior economist.

Hu Kang

Mr. Hu is currently the chief financial officer of the Company, the chairman of the board of supervisors of Shanghai Mechanical & Electrical Industry Co., Ltd., the president and deputy secretary of the CPC Party Committee of Shanghai Electric Finance Group, and the chairman of the board of Shanghai Electric Enterprise Service Co., Ltd. (上海電氣集團企業服務有限公司). Mr. Hu formerly served as the deputy general manager of Shanghai Bearing (Group) Co., Ltd., the factory director of Shanghai Zhenhua Bearing Factory Company Limited, the assistant to the chief financial officer of Shanghai Electric (Group) Corporation, the chairman of the board and general manager of Shanghai Shangling Electric Company Ltd., the general manager of the second management department of Shanghai Electric Assets Management Company Limited, a director and general manager of Shanghai Prime Machinery Company Limited, and the assistant to the president, head of the internal audit department, head of the assets finance department and chief financial officer of the Company. Mr. Hu obtained an EMBA degree from Shanghai Jiao Tong University and a master's degree in professional accounting from the Chinese University of Hong Kong. He is a senior accountant and senior economist.

Tong Liping

Ms. Tong currently serves as the chief legal officer, director of the legal department and the solicitor of the Company. Ms. Tong has long been engaged in in-house legal works and is experienced in managing corporate legal affairs with rich knowledge in relevant laws. She served as the director of the legal and audit office and department head of legal department of Shanghai Electric Power Generation Group from 2004 to 2010, director of the legal affairs centre of the Company from 2006 to 2008, and taking up the responsibility of the deputy director, director of the legal department and then the chief legal counsel of the Company since 2008. Ms. Tong graduated from Shanghai Fudan University with a master's degree in law.

Fu Rong

Ms. Fu is currently the secretary to the Board, and secretariat director of the Board of the Company. She formerly successively assumed the role of the securities affairs representative of Shanghai Power Transmission and Distribution Co., Ltd., the marketing director of the low-voltage product division of ABB (China) Investment Ltd., the board secretary and head of the securities department of Shanghai Electric Devices Company Limited, the board secretary and head of the securities department of Shanghai Power Transmission and Distribution Co., Ltd., and the head of the human resources department, head of the investor relations department and head of the general office of the Company. Ms. Fu Rong holds a master's degree in business administration and is an economist.

Zhang Mingjie

Mr. Zhang is currently the chief investment officer of the Company, the director of industry development department and the dean of the central research institute of the Company, the vice chairman of the board of directors of Shanghai Highly (Group) Co., Ltd. and a director of Shanghai Prime Machinery Company Limited. He successively served as the deputy director, executive deputy director and acting director of Shanghai Voltage Regulator Factory (上海電壓調整器廠), deputy chief engineer, the assistant to the general manager and deputy general manager of Shanghai Electric Co., Ltd. (上海電器股份有限公司), the deputy general manager of Shanghai Electric Industry Co., Ltd. (上海電器工業有限公司), the director and deputy secretary of CPC Party Committee of Shanghai Huatong Switch Factory (上海華通開關廠), the secretary of CPC Party Committee and deputy general manager of Shanghai Power Transmission and Distribution Co., Ltd. (上海輸配電股份有限公司), and the director of wind power department of Shanghai Electric (Group) Corporation. Mr. Zhang Mingjie graduated from Shanghai Jiao Tong University, and he has a bachelor's degree in engineering and a master's

Employment status with shareholder entities

Name	Name of shareholder entities	Position in shareholder entities	Term of office commencing on	Term of office ending on
Zheng Jianhua	Shanghai Electric (Group)Corporation	Chairman of the board of directors	2017-8	to present
Zhu Bin	Shanghai Electric (Group)Corporation	Director	2018-9	to present
Yao Minfang	Shenergy (Group) Company Limited	Deputy Chief Engineer	2017-9	to 2020-3
Yao Minfang	Shenergy (Group) Company Limited	Deputy chief economist	2020-3	to present
Yao Minfang	Shenergy (Group) Company Limited	Director of Science and Technology Innovation Center	2017-11	to present
Li An	Shanghai Guosheng Group Company Limited (上海國盛（集團）有限公司)	Vice President	2014-8	to present
Li An	Shanghai Guosheng Group Company Limited (上海國盛（集團）有限公司)	Director	2017-1	to present

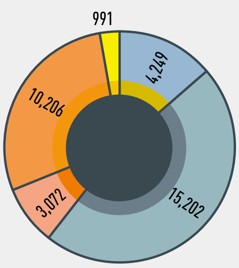
Employments with other companies or organizations

Name	Name of company/organization	Position held	Term of office commencing on	Term of office ending on
Yao Minfang	Shenergy Company Limited	Director	2018-6-16	2020-5-22
Yao Minfang	Shanghai LNG Company Ltd.	Secretary of the Party Committee and chairman	2020-3	to present
Li An	Arcplus Group Plc	Director	2014-12-31	to present
Li An	Shanghai Tunnel Engineering Co. Ltd. (上海隧道工程股份有限公司)	Director	2015-10-19	to present
Li An	Shanghai Pharmaceuticals Holding Co., Ltd	Director	2016-6-28	to present
Li An	Shanghai Lingang Economic Development (Group) Co., Ltd.	Director	2017-3-29	to present
Chu Junhao	Shanghai Institute of Technical Physics	Researcher	1984-12	to present
Chu Junhao	East China Normal University	Deputy Director of the Academic Committee	2018	to present
Chu Junhao	Shanghai Solar Cells Research and Development Center	Head	2008-1	to present
Chu Junhao	Shanghai Cambridge Technology Co., Ltd. (上海劍橋科技股份有限公司)	Independent director	2018-6-26	2021-6-25
Chu Junhao	Hengtong Optic-Electric Co,.Ltd. (江蘇亨通光電股份有限公司)	Independent director	2018-5-22	2021-5-21
Chu Junhao	Shanghai Tunnel Engineering Co., Ltd. (上海隧道工程股份有限公司)	Independent director	2018-12-28	2021-12-27
Xi Juntong	Shanghai Jiao Tong University	Professor of Mechanical Manufacture and Automation and at the State Key Laboratory of Mechanical System and Vibration and Doctoral Supervisor	2003-4	to present
Xi Juntong	Shanghai Intelligent Manufacturing Institute(上海智能製造研究院)	Acting dean	2015-12	to present
Xi Juntong	Shanghai Key Laboratory of Network-based Manufacturing and Enterprise Informatization (上海市網絡化製造與企業信息化重點實驗室)	Head	2009-9	to present
Xi Juntong	Shanghai Jiaotong University-Lingang Group Intelligent Manufacturing Innovation Technology Co., Ltd.	General manager	2016-10	to present
Xi Juntong	Shanghai Hi-tech Control System Co., Ltd.	Independent director	2018-5-21	to present
Xi Juntong	Shanghai Friendess Electronics Technology Co., Ltd.	Independent director	2018-7-4	2021-7-3
Xu Jianxin	Shanghai Purest Investment Management Co., Ltd.	Senior vice president	2015-1	to present
Xu Jianxin	Bank of Shanghai Co., Ltd.	Independent director	2015-9	to present
Xu Jianxin	Shanghai Shunho New Materials Technology Co., Ltd.	Independent director	2015-6-30	2021-6-30
Zhou Guoxiong	Shanghai Tunnel Engineering Co., Ltd. (上海隧道工程股份有限公司)	Chairman of the supervisory committee	2018-12-28	2021-12-27
Dong Jianhua	Shanghai Highly (Group) Co., Ltd.	Chairman of the board of directors	2017-12-12	2020-12-11
Dong Jianhua	Shanghai Lingang Holdings Limited	Director	2018-10-26	2021-10-25
Zhang Mingjie	Shanghai Highly (Group) Co., Ltd.	Deputy chairman of the board of directors	2018-5-17	2020-12-11

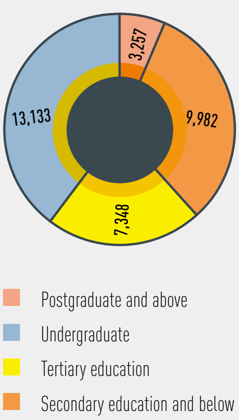
Remunerations of Directors, Supervisors and Senior Management

Procedures for determining the remunerations of Directors, Supervisors and senior management	The remunerations of our Directors and Supervisors (non-employee representatives) are determined in general meeting, while the remunerations of our senior management are determined by the Board of Directors of the Company.
Basis for determining the remunerations of Directors, Supervisors and senior management	The remunerations of our Directors and Supervisors (non-employee representatives) are determined based on a number of factors, such as the operating results of the Company, their responsibilities, performance and market conditions. The remunerations of our Supervisors (employee representatives) and Senior Management are determined based on their responsibilities and performance appraisal in respect of the completion of annual operation plan.
Remunerations paid to Directors, Supervisors and senior management	Remunerations were paid to the Directors, Supervisors and senior management of the Company based on their respective entitlement.
Total actual remunerations received by all Directors, Supervisors and senior management up to the end of reporting period	RMB19,895.2 thousand

Statistical Chart of Functional classification



Statistical Chart of Education Level



Changes of Directors, Supervisors and Senior Management of the Company

Name	Position	Change	Reason for the change
Xu Jianxin	Independent Non-executive Director	Elected	Elected at general meeting
Zhang Yan	Supervisor (employee representative)	Elected	Elected at staff congress
Yuan Shengzhou	Supervisor (employee representative)	Elected	Elected at staff congress
KAN Shun Ming	Independent Non-executive Director	Resigned	Personal reason
Li Bin	Supervisor (employee representative)	Resigned	Passed away due to illness
Zhu Xi	Supervisor (employee representative)	Resigned	Age concern

Employees of the Company and Principal Subsidiaries

Staff

Number of current staff in the Company	268
Number of current staff in the principal subsidiaries	30,873
Total number of current staff	33,720
Number of retired staff for whom the Company and the principal subsidiaries are responsible for the retirement benefits	305

Functional classification

Categories by function	Number of persons
Production personnel	15,202
Sales personnel	3,072
Technical personnel	10,206
Financial personnel	991
Administration personnel	4,249
Total	33,720

Education Level

Categories by education level	Number of persons
Postgraduate and above	3,257
Undergraduate	13,133
Tertiary education	7,348
Secondary education and below	9,982
Total	33,720

Remuneration Policy

During the reporting period, the Company paid wages and salaries to its employees and made social insurance contributions for them in strict compliance with the relevant laws and regulations. There was no default in payment of wages or remuneration to employees or labour service workers. The Company set up a comprehensive system which synchronized the increase of employees' salaries with the improvement in labour productivity; thus, the level of wage increase of the Company and the wages adjustment of employees of various work positions can be determined reasonably. The Company insisted on the policy of "Dual Inclination, Dual Care" and implemented policies that tilted towards scientific and technological staff and the front-line technical workers while paying special care towards temporarily unemployed workers and those who are in financial difficulties.

Training Program

During the reporting period, the Company, following the strategy of the Group, adhered to the demand-oriented approach and proceeded with the establishment of training system and training base. It emphasized training for core employees, especially for leading cadres and strategically needed talent, and promoted staff training on a full coverage basis, so as to boost the business development of the Group and enhance the value of human capital.

Contracted Labour

Total remuneration paid to contracted labour	RMB78 million

Services Contracts of Directors and Supervisors

None of the Directors and Supervisors of the Company has entered into any service contract with the Company which is not terminable by the Company within one year without payment of compensation (other than statutory compensation).

Directors' and Supervisors' Interest in Transactions, Arrangements or Contracts of Significance

During the year, none of the Directors, Supervisors or any of their respective associates had a material interest, whether directly or indirectly, in any transaction, arrangement or contract of significance to which the Company, its holding company, or any of its subsidiaries or fellow subsidiaries was a party.

Permitted Indemnity Provision

The Company has maintained appropriate insurance coverage for Directors, Supervisors and senior management's liabilities in respect of potential legal actions against its Directors, Supervisors and senior management arising out of the business activities of the Company.

Share Incentive Scheme

On 22 January 2019, the Board considered and approved the Relevant Resolution in relation to the proposed adoption of Restricted A Share Incentive Scheme ("the Scheme"). The purpose of the Scheme is to establish and improve the long-term incentive mechanism of the Company, attract and retain talents, fully motivate the Directors, Senior and Middle Management and key technical (business) personnel of the Company, and align the interests of the Shareholders and the Company with those of the core team members of the Company so that all parties will make joint efforts for the Company's long-term development. On 6 May 2019, the resolution in respect of the proposed adoption of the Restricted A Shares Incentive Scheme was considered and approved at the 2019 first extraordinary general meeting, 2019 first A share class meeting and 2019 first H share class meeting.

The participants under the Scheme ("the Participants") cover Directors and Senior Management, middle management and key technical (business) personnel. The Participants do not include the Independent Directors and the Supervisors, any Shareholder or actual controller, whether jointly or individually, holding more than 5% of the shares of the Company, or their respective spouses, parents and children.Pursuant to the Administrative Measures on Share Incentives of Listed Companies (上市公司股權激勵管理辦法) and the Trial Measures on Implementation of Share Option Incentive Schemes by State-Owned Listed Companies (Domestic) (Guo Zi Fa Fen Pei [2006] No. 175) (國有控股上市公司（境內）實施股權激勵試行辦法（國資發分配〔2006〕175號）), the Grant Price of Restricted Shares shall be 60% of the fair market value of the shares of the Company. The fair market value of the A shares of the Company shall be RMB 5.044 per share. Accordingly, the Grant Price of the Restricted Shares shall be RMB 3.03 per share. The proceeds raised by the Company from issuance of ordinary A shares to the Participants will be fully used to replenish the working capital of the Company.

On 29 April 2019, the Company received the Approval on the Implementation of Restricted A Share Incentive Scheme of Shanghai Electric (Hu Guo Zi Wei Fen Pei [2019] No.80) (關於同意上海電氣實施限制性股票激勵計劃的批復（滬國資委分配〔2019〕80號）) from the Shanghai Municipal State-owned Assets Supervision and Administration Commission. On 6 May 2019, upon consideration by the Board, the Company approved the grant of 136,500,000 restricted shares to 2,235 participants at the grant price of RMB3.03.

As at 20 May 2019, the Company received subscription funds in an aggregate amount of RMB404,741,340.00 paid by 2,194 Participants for subscription of 133,578,000 Restricted Shares. All Participants made capital contribution in cash, including RMB133,578,000.00 included in the share capital and RMB271,163,340.00 transferred to the capital reserve. The Company completed the registration of Restricted Shares under the Restricted A Share Incentive Scheme of the Company with China Securities Depository and Clearing Co., Ltd. Shanghai Branch on 21 June 2019.

For details of the Restricted A Share Incentive Scheme, please refer to the announcement published by the Company on the website of the Hong Kong Stock Exchange on 22 January 2019.

Corporate Governance Report

The Board of Directors of the Company firmly believes that corporate governance is essential to the success of the Company and has adopted various measures to establish a listed corporation with high level of transparency in corporate governance and an excellent performance in operation.

The Company will periodically review and update the existing practices to keep abreast of the latest developments in corporate governance.

Model Code for Securities Transactions by Directors

The Company has adopted the code provisions regarding the purchase and sale of the Company's shares by the Directors of the Company as set out in the Model Code for Securities Transactions by Directors of Listed Issuers (the "Model Code") in Appendix 10 of the Hong Kong Listing Rules. All Directors and Supervisors of the Company confirmed that they had complied with the requirements contained in the Model Code throughout the year 2019. The Company was not aware of any non-compliance with the Model Code by any of its employees.

Board of Directors

During the reporting period, the Board comprised nine Directors, including four executive Directors, namely Zheng Jianhua, Huang Ou, Zhu Zhaokai and Zhu Bin; two non-executive Directors, namely Yao Minfang and Li An; and three independent non-executive Directors, namely, Chu Junhao, Xi Juntong, Xu Jianxin (appointed on 14 November 2019) and Kan Shun Ming (resigned on 14 November 2019). The number of independent non-executive Directors represents one-third of the total number of Directors.

Members of the Board have different professional backgrounds with expertise in various aspects such as corporate management, technology development, financial management, strategic investment and human resources management. Their biographical particulars are set out in the section headed "Directors, Supervisors, Senior Management and Staff" of this annual report.

The independent non-executive Directors of the Company are aware of the rights and obligations of directors and independent non-executive directors of listed companies. During the reporting period, the independent non-executive Directors attended the Board meetings in prudent, responsible, proactive and earnest manner. Fully leveraging on their experience and expertise, they made tremendous efforts in improving corporate governance and facilitating major decision-making process, expressed fair and objective opinions on matters concerning significant events and connected transactions of the Company, enhanced the scientific development and standardization of the Board's decision-making process and safeguarded interests of the Company and its shareholders as a whole effectively.

Each of the independent non-executive Directors has confirmed his/her independence with the Company as required under Rule 3.13 of the Hong Kong Listing Rules annually. The Company has received the annual confirmations from such Directors and considered them independent in 2019.

Rights and duties of the Board and the management have been clearly specified in the Articles of Association to ensure adequate check and balance for sound corporate governance and internal controls. The Board formulates overall development strategies of the Group, monitors its financial performance and maintains effective supervision over the management. Members of the Board act in an effort to maximize the long-term interests of shareholders and achieve business goals and development direction of the Group amidst the prevailing economic and market conditions. The management is responsible for daily operation and management. The management of the Company, under the leadership of the President, is responsible for implementing various resolutions made by the Board and organizing daily operation and management of the Company.

Every member of the Board has the right to access documents and relevant materials of the Board, to consult the Company Secretary and the Secretary to the Board on regulatory and compliance matters and to seek external professional advice when necessary. The Company Secretary and the Secretary to the Board advise all Directors on the requirements under the Hong Kong Listing Rules and other applicable provisions to ensure the Company's compliance with and maintenance of excellent corporate governance.

Apart from the working relationship in the Company, there was no financial, operational, familial or other material relationship among the Directors, Supervisors and senior management.

The Company attaches great importance to the continuous training of its Directors on various areas. During the reporting period, the Company has updated Directors on the latest regulations in aspects such as business, law and finance in order to enhance their professional knowledge on a continuous basis.

Attendance Record of Directors at Board meetings and general meetings

		Attendance at Board meetings						Attendance at general meetings
Name of Directors	Independent Non-executive Director	Required attendance in Board meetings during the year	Attendance in person	Attendance via other communication means	Attendance by proxy	Absence	Absence for two consecutive meetings in person	Attendance record at general meetings
Zheng Jianhua	No	21	21	18	0	0	No	2
Huang Ou	No	21	21	18	0	0	No	1
Zhu Zhaokai	No	21	21	18	0	0	No	1
Zhu Bin	No	21	21	18	0	0	No	1
Yao Minfang	No	21	21	18	0	0	No	3
Li An	No	21	21	18	0	0	No	0
Chu Junhao	Yes	21	21	18	0	0	No	2
Xi Juntong	Yes	21	21	18	0	0	No	3
Xu Jianxin	Yes	3	3	3	0	0	No	1
KAN Shun Ming	Yes	18	18	15	0	0	No	3

Number of Board meetings convened during the year	21
Of which: number of on-site meetings	3
Number of meetings convened via other communication means	18
Number of on-site meetings assisted by other communication means	0

Corporate Governance Functions

During the reporting period, the Board of the Company performed the following functions: to formulate and review the Company's policies and practices on corporate governance and make recommendations; to review and monitor the training and continuous professional development of Directors and senior management; to review and monitor the Company's policies and practices on compliance with legal and regulatory requirements; to develop, review and monitor the code of conduct and compliance manual (if any) of employees and Directors; and to review the Company's compliance with the code provisions and disclosure in the "Corporate Governance Report".

During the reporting period, the Board is of the view that the Company has complied with the requirements of the code contained in Appendix 14 of the Hong Kong Listing Rules (the "Code"), except for the deviation from requirement of A.2.1 of the Code concerning the separation of the roles of the chairman and chief executive officer. Pursuant to code provision A.2.1, roles of the chairman and chief executive officer should be separate and should not be performed by the same individual. The division of responsibilities between the chairman and chief executive officer should be clearly established and set out in writing. During the reporting period, Mr. Zheng Jianhua, the Chairman of the Board and the Chief Executive Officer of the Company, has been responsible for the overall strategy setting for the Company; and Mr. Huang Ou, an executive Director and the President of the Company, has been fully responsible for the daily operations and execution of the Company. The Company is of the view that segregation of duties and responsibilities between the Board and the management has been well maintained and there is no over-centralization of management power under such mechanism.

Audit Committee

The audit committee of the Company (the "Audit Committee") is mainly responsible for reviewing and overseeing the risk management of the Company, financial reporting procedures and internal control system, reporting the results of such review and making recommendations to the Board, and overseeing as well as assessing the establishment of sound risk management system of the Company and the completeness and effectiveness of its implementation on a regular basis in accordance with the requirements in relation to corporate risk management under Code on Corporate Governance and Corporate Governance Report as set out in Appendix 14 to the Rules Governing the Listing of Securities on the Hong Kong Stock Exchange. The Audit Committee is also responsible for reviewing the quarterly, interim and annual financial statements, connected transactions, the appointment of and remuneration for auditors.

The Audit Committee currently comprises Dr. Xu Jianxin (appointed on 14 November 2019), Dr. Chu Junhao, Dr. Xi Juntong, independent non-executive Directors, and Ms. Yao Minfang, a non-executive Director, and is chaired by Dr. Xu Jianxin, an independent non-executive Director. During the reporting period, Mr. Kan Shun Ming, a former member of the Audit Committee, resigned on 14 November 2019.

Fourteen meetings were held by the Audit Committee during the reporting period. At these meetings, the Audit Committee has reviewed and overseen the risk management of the Company, financial reporting procedures and internal control system, reported its results of review and made recommendations to the Board. The Audit Committee has also reviewed the quarterly, interim and annual financial reports of the Company, material connected transactions, continuing connected transactions and the appointment of and remuneration for auditors, and listened to the report on the 2019 internal audit plan of the Company given by the internal audit department and 2019 risk management plan of the Company given by the risk management department of the Company. On 14 April 2020, the Audit Committee reviewed and passed the 2019 risk management report of the Company.

The Attendance Record of Committee Members at the Meetings of the Audit Committee during the reporting period

(actual attendance/required attendance at the meetings)

Name of Audit Committee Member	Actual attendance/ attendance required
Xu Jianxin (Chairman of the Committee)	2/2
Chu Junhao	14/14
Xi Juntong	14/14
Yao Minfang	14/14
Kan Shun Ming (Former Chairman)	12/12

Remuneration Committee

The remuneration committee of the Company (the "Remuneration Committee") is mainly responsible for making recommendations to the Board regarding the formulation of a proper and transparent procedure for the overall remuneration policy and structure for Directors and senior management of the Company.

The Remuneration Committee of the Company currently comprises Dr. Chu Junhao and Dr. Xu Jianxin(appointed on 14 November 2019), and is chaired by Dr. Chu Junhao. Mr. Zhu Zhaokai, former member of the Remuneration Committee, resigned on 22 January 2019, and Mr. Kan Shun Ming, former member of the Remuneration Committee, resigned on 14 November 2019.

One meeting was held by the Remuneration Committee during the reporting period, at which the principal issue considered was the remuneration proposal for the Directors, Supervisors and the senior management of the Company during the reporting period and proposal for Restricted A Share Incentive Scheme. According to clause 11(b) of the Terms of Reference for the Remuneration Committee of the Company, the Remuneration Committee has been delegated to determine the specific remuneration packages of all executive Directors and senior management.

The Attendance Record of Committee Members at the Meetings of the Remuneration Committee during the reporting period

(actual attendance/required attendance at the meetings)

Name of Remuneration Committee Member	Actual attendance/ attendance required
Chu Junhao (Chairman of the Committee)	3/3
Xu Jianxin	0/0
Zhu Zhaokai (Former member)	1/1
Kan Shun Ming (Former member)	3/3

Strategy Committee

The strategy committee under the Board of the Company (the "Strategy Committee") currently comprises Mr. Zheng Jianhua, Mr. Huang Ou, Dr. Chu Junhao and Dr. Xi Juntong, and is chaired by Mr. Zheng Jianhua.

During the Reporting Period, the strategic committee held a meeting to hear the Company's report on the industrial development action plan.

The Attendance Record of Committee Members at the Meeting of the Strategy Committee during the reporting period

(actual attendance/required attendance at the meeting)

Name of Strategy Committee Member	Actual attendance/ attendance required
Zheng Jianhua (Chairman of the Committee)	1/1
Huang Ou	1/1
Chu Junhao	1/1
Xi Juntong	1/1

Nomination Committee

The nomination committee under the Board of the Company (the "Nomination Committee") currently comprises Dr. Chu Junhao, Mr. Zhu Zhaokai and Dr. Xu Jianxin (appointed on 14 November 2019), and is chaired by Dr. Chu Junhao. Mr. Kan Shun Ming, former member of the Nomination Committee, resigned on 14 November 2019.

The principal responsibilities of the Nomination Committee of the Company include reviewing and making recommendations to the Board and the general meeting of the Company on the selection of candidates as the Directors of the Company, the selection criteria and procedures.

The Company has formulated the "Board Diversity Policy of Shanghai Electric Group Company Limited", which includes the requirements of compliance with relevant laws, regulations and the Articles of Association by candidates for Directors of the Company to ensure the effective discussions at the Board and enable the Board to make scientific, prompt and careful decisions. The Nomination Committee will select the candidates for Directors based on objective criteria, which contain certain diversified factors, including but not limited to, gender, age, cultural and education background, locality, professional experience, skills, knowledge and terms of office of the candidates for Directors and other regulatory requirements; the degree of suitability of the professional background and skills of the candidates for Directors with the business features and future development requirements of the Company.

One meeting was held by the Nomination Committee of the Company during the reporting period, at which candidate for independent non-executive Director of the Board were considered.

The Attendance Record of Committee Members at the Meeting of the Nomination Committee during the reporting period

(actual attendance/required attendance at the meeting)

Name of Nomination Committee Member	Actual attendance/ attendance required
Chu Junhao (Chairman of the Committee)	1/1
Zhu Zhaokai	1/1
Xu Jianxin	0/0
Kan Shun Ming (Former member)	1/1

Directors' and Auditors' Responsibilities for Accounts

The Directors of the Company acknowledge their responsibilities for the preparation of financial reports for each financial year, which shall give a true and fair view of the financial position, the results and cash flows of the Group for that financial year. In preparing the financial report for the year ended 31 December 2019, the Directors have selected and consistently applied suitable accounting policies, made judgments and estimates that are prudent and reasonable, and have prepared the financial report on a going concern basis. The Directors are responsible for keeping proper accounting records which disclose with reasonable accuracy at any time the financial position of the Group.

Supervisory Committee

The Supervisory Committee is a standing monitoring agency of the Company responsible for monitoring the Board and its members as well as senior management to avoid abuse of power that may harm the legitimate interests of shareholders, the Company and staff of the Company. The size and composition of the Supervisory Committee of the Company comply with the requirements of the relevant laws and regulations in the PRC.

The attendance record of committee members at the meetings of the Supervisory Committee during the reporting period

(attendance in person/required attendance at the meetings)

Name of Supervisor	Actual attendance/ attendance required
Zhou Guoxiong	16/16
Hua Xingsheng	16/16
Han Quanzhi	16/16
Zhang Yan (appointed on 20 May 2019)	7/7
Yuan Shengzhou (appointed on 20 May 2019)	7/7
Li Bin (resigned on 21 February 2019)	2/2
Zhu Xi (resigned on 20 May 2019)	9/9

Senior Management

As at the date of this report, the Company has twelve senior management members in total, namely Zheng Jianhua, Huang Ou, Lv Yacheng, Dong Jianhua, Zhang Ke, Chen Ganjin, Gu Zhiqiang, Jin Xiaolong, Hu Kang, Tong Liping, Fu Rong and Zhang Mingjie. The details of their duties, biographical details and remuneration are set out in the section headed "Directors, Supervisors, Senior Management and Staff".

Risk Management and Internal Controls

According to the requirements in relation to corporate risk management and internal controls set out in the Corporate Governance Code and Corporate Governance Report in Appendix 14 to the Hong Kong Listing Rules, the Company has established comprehensive risk management and internal control systems, including a system with a proper structure and organization and a system with relevant standards and relevant management principles for risk management and internal controls, to reach a full implementation for risk management and internal controls. The Company is of the view that such systems are effective and sufficient. The intention of the establishment of such a risk management and internal control system is to enhance the management and operation of the Company as far as scientific approach for decision making proper compliance with governing rules and regulations as well as its effectiveness are concerned. The system should also help to increase the risk control capability and ensure the continuous, stable and healthy development of all kinds of businesses of the Company. However, this is only a reasonable rather than an absolute guarantee against material untruthful representation or losses, as the intention is to manage instead of eliminating the risk of not achieving the business targets.

The Board acknowledges that it has the responsibility to examine the risk management and internal control systems of the Company and through the Audit Committee reviews the effectiveness of such systems at least once every year. The Board of the Company and the Audit Committee oversee and evaluate the completeness and effectiveness in relation to the design and implementation of the risk management and internal control systems, as well as review and approve the mid-to-long-term planning, annual audit plan as well as evaluation report on risk management and internal control evaluation report. The management of the Company is responsible for the establishment and improvement of the risk management and internal control systems of the Company, the review of working plans and annual report on risk management and internal controls. The risk management and internal control department of the Company is responsible for the design and establishment of the risk management and internal control systems, as well as annual organization of risks identification, evaluation and remedial measures and report, so as to promote execution of the internal controls and optimization of the system procedures; audit department of the Company is responsible for regular evaluations of the effectiveness of risk management and internal controls, as well as the appointment of accounting firms to conduct financial reporting internal control audit, so as to identify potential risks and internal control defects in a timely manner, ensure that the relevant operational departments and units implemented rectification measures and the effective operation of the risk management and internal controls system of the Company.

In respect of the identification, assessment, management procedures and business processes that are exposed to possible material risks, the Company has formulated all-inclusive control measures, such as management and internal control on key work flows including the preparation and disclosure of financial reports and processing and announcement of inside information. Regular internal control measures were established through specific procedures to prevent risks in key segments and reduce the impacts of risks. In terms of the disclosure of inside information, the Company has established standardized control procedures to collect, organize, validate, review and disclose information. The Company will ensure that the information is kept confidential before it is fully disclosed to the public. For information that is difficult to keep confidential, the Company will disclose it in a timely manner to protect the benefit of investors and stakeholders.

During the reporting period, the Company's risk management department continued to improve the risk management system, revised the "Risk Management Regulations" and "Procedures for Risk Management Implementation and Reporting", continuously improved and implemented the regular risk investigation and reporting mechanism, and established a risk assessment mechanism for major decision-making matters to further strengthen compliance risk management. According to the stipulated standards and procedures, the Company insisted on promoting regular comprehensive risk investigation, carried out periodic risk assessment, response and reporting on key business, and implemented dynamic response and follow-up to the business risks that were focused on previous year to update the risk situation. In addition, it implemented risk assessment procedures and incorporated system requirements for major investment and financing projects, major asset disposal, major reforms and other decision-making matters, strengthened rigid constraints to prevent and resolve major risks, and form a long-term control mechanism. In terms of compliance risk management, the Company established a compliance team and a three-level work network to implement compliance induction certification; at the same time, a dynamic monitoring mechanism for compliance events has been established to focus on and analyze the reasons for frequent compliance issues, supervise improvement and strengthen management.

The internal audit department oversees and evaluates the effectiveness of the implementation of the risk management and internal control system, prepares the plan for evaluation work, calls for qualified personnel with professional capability to form the evaluation team and conducts evaluation for the risk management and internal controls of the Company. It makes warnings and rectification suggestions on risks and internal control deficiencies identified, urges for remedial actions to cope with risks and to rectify system for deficiencies identified, prepares the risk management evaluation report and the internal control evaluation report and submits the reports to the management, the Audit Committee, the Supervisory Board and the Board of the Company for consideration, so as to enhance the effectiveness of the risk management and internal controls of the Company on an ongoing basis.

The Company appoints accounting firms to conduct financial reporting internal control audit every year, so as to identify internal control deficiencies in a timely manner, urge the relevant operational departments and units to implement rectification measures and ensure the effective operation of the internal controls of the Company.

According to the relevant rules, the Company appointed PricewaterhouseCoopers Zhong Tian LLP to conduct an audit on the effectiveness of the internal controls in relation to financial reporting of the Company for 2019, for which a internal control audit report of internal control opinions for the financial report that has maintained effective in all major aspects was received.

General Meetings

The General Meeting is the highest authority of the Company which performs its duties according to laws and makes decisions on major issues of the Company. Annual general meetings or extraordinary general meetings of the Company are direct communication channels between the Board and the shareholders of the Company. Therefore, the Company attaches great importance to general meetings and encourages all shareholders to attend and express their opinions at the meetings.

Shareholders may convene an extraordinary general meeting and make proposals on the meeting in accordance with Articles 87 and 64 of the Articles of Association, whose latest version was published on the websites of the Company and the Stock Exchange.

Communications with Shareholders

The Company releases its announcements, financial data and other relevant data on its website, which serves as a channel facilitating effective communication with investors. The shareholders may send any enquiry in writing to the Company's principal place of business in Hong Kong. The Company will properly handle all enquiries in time.

Company Secretary

As at the date of this report, Mr. Li Chung Kwong Andrew is the company secretary of the Company. According to the relevant requirements of the Hong Kong Listing Rules, Mr. Li Chung Kwong Andrew participated in the relevant training during the reporting period and the time for training was no less than 15 hours in total.

Disclosure of Information and Investor Relations

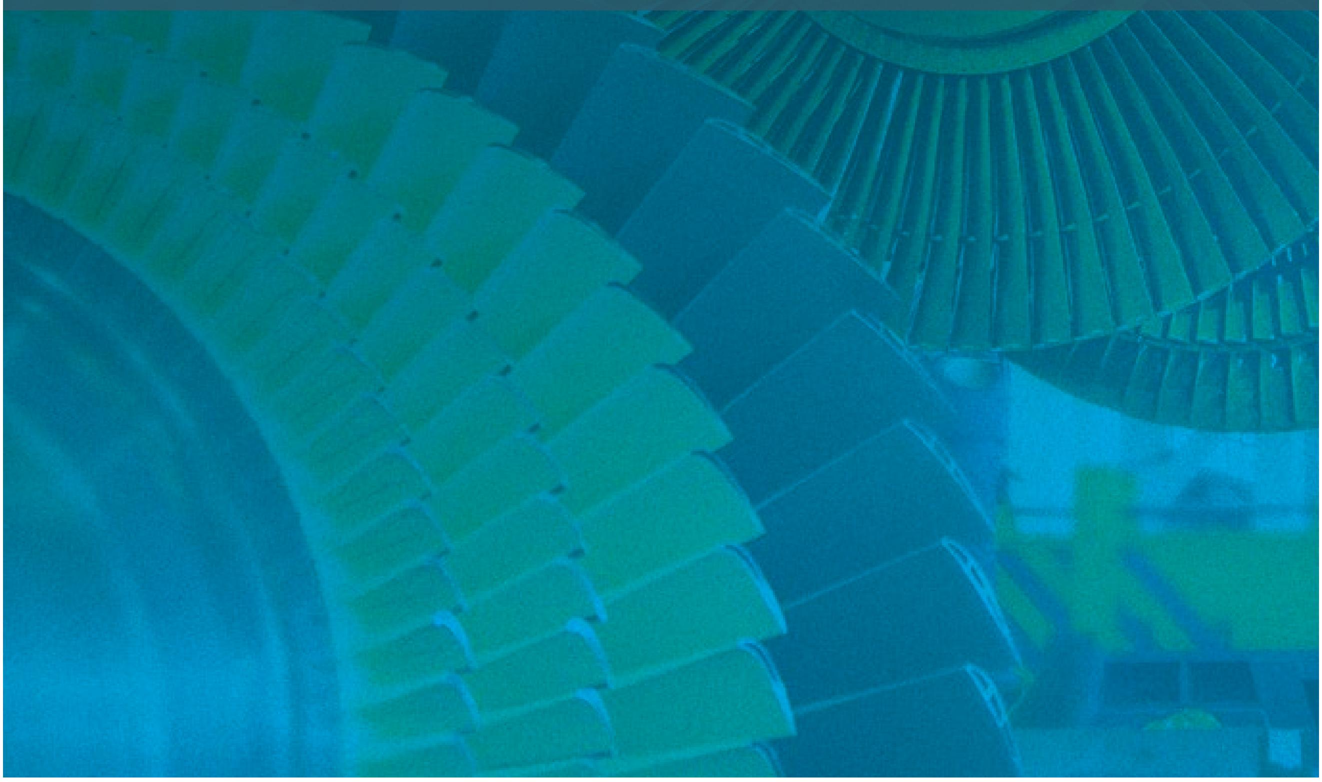
The Company persistently discloses its significant corporate information to public in a timely, accurate and complete manner since our public listing. The Company recognizes the importance of good communications with its investors. Our investor relations department has arranged interviews, site visits and reverse roadshows for investors from time to time. The team has also actively attended investors' forums to help investors gain a better understanding of the Company's operating results as well as its strategies and plans for future development. The Company will continue to make great efforts in investor relations work to further enhance its transparency.

Other Matters

During the reporting period, the Company amended once its Articles of Association, and such amendments were approved by way of a special resolution at the 2019 second extraordinary general meeting of the Company, respectively. For details of the amendments, please refer to the circulars of the general meetings dated 28 October 2019 and the announcements on the voting results of the general meetings dated 14 November 2019.

Summary of General Meetings

Session of the meeting	Date of meeting	Designed websites where resolution Published	Disclosure Date of resolution
2019 first extraordinary general meeting, 2019 first A shareholders' class meeting, and 2019 first H shareholders' class meeting	6 May 2019	www.hkexnews.hk www.sse.com.cn	6 May 2019 7 May 2019
2018 annual general meeting	10 June 2019	www.hkexnews.hk www.sse.com.cn	10 June 2019 11 June 2019
2019 second extraordinary general meeting, 2019 second A shareholders' class meeting, and 2019 second H shareholders' class meeting	14 November 2019	www.hkexnews.hk www.sse.com.cn	14 November 2019 15 November 2019
2019 third extraordinary general meeting	27 December 2019	www.hkexnews.hk www.sse.com.cn	27 December 2019 28 December 2019



Report of the Directors

The Directors present their report and the audited financial statements of the Company and the Group for the year ended 31 December 2019.

Principal Activities

During the reporting period, to accelerate the Company's strategic transformation by integrating internal and external resources, we re-integrate and divide the subdivisions of original four segments, i.e. new energy and environmental protection equipment, high-efficiency clean energy equipment, industrial equipment and modern services into three major segments, energy equipment, industrial equipment and integrated services. There were no significant changes in the principal activities of the Group during the year. Details of the principal activities of the major subsidiaries of the Company are set out in note 23 to the financial statements.

Buiness Review

During the reporting period, the Company achieved revenue of RMB127,509 million, representing a year-on-year increase of 26.05%; the net profit attributable to owners of the Company of RMB3,720 million, representing a year-on-year increase of 24.81%.

Analysis of principal business, assets and liabilities, and operational information by industry, and the Board's discussion and analysis on the future prospect of the Company are set out below:

Analysis of Principal Business

Analysis of changes of relevant items in the income statement and the statement of cash flows

Unit: 100 million; Currency: RMB

Items	For the year ended 31 December 2019	For the year ended 31 December 2018	Percentage of change (%)
Revenue	1,275.09	1,011.58	26.05
Costs of sales	1,055.18	827.08	27.58
Distribution expenses	28.98	27.59	5.04
Administrative expenses	128.07	108.19	18.38
Finance cost	13.13	9.40	39.68
Net cash flows generated from operating activities	105.05	58.07	80.90
Net cash flows generated from investing activities	-122.76	-65.90	86.28
Net cash flows generated from financing activities	122.83	100.73	21.94

Analysis of changes

The year-on-year increase in finance cost was due to the significant increase in external borrowings as at the end of the reporting period resulting from the expansion of the Group's new business during the reporting period.

The year-on-year increase in net cash flows generated from operating activities was mainly due to better collection of receivables resulting from strengthened cash management of the Group.

The year-on-year increase in net cash outflows from investing activities was mainly due to increased cash paid for acquisitions of fixed assets, intangible assets and other long-terms assets.

Analysis of revenue and cost

For the reporting period, the Company recorded revenue of RMB 127,509 million, representing a year-on-year increase of 26.05%. The gross profit margin for the reporting period was 17.25%, representing a decrease of 0.99 percentage point over the preceding year.

Analysis of the principal business by segment, product and geographic location

Unit: 100 million Currency: RMB

Principal business by segment						
By segment	Revenue	Cost of sales	Gross profit margin (%)	Year-on-year increase/ decrease in revenue (%)	Year-on-year increase/decrease in cost of sales (%)	Year-on-year increase/decrease in gross profit margin (%)
Energy Equipment	459.44	396.62	13.7	12.06	13.86	A decrease of 1.4 percentage points
Industrial equipment	464.09	383.70	17.3	11.64	13.45	A decrease of 1.3 percentage points
Integration Services	443.16	369.02	16.7	83.51	87.14	A decrease of 1.6 percentage points
Principal business by geographic location						
Geographic location	Revenue	Cost of sales	Gross profit margin (%)	Year-on-year increase/ decrease in revenue (%)	Year-on-year increase/decrease in cost of sales (%)	Year-on-year increase/decrease in gross profit margin (%)
Mainland China	1,102.81	915.65	16.97	22.65	24.60	A decrease of 1.3 percentage points
Other countries/regions	172.28	139.53	19.01	53.21	51.37	An increase of 0.98 percentage point

Explanation of changes in major businesses by segment and by geographic location

The increase in revenue from integrated services as compared with that of the previous year was mainly due to the consolidation of Thvow Technology during the reporting period. The increase in revenue from Other countries/regions as compared with that of the previous year was mainly due to the increased revenue of overseas construction projects achieved in 2019.

Major customers

The sales revenue from the five largest customers of the Company was RMB11,745 million in aggregate for the reporting period, accounting for 9.27% of the total sales revenue of the Company.

Major suppliers

The purchases from the five largest suppliers of the Company amounted to RMB7,624 million in aggregate for the reporting period, accounting for 6.33% of the total purchases of the Company.

Analysis of Costs

Unit: 100 million; Currency: RMB

BY SEGMENT						
By segment	Cost component	For the year ended 31 December 2019	Proportion in the total costs (%)	For the year ended 31 December 2018	Proportion in the total costs (%)	Percentage of change (%)
Energy Equipment	Raw materials	332.89	83.93	287.47	82.52	15.80
Energy Equipment	Labour costs	27.23	6.87	23.25	6.68	17.12
Energy Equipment	Other fees	36.50	9.20	37.63	10.80	-3.00
Energy Equipment	Total	396.62	100.00	348.35	100.00	13.86
Industrial equipment	Raw materials	308.71	80.46	268.66	79.44	14.91
Industrial equipment	Labour costs	30.77	8.02	26.65	7.88	15.46
Industrial equipment	Other fees	44.22	11.52	42.90	12.68	3.08
Industrial equipment	Total	383.70	100.00	338.21	100.00	13.45
Integration Services	Raw materials	251.69	68.20	132.76	67.32	89.58
Integration Services	Labour costs	54.10	14.66	28.65	14.53	88.83
Integration Services	Other fees	63.23	17.13	35.78	18.14	76.72
Integration Services	Total	369.02	100.00	197.19	100.00	87.14

R&D expenditure

Table of R&D expenditure

Unit: 100 million; Currency: RMB

R&D expenditure expensed in the reporting period	40.88
R&D expenditure capitalized in the reporting period	0.14
Total R&D expenditure	41.02
Percentage of total R&D expenditure to total revenue (%)	3.24
Number of R&D staff	3,124
Percentage of R&D staff to total staff (%)	9.26
Percentage of R&D expenditure capitalized (%)	0.34

Description

Energy Equipment

In the field of green coal-fired power generation technology, the new self-developed 1000MW ultra-supercritical double-unit regenerative steam turbine was successfully developed and put into commercial operation. The world's first 660MW double water internal cooling generator was successfully developed and put into commercial operation. The first 1000MW ultra-supercritical primary reheating tower-type boiler with reheat steam temperature of 623 ℃ was successfully developed.

In the field of nuclear power equipment technology, the world's first CAP1400 wet winding motor main pump prototype has completed all appraisal and test project, which met the requirements of the design specification and passed the appraisal of relevant experts. The steam generators of KOEBERG project in South Africa, the first fully commercial export nuclear island main equipment of China, completed the hydrostatic test and is to be shipped.

In the field of gas turbine technology, the development of 75MW small F-class gas turbine suitable for distributed energy and E-class ultra-low calorific value gas turbine based on associated gas fuel in the field of iron and steel was completed.

In the field of wind power equipment technology, the offshore 7MW unit has become the largest MW wind turbine for mass production and operation in China; Feng Yun intelligent energy system has gained access to more than 3,000 wind turbines, which can greatly improve the operation and maintenance efficiency of the wind farms, thus improving the power generation capacity.

In the field of hydrogen energy technology, HEnV-30, the first generation of 35kW fuel cell engine system, was launched and passed the announcement test of National Automobile Product Quality Supervision and Inspection Center (Shanghai).

In the field of energy storage technology, the self-developed MW container-type all-vanadium flow battery energy storage system successfully won the order for the 0.45GW wind farm supporting flow battery energy storage project.

In the field of high-end power transmission and distribution technology, the research and development of environmental protection cable materials, medium-voltage environmental protection cables and accessories, series of medium-voltage environmental protection gas insulated cabinet and 1,000kV ultra high voltage (“UHV”) transformer were completed.

Industrial Equipment

In the field of basic equipment by intelligent manufacturing technology, the miniaturized precise additive manufacturing equipment (TS120 model) and longitudinal “meter-level” large-scale additive manufacturing equipment (TS500 model) were independently developed, and a breakthrough in the application of printing research for components and parts of special structural design of aeroengine was made.

In the field of motor technology, a new generation of high-performance universal high-voltage asynchronous electric motor series was successfully developed, and the 40MW large vertical synchronous pump motor exported to the Indian market was successfully developed, with an export volume worth more than RMB500 million.

In the field of machine tool technology, the self-developed static-pressure functional components for high-grade CNC grinding machines was put into operation. The self-developed H376 and H377 CNC high-precision composite grinding centers completed the installation and commissioning of machine tools. The technical indicators of machine tools are close to the level of similar products abroad.

Integrated Services

In the field of distributed energy technology, Shantou intelligent energy system project was completed, and technologies such as distributed wind power, solar energy, energy storage were applied to promote the application of Energy Internet. The distributed energy online planning and design software DES-PSO was commercially available, and the comprehensive energy management platform realized demonstration application.

In the field of solar energy equipment technology, the first steam generation system with tower-type photothermal power generation unit was put into operation, and key components of photothermal storage tank for Dubai 950MW photothermal photovoltaic solar power plant project were shipped.

In the field of environmental protection equipment technology, the development and system integration of a complete set of environmental protection and efficient solidification system for 50 m3/h underwater large-scale river dredging were completed, and a hundred million RMB-level river dredging project was successfully acquired. The processing and manufacturing for all equipment of the first set of 500kW biomass gasification power generation system was completed, and a new mobile internal and external double-layer heating mode was designed, achieving the effect of increasing heat transfer efficiency by 30-50% on the premise of constant volume.

In the field of Industrial Internet platform development technology, "SEunicloud" Industrial Internet platform was officially released at 2019 China International Industrial Expo, and industrial solutions such as intelligent operation and maintenance of wind power, remote operation and maintenance of thermal power, and maintenance of machine tools have been preliminarily formed. "SEunicloud" Industrial Internet platform has developed and integrated applications such as equipment networking, fault diagnosis, remote operation and maintenance and energy planning, which possesses the ability of bearer service.

Analysis of assets and liabilities

Assets and liabilities

Unit: 100 million; Currency: RMB

Items	By the end of the current period	Proportion to total assets by the end of the current period (%)	By the end of the preceding period	Proportion to total assets by the end of the preceding period (%)	Percentage of change in amount compared with the end of the preceding period (%)
Trade receivables	293.37	10.46	188.41	8.62	55.71
Trade payables	579.23	20.65	388.81	17.79	48.98
Interest-bearing bank borrowings and other borrowings	316.71	11.29	199.40	9.12	58.83

(1)The increase in trade receivables as compared with the opening balance was mainly due to increased sales volume and consolidation of Thvow Technology during the year.

(2)The increase in trade payables as compared with the opening balance was mainly due to increased purchases for projects of the Company during the year.

(3)The increase in interest-bearing bank borrowings and other borrowings as compared with the opening balance was mainly due to increased external borrowings owing to the expansion of the Group's new business.

Analysis of Operational Information by Industry

Shanghai Electric is one of the largest comprehensive equipment manufacturing conglomerates. Information on the industries in which our main businesses operate is set out as below:

Energy Equipment

In terms of nuclear power, following the three-year non-approval of nuclear power, the state restarted the approval of nuclear power in 2019. A total of 6 units were approved throughout the year, namely, Zhangzhou unit 1 and unit 2, Taipingling unit 1 and unit 2 and two units of Shidaowan CAP1400. As at the end of 2019, nuclear power generation units put into operation in China increased to 47 units with a total installed capacity of 48.73 million kW, and 14 units were under construction. According to the Research on China's Nuclear Power Development Plan issued by China Nuclear Power Development Center and State Grid Energy Research Institute, based on the benchmark scheme, the scale of China's nuclear power units will reach 130 million kW, 170 million kW and 340 million kW by 2030, 2035 and 2050. Therefore, it is generally predicted at present that the construction of 6-8 units will be approved every year, and the development of nuclear power industry will be more stable.

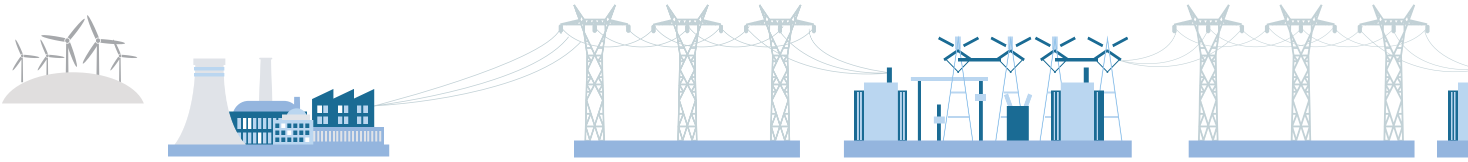
In terms of wind power, affected by the improvement of wind power curtailment problem, wind power bidding policy and the acceleration of offshore wind power, the newly added grid-connected installation of domestic wind power picked up with an annual increase of approximately 25 million kW. While the installation of Shanghai Electric wind power equipment of 1.27 million kW was newly added. The offshore wind power installation of the Company remained the first in China.

In terms of thermal power, according to the information released by the National Energy Administration, the average utilization hours of power generation equipment of power plants nationwide of 6,000 kW and above amounted to 3,825 hours, a decrease of 54 hours over the previous year; among them, the average utilization hours of thermal power equipment amounted to 4,293 hours, a decrease of 85 hours over the previous year. It is expected that China will continue to implement the risk alert mechanism of thermal power planning and construction, and the planning and construction of self-use thermal power plants in red alert areas will continue to be strictly controlled, the control measures such as suspension and postponement of construction will be strictly implemented, and the efforts to eliminate backward thermal power units will continue to be enhanced. We will insist on the principle of "Independent development and Innovation-driven" and develop marketable products by strengthening the analysis of electric power industry and customer demand. We will also give full play to technology-leading function, greatly improve product quality and continuously launch green, efficient and clean thermal power equipment with “high performance parameters, high reliability, high stability, low energy consumption, low emission, low pollution”.

In the field of power grid, the investment scale of China's power grid in 2019 has experienced a drop in the middle, but with the development of China's economy and the increasing demand for electric power, China's investment in the power grid will still maintain a high level, and the overall situation is still showing a continuous growth. The General Office of the State Council issued the Guiding Opinions on Maintaining the Strength of Improving Weak Links in the Field of Infrastructure(《關於保持基礎設施領域補短板力度的指導意見》), which clearly mentioned that it is necessary to accelerate the promotion of trans-provincial and trans-regional transmission, optimize and improve the main grid structure of each province, and promote the implementation of a number of UHV transmission projects. The implementation of UHV project construction plan is expected to speed up and new orders for UHV project will be obtained by mainstream suppliers and supporting suppliers. It can be predicted that in the future, the state's investment in power grid will maintain a high growth rate, and with the acceleration of national power grid construction, urbanization and rural power grid transformation, the domestic demand for transmission and distribution equipment will again reach its peak. With the continuous improvement of the overall technical level of nationwide transmission and distribution equipment, in the next five years, the nationwide transmission and distribution equipment has come to a period of opportunities and challenges, which will realize the digital transformation and upgrading.

Industrial Equipment

There are more than 6 million elevators in use in China, of which the number of old elevators with an age over 15 years has been increasing. Due to the influence of the real estate market, the growth rate of demand for elevator complete machine will slow down in the future, but with the promotion of the new urbanization strategy and the continuous impact from the "aging population" factors, the elevator industry will still maintain a trend of steady growth. At present, there are more than 700 complete machine manufacturers in the elevator industry with a production capacity of over 1.4 million units. It is expected that in the next few years, the competition in the elevator industry will remain fierce. With



the trend of overcapacity in the industry expanding, the competition in the industry will show the trend of integration towards “large companies”. In line with the development and change of the elevator market, Shanghai Mitsubishi will continue to invest in elevator service capacity. In 2020, we will closely focus on the annual business policy of "actively benchmarking and finding gaps, striving to forge ahead and increase strength", and constantly improve the Company's comprehensive competitiveness.

Integration Services

The Company's integrated services include power plant engineering business and financial services to support the Company's main business development. Focusing on the “Belt and Road” initiative, we regard more than 50 countries and regions involved in the “Belt and Road” initiative as key markets of power plant project. At present, we have overseas sales outlets in India, Malaysia, Saudi Arabia and Dubai, and we will actively promote construction of sales outlets to achieve multi-regional sales capacity. Our engineering business is no longer dominated by thermal power alone, instead we will open up new energy and distributed energy markets. At the same time, we will actively promote the integration of industry and finance as well as increase project investment and project financing.

In terms of environmental protection, the state continued to strengthen environmental governance. Other than promoting the implementation of “The Action Plan for Prevention and Treatment of Water Pollution”, “The Action Plan for Prevention and Treatment of Soil Pollution” and “The Action Plan for Prevention and Treatment of Atmosphere Pollution”, the state promoted waste classification in 46 major cities across the country. Meanwhile, with the “3.21” Yancheng explosion, the state further strictly regulated the disposal and transfer of industrial and chemical hazardous wastes and put forward higher requirements for the super clean discharge of solid waste.

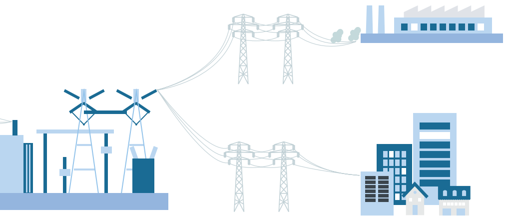
The Company's financial business is committed to becoming “the best example of global equipment manufacturing financial industry in line with China's reality” and realizing three transformations: from “executive” treasurer to “management planning” treasurer, from “single internal bank” to “value-added financial service platform”, from “isolated market-oriented new business” to “the growth engine relying on main business”.

Analysis on Investments

Material equity investment

In November 2019, the Company entered into the Share Transfer Agreement with Mr. Wang Weidong and Ms. Xu Xiaoju, pursuant to which, the Company will acquire 36,589,932 shares held by Mr. Wang Weidong and Ms. Xu Xiaoju in Yinghe Technology,representing 9.73% of the total share capital of Yinghe Technology.Mr. Wang Weidong and Ms. Xu Xiaoju entered into the Commitment on Waiver of All Voting Rights, pursuant to which, Mr. Wang Weidong and Ms. Xu Xiaoju will give up the voting rights attached to the 109,769,800 shares held by them in Yinghe Technologywhen the Company completes the adjustments to the board of directors of Yinghe Technology and the directors nominated by the Company hold more than half of the seats on the board of directors of Yinghe Technology. The Company entered into the Conditional Share Subscription Agreement with Yinghe Technology, pursuant to which, the Company proposes to subscribe for the shares of Yinghe Technology to be issued under the non-public issuance with full amount in cash of no more than RMB2,000 million.During the reporting period, the Share Transfer in the transactions in relation to the acquisition of Yinghe Technology has been completed.

In February 2020, the Company entered into the Share Transfer Agreement with Mr. Wang Weidong and Ms. Xu Xiaoju, pursuant to which, the Company will acquire 27,442,449 shares held by Mr. Wang Weidong and Ms. Xu Xiaoju in Yinghe Technology.Upon completion of the Share Transfer, the Company will hold 64,032,318 shares in Yinghe Technology, representing 17.03% of the total share capital of Yinghe Technology. As of the date of this report, the number of directors nominated by the Company represented more than half of the number of the seats on the board of Yinghe Technology, and Mr. Wang Weidong and Ms. Xu Xiaoju have given up the voting rights attached to the 109,769,800 shares held by them in Yinghe Technology, and thereforethe Company is the controlling shareholder of Yinghe Technology and Yinghe Technology is a subsidiary of the Company.



Equity interests in other listed companies held by the Company

Unit: '000 ; Currency: RMB

No.	Stock abbreviation	Initial investment amount	Equity share (%)	Carrying amount as at the end of the period	Gain or loss during the reporting period	Classification in accounts	How shares being obtained
600642	Shenergy	2,800	0.06	15,730	2,554	Other non-current financial assets	Purchase
600011	Huaneng Power	500,000	0.005	425,954	-97,710	Trading financial assets	Purchase
600021	Shanghai Electric Power Co,.Ltd.	150,000	0.01	92,600	4,745	Trading financial assets	Purchase
600633	Zhejiang Daily Digital Culture	7,462	0.34	40,099	4,382	Other non-current financial assets	Purchase
000501	Wu Han Department Store Group Co., Ltd. A	354	0.03	2,576	737	Other non-current financial assets	Purchase
600665	Tande Co., Ltd.	1,399	0.09	2,930	206	Other non-current financial assets	Purchase
600027	HDPI A-share	234,000	0.76	275,250	-81,000	Other non-current financial assets	Purchase
601229	Bank of Shanghai	941	0.02	30,854	2,868	Other non-current financial assets	Purchase
	Total:	896,956		885,993	-163,218	/	/

Profit Guarantee

In the plan of shares issuance, assets purchase, matching funds raising and connected transactions between the Company and Shanghai Electric (Group) Corporation ("SEC"), the Company acquired 50.1% equity of Shanghai Thales Saic Transport Co. Ltd. ("Thales Saic") from SEC. SEC undertakes that the audited actual net profit attributable to the owners of the parent company after deduction of non-recurring profit and loss of Thales Saic (the "Actual Net Profit") for the years of 2017, 2018 and 2019 shall be no less than RMB54,475.9 thousand, RMB62,945.8 thousand and RMB64,280.2 thousand, respectively, failing which, SEC will compensate the Company in accordance with relevant rules (the "Profit Guarantee").

The Profit Guarantee for the years ended 31 December 2017, 2018 and 2019 was met, details of which are set out as follows:

For the year ended 31 December	Profit Guarantee (RMB in millions)	Actual Net Profit(Note) (RMB in millions)
2017	54.4759	66.24
2018	62.9458	88.15
2019	64.2802	87.94

Note: the Actual Net Profit for the years ended 31 December 2017, 2018 and 2019 are from the Company's financial statements for respective years in accordance with the PRC Accounting Standards for Business Enterprises audited by PricewaterhouseCoopers Zhongtian Certified Public Accountants (Special General Partnership), an accounting firm with securities and futures qualifications,.

The Board's Discussion and Analysis on the Future Prospect of the Company

Industry competition landscape and development trend

At present, China's economic operation is stable while changes and worries are within. The external environment is complex and severe. The economy is facing downward pressure, and the uncertainty of electric power consumption growth is increasing.

According to the data released by China Electricity Council, the state's power production and operation was stable, and the overall balance of power supply and demand was achieved in 2019. In the whole year, the power consumption of the whole country amounted to 7.23 trillion kwh, an increase of 4.5% over the previous year, and the contribution rate of the tertiary industry and the electricity consumption for daily use of urban and rural residents to the growth of the whole country's power consumption was 51%. As at the end of 2019, the installed capacity of full caliber power generation in China continued to increase, the electric power continued to develop in a green and low-carbon way, and the proportion of installed capacity of non-fossil energy power generation continued to increase; the non-fossil energy power generation maintained a rapid growth; the power transmission across regions and provinces achieved double-digit growth. It is predicted that in 2020, the power consumption will continue to grow steadily, and the power consumption of the whole country will increase by 4% - 5%. It is estimated that by the end of the year, the installed capacity of power generation will amount to 2.13 billion kW, of which the proportion of non-fossil energy power generation will continue to rise. It is expected that the power supply and demand in China will remain an overall balance, and the power supply in some areas will be tight during peak hours. As at the end of 2019, the installed capacity of full caliber power generation in China amounted to 2.01 billion kW, an increase of 5.8% over the end of the previous year, of which the installed capacity of full caliber non-fossil energy power generation in China amounted to 840 million kW, an increase of 8.7% over the previous year, accounting for 41.9% of the total installed capacity, an increase of 1.1 percentage points over the end of the previous year. In 2019, the utilization hours of power generation equipment amounted to 3,825 hours, 54 hours lower than the previous year. RMB799.5 billion in total was invested by major electric power companies nationwide, a decrease of 2.0% over the previous year.

The main features of national power supply in 2019 are as follows:

Firstly, the installed capacity of power generation in China exceeded 2 billion kW. As at the end of 2019, the installed capacity of full caliber power generation in China amounted to 2.01 billion kW, an increase of 5.8% over the previous year. In terms of classification, there were hydropower of 360 million kW, nuclear power of 48.74 million kW, grid-connected wind power of 210 million kW, grid-connected solar power of 200 million kW and thermal power of 1.19 billion kW. Among the installed capacity of thermal power, the installed capacity of coal-fired power amounted to 1.04 billion kW and that of gas power amounted to 90.22 million kW. In 2019, China's newly added installed capacity of power generation amounted to 101.73 million kW, a decrease of 26.12 million kW over the previous year; among them, the newly added installed capacity of non-fossil energy power generation amounted to 63.89 million kW, accounting for 62.8% of the total newly added installed capacity. The newly added installed capacity of grid-connected wind power and solar power generation in China amounted to 25.74 million kW and 26.81 million kW respectively, an increase of 4.47 million kW and a decrease of 18.44 million kW over the previous year, respectively. The newly added installed capacity of coal-fired power and gas-fired power amounted to 29.89 million kW and 6.29 million kW respectively, a decrease of 0.67 million kW and 2.55 million kW over the previous year, respectively.

Secondly, the nuclear power, wind power and solar power generation showed a rapid growth. In 2019, the full caliber power generation in China amounted to 7.33 trillion kwh, an increase of 4.7% over the previous year. China's non-fossil energy power generation amounted to 2.39 trillion kwh, an increase of 10.4% over the previous year, accounting for 32.6% of China's power generation, an increase of 1.7 percentage points over the previous year, among which the hydropower, nuclear power, grid-connected wind power and grid-connected solar energy increased by 5.7%, 18.2%, 10.9% and 26.5% respectively over the previous year. The full caliber thermal power generation in China amounted to 5.05 trillion kwh, an increase of 2.4% over the previous year, of which coal-fired power generation capacity amounted to 4.56 trillion kwh, an increase of 1.7% over the previous year.

Thirdly, the utilization hours of hydropower and solar power generation equipment increased over the previous year. In 2019, the utilization hours of hydropower equipment amounted to 3,726 hours, an increase of 119 hours over the previous year; of the grid-connected solar power amounted to 1,285 hours, an increase of 55 hours over the previous year; of the grid-connected wind power amounted to 2,082 hours, a decrease of 21 hours over the previous year; of the nuclear power amounted to 7,394 hours, a decrease of 149 hours over the previous year; of the thermal power amounted to 4,293 hours, a decrease of 85 hours over the previous year, of the thermal power further broken down into 4,416 hours for coal-fired power, a decrease of

79 hours over the previous year, and 2,646 hours for gas power , a decrease of 121 hours over the previous year.

In 2020, under the keynote of seeking progress while maintaining overall stability and the background of counter-cyclical adjustment of national macro policies, the power consumption of the whole country will continue to grow steadily in 2020. In the absence of the influence of large-scale extreme temperature, China Electricity Council expects that in 2020, the newly added installed capacity of power generation of national infrastructures will amount to approximately 120 million kW, of which the installed capacity of non-fossil energy power generation will be amount to 87 million kW. It is estimated that as at the end of 2020, the installed capacity of power generation in China will amount to 2.13 billion kW, an increase of approximately 6%; the total installed capacity of non-fossil energy power generation will amount to approximately 930 million kW, accounting for 43.6% of the total installed capacity, an increase of about 1.7 percentage points over the end of 2019.

As a large energy equipment manufacturing group, Shanghai Electric will continue to endeavor to improve product competitiveness and increase market share. Relying on our existing industrial foundation and technical advantages, during the “13th Five-year-plan” period, we expect to have more market development opportunities and business development space in distributed power supply (such as wind power and photovoltaic power) , nuclear power and in the fields of energy conservation and environmental protection, major energy project construction, independent research and development of gas turbines, ultra-low emission retrofit of coal-fired power plants.

Development strategy of the Company

As a large-scale integrated equipment manufacturing conglomerate, we have both opportunities and challenges in the new round of economic restructuring and transformation. In internal and external environment, the market demand decreased rapidly due to the economic downturn. Cutting overcapacity in heavy machinery, coal-fired power generation and other industries are still one of the main focuses of the national macroeconomic policies. A new round of global technological revolution and industry transformation is emerging, multinational corporations are enhancing their strategic planning efforts in areas such as intelligent manufacturing and the Industrial Internet, conquering the top spot in the global technological and industrial competition. “Produce Green” and “Green Production” have become the direction for energy development during the 13th Five-year Plan period in China, which will promote rapid development in high efficiency and clean energy equipment as well as energy conservation and environmental protection industries.

We will adhere to the strategic guideline of “valuing technology over assets”, tap into the opportunities arising from the national “Belt & Road” initiative, regard customer demands as the driving engine and take craftsmanship as our ethos, endeavoring to provide China and the world with more efficient, eco-friendly and economic energy and industrial equipment and integrated solutions and thereby developing Shanghai Electric into a modern international conglomerate in the first echelon in the world.

We will further focus on three major areas, namely “energy equipment, industrial equipment and integrated services”. For energy equipment, we will focus on the development of green and high efficiency clean energy and new energy. For industrial equipment, we will actively advance the transformation from traditional manufacturing to intelligent manufacturing to achieve automation, digitalization and intelligentization. For integrated services, we will speed up in the development of production services and financial services. We will continue to enhance our strength and competitiveness in respect of thermal power, gas turbines, nuclear power, wind power, power transmission and distribution, power plant engineering, power plant services, elevators, key fundamental components and electric motors. We will vigorously tap into new industries such as environmental protection and automation and actively explore medical equipment and aviation industry and other new areas and consistently optimize the industrial layout of the Group to establish more healthy, efficient and sustainable business portfolios “in line with the future development trend of the society, the strategic development vision of the Group and the balancing of current and medium-to long-term benefits”.

We will strive to achieve transformation in three areas, namely accelerating the transformation from provision of traditional energy equipment to high efficiency and clean energy equipment, the transformation from traditional manufacturing to intelligent manufacturing and the transformation from a mere manufacturing model to a “manufacturing + service” mode. We will actively promote the deep integration of industry technology and information technology. With intelligent manufacturing as the focus, we will take full advantage of the Internet, the Internet of Things, big data, cloud computing and other advanced information technology to boost the automation, digitalization and intelligentization of high-end equipment. We will energetically advance development of existing businesses and spillover from incremental businesses and integrate endogenous production and operation with exogenous investment and M&As to promote the leap-forward development of Shanghai Electric.

Operation plans

2020 marks a critical turning point for Shanghai Electric. To boost high-quality development, we will adhere to the idea of unifying speed, quality and efficiency and make the most of our comparative advantages in promoting digitalization, informatization, networking and intelligence. Our goal in 2020 is to maintain a healthy and steady development momentum and realize a revenue increase over that of 2019. Particularly, we will focus on the following aspects:

Stay strategy-oriented to build core competitive strength in emerging industries

In 2020, we will keep concentrating on energy equipment, industrial equipment and integrated services. By catching a wave of new technology and industry reform, we are transforming our Company from a traditional energy equipment maker into a new energy equipment maker, and from a high energy-consumption manufacturer into an intelligent manufacturer. Specifically, we will foster business in such strategic emerging sectors as new energy, environmental protection, intelligent manufacturing and transportation to ultimately build our core competitive strength.

Accelerate the implementation of intelligent applications to unleash the advantages of the industrial internet platform

We intend to accelerate the implementation of industrial internet-based intelligent applications such as remote monitoring and predictive maintenance in various fields to create an industrial internet ecology of Shanghai Electric. By virtue of the industrial internet platform and focusing on key applications of key industries, we will further promote overall solutions to digital production lines and factories among customers, thereby driving the Group's output of industrial solutions and products.

Optimize R&D resources allocation to strengthen technology innovation

Our technology management system is oriented towards market and customers demand. We formulate development plans for major new technologies and products based on the needs of emerging industries and business. Among others, we will invest more in forward-looking technologies, generic technologies and capacity-building, and intensify R&D in emerging industries and business by establishing overseas innovation centers and conducting strategic cooperation with universities and enterprises. We will also seek partners in new energy, intelligent manufacturing, and put technological achievements into practice in various of forms.

Deepen mechanism innovation to generate fresh development impetus

We will further improve management and control mechanism and make better use of “sharing with common responsibilities”. We apply market-based assessment and incentive tools like differentiated incentive schemes to help enterprises grow. Meanwhile, we will offer environmental protection groups systematic action plans for the "Double Hundred Action" (雙百行動), deepen mechanism reform, and promote industrial development with new mechanisms.

Potential Risks

Market Risks

Equipment manufacturing industry is greatly affected by the public investment in fixed assets and highly correlated with national economic growth. Changes in macro economy and cyclical fluctuations in industry development may bring about challenges to the sustainable development of the Company. The outbreak of a new coronavirus pneumonia epidemic worldwide since the beginning of 2020 is also expected to have a certain impact on the Company's downstream industry demand.

The Company will continue to pay attention to and regularly analyze the possible impact of global and domestic macroeconomic trends on the Company so as to develop responsive measures in a timely manner. Meanwhile, the Company will timely adjust management measures to raise its management efficiency, and actively develop its business model in an innovative manner. The Company will seek the most effective solutions to address all challenges from changes in the domestic and overseas markets.

Overseas Business Risks

With the continuous expansion of its overseas presence, the Company's exposure to possible risks resulting from changes in political or economic landscapes in certain overseas countries, in which the Company is operating, are increasing. There is also escalating risks of commercial disputes between the Company and its foreign customers and business partners.

In this regard, the Company will consider in depth the policy and the business environment of the overseas markets and will establish overseas subsidiaries and branches or offices to take efforts to minimize the operational risk in the overseas markets. The Company will engage in relevant insurance policies to cover related risks of its businesses and employees to maximize the protection over the interests of the Company. Meanwhile, the Company will implement its "localization strategy" in the overseas market, seeking to establish long term cooperative relationships with the local customers so as to build up a good market reputation in the overseas markets.

Exchange Rate Fluctuation Risks

The Company's businesses in power plant equipment, power plant engineering and power transmission and distribution engineering involve export business and their contract amounts are large and usually denominated in US dollars. In the process of its production, the Company needs to purchase imported equipment and components and the contracts are also denominated in major foreign currencies, such as US dollars. If the range of fluctuation of exchange rates between RMB and major foreign currencies, such as US dollars, tends to expand, the Company may be exposed to an increasing exchange risk.

In this regard, the Company will utilize more hedging instruments and increase its RMB settlement scope in cross-border trades, lock-in certain exchange rates to reduce exchange risks and exercise better control over the costs of its overseas projects.

Source of Funding and Indebtedness

As at 31 December 2019, the Group had an aggregate amount of bank and other borrowings and bonds of RMB43,277 million (2018: RMB32,689 million), representing an increase of RMB10,588 million as compared with that of the beginning of the year. Borrowings and bonds repayable by the Company within one year amounted to RMB25,091 million, representing an increase of RMB14,740 million as compared with that of the beginning of the year. Borrowings and bonds repayable after one year amounted to RMB18,186 million, representing a decrease of RMB4,152 million as compared with that of the beginning of the year.

As at 31 December 2019, included within the bank and other borrowings of the Group are unsecured bank borrowings of USD256,458,000 in total (2018: USD191,902,000), equivalent to RMB1,789,105,000 (2018: RMB1,317,062,000), EUR128,141,000 in total (2018: EUR42,442,000), equivalent to RMB1,001,486,000 (2018: RMB333,063,000), HKD828,000,000 in total (2018: HKD450,000,000), equivalent to RMB741,706,000 (2018: RMB394,290,000), and CHF534,000 in total (2018: nil), equivalent to RMB3,847,000 (2018: nil), secured bank borrowings of EUR6,494,000 in total (2018: EUR100,495,000), equivalent to RMB50,758,000 (2018: RMB788,612,000), guaranteed bank borrowings of USD174,375,000 in total (2018: USD73,515,000), equivalent to RMB1,216,475,000 (2018: RMB504,549,000) and EUR99,093,000 in total (2018: nil), equivalent to RMB774,464,000 (2018: nil). All other unsecured bank borrowings are denominated in Renminbi.

As at 31 December 2019, gearing ratio of the Group, which represents the ratio of the sum of interest-bearing bank borrowings and other borrowings and bonds to the sum of total equity of the shareholders plus interest-bearing bank borrowings and other borrowings and bonds, was 32.09%, representing an increase of 1.35 percentage points as compared with 30.74% at the beginning of the year.

Pledge of Assets

As at 31 December 2019, the Group's bank deposits amounted to RMB 1.583 billion (2018: RMB 698 million), notes receivable amounted to RMB 181 million (2018: RMB 198 million), investment property with a carrying amount of RMB 182 million (2018: nil) and certain property and equipment with a carrying amount of RMB 677 million (2018: RMB 595 million) were secured to banks to obtain bank borrowings or credit line. In addition, as at 31 December 2019, part of the Group's bank borrowings was secured by the Group's inventory with a carrying amount of RMB400 million (2018: nil). Part of the Group's bank borrowings was secured by the Group's long-term receivables, with a carrying amount of RMB 1.70 billion (2018: nil).

Events After the Date of Financial Statements

On 15 April 2020, the proposal for profit distribution for 2019 that no dividend will be distributed was considered and approved at the thirty-third meeting of the fifth session of the Board and is subject to consideration and approved at the general meeting of the Company.

The outbreak of COVID-19 across China in early 2020, and related prevention and control work continued throughout the country. The Group will pay close attention to the development of the pandemic and assess its impact on the financial positions and operating results of the Group. As of the date of approval of these financial statements, the Group has not found any material adverse impact.

Contingent Liabilities

Please refer to note 48 to the financial statements for details.

Capital Commitments

Please refer to note 50 to the financial statements for details.

Use of Proceeds from Financing Activities and Capital Utilization Plan

Under the complicating economic conditions in the macro environment, we adhered to the scientific and cautious investment philosophy and maintained an appropriate investment scale. In March 2013, the Company completed the issue of corporate bonds of RMB2 billion by public offering, which had been repaid in full by the Company in February 2016 and February 2018. The use of the proceeds and utilization plan, etc. are in line with the offering document.

In February 2015, the Company completed the issue of A Share convertible corporate bonds amounting to RMB6 billion, and the net proceeds were used for the Iraq Wassit II Thermal Power Plant EPC project, India SASAN Thermal Power Plant BTG project and Vietnam Vinh Tan II Coal-fired Power Plant EPC project, as the capital contribution to Shanghai Electric Leasing Co., Ltd. and for replenishing the working capital of the Company. Actual use of the proceeds is in line with the above disclosure.

On 22 May 2015, Shanghai Electric Newage Company Limited, a wholly-owned subsidiary of the Company, issued offshore bonds in the aggregate amount of EUR600 million, with such Eurobonds listed and traded on the Irish Stock Exchange from 25 May 2015 onwards. The Eurobonds are guaranteed by the Group and have a term of 5 years with annual interest rate of 1.125%. The proceeds from the bonds were mainly used for repayment of the bridge loan obtained in connection with the acquisition of 40% equity interest in Ansaldo Energia S.p.A. and related interests and fees. Actual use of the proceeds is in line with the above disclosure.

On 7 November 2017, the Company completed the issue of A shares with an aggregate amount of RMB3 billion to eight specific investors (including Shanghai Electric (Group) Corporation, the controlling shareholder of the Company) by way of non-public issuance. Proceeds from the non-public issuance were originally intended to be used to finance the projects including the Emerging Industrial Park Development Project at Gonghe New Road, the Innovative Industry Park Reformation Project at Beinei Road, the Technology Innovative Park Reformation Project at Jinshajiang Branch Road, and the Industrial Research, Development and Design and High-end Equipment Manufacturing Base Project at Jungong Road. According to the requirements such as adjustments by government authorities to the planning of the relevant areas where the proceeds-funded projects are located, in light of the Company's business development and the change in market conditions and on the principles of satisfying the requirements for use of raised proceeds and reducing the risks associated with the implementation of proceeds-funded projects, as considered and approved at the second meeting of the fifth session of the Board and approved at the 2018 third extraordinary general meeting of the Company, the proceeds would not be used to finance the Emerging Industrial Park Development Project at Gonghe New Road, the Technology Innovative Park Reformation Project at Jinshajiang Branch Road and the Industrial Research, Development and Design and High-end Equipment Manufacturing Base Project at Jungong Road. As considered and approved at the fourth meeting of the fifth session of the Board, the Company intends to apply part of the proceeds towards the successfully completed acquisitions of the 100% equity interests in Wujiang Taihu Industrial Wastes Treatment Company Limited (吳江市太湖工業廢棄物處理有限公司) and the 100% equity interests in Ningbo Hi-Firm Environmental Protection Company Limited (寧波海鋒環保有限公司). The Company has proceeded with the aforesaid acquisitions with its self-owned funds, and upon consideration and approval of the resolutions in relation to the proposed change in use of proceeds at the general meeting of the Company, it will use such proceeds to supplement the self-owned funds early invested. After consideration and approval of the 20th session of the 5th board of directors of the Company and the approval of the second extraordinary general meeting in 2019, the Company adjusted the amount of raised funds used in the reconstruction project of Beinei Road Creative Industry Park and used part of the raised funds in the project of Shanghai Electric Nantong Central Research Institute, and the remaining raised funds were used in permanent replenishment of working capital.

Overall Use Of Proceeds Raised From The Placement Of A Shares

Unit: 100 million Currency: RMB

Total amount of proceeds	30.00	Total proceeds invested during the year	21.12
Total proceeds used for other purposes instead of the scheduled one(s)	27.09	Total cumulative proceeds invested (Note1)	23.22
Percentage of total proceeds used for other purposes instead of the scheduled one(s)	90.30%		

Projects with investment commitment	Project changed or not (including those with partial changes (if any)	Total amount of proceeds with investment commitment	Total investment after adjustment	Amount invested during the year	Cumulative amount invested as at the end of the Reporting Period (Note 1)	Date of achieving the project's designed serviceable condition	Benefits generated during the year	Achieved the estimated goal or not
Emerging Industrial Park Development Project at Gonghe Xin Road	Yes	10.55	-	-	-	-	N/A	N/A
Innovative Industry Park Reformation Project at Beinei Road (Note2)	Yes	2.26	0.66	-	-	2020	N/A	N/A
Technology Innovative Park Reformation Project at Jinshajiang Branch Road	Yes	3.28	-	-	-	-	N/A	N/A
Industrial Research, Development and Design and High-end Equipment Manufacturing Base Construction Project at Jungong Road	Yes	11.66	-	-	-	-	N/A	N/A
Tax, surcharges and other expenses in relation to the restructuring	No	2.25	2.10	-	2.10	2018	N/A	N/A
Acquisition of 100% equity interests in Wujiang Taihu Industrial Wastes Treatment Company Limited	Yes	-	3.42	3.42	3.42	2019	N/A	N/A
Acquisition of 100% equity interests in Ningbo Hi-Firm Environmental Protection Company Limited	Yes	-	7.56	7.56	7.56	2019	N/A	N/A
Shanghai Electric Nantong Central Research Institute Project	Yes	-	7.26	1.29	1.29	2020	N/A	N/A
Permanent replenishment of working capital	Yes	-	8.85	8.85	8.85	2019	N/A	N/A
Total	-	30.00	29.85	21.12	23.22	-	-	-

Note 1: "Total cumulative proceeds invested" comprising the cumulative invested amount after such proceeds were credited and the actual amount used to replace the upfront investment amounted to RMB88 million altogether.

Note 2: Application for approval of the project content of the Innovative Industry Park Reformation Project at Beinei Road as per requirements under the "50 provisions for culture and creativity industry (文創五十條)" of Shanghai are underway and is expected to be completed in 2020.

Changes in proceeds-funded project	As considered and approved at the second meeting of the fifth session of the Board of the Company held on 22 October 2018 and the 2018 third extraordinary general meeting, 2018 first A share class meeting and 2018 first H share class meeting held on 10 December 2018, Shanghai Electric will no longer use any of the proceeds of RMB2,554 million (including interest income, the actual amount is subject to the balance after interest settlement of the bank on the date when the funds are transferred out) to finance the Emerging Industrial Park Development Project at Gonghe New Road, the Technology Innovation Park Reformation Project at Jinshajiang Branch Road and the Industrial Research, Development and Design and High-end Equipment Manufacturing Base Project at Jungong Road, including proceeds of RMB2,549 million and interest income on the proceeds of RMB5,000,000. As considered and approved at the fourth meeting of the fifth session of the Board of the Company held on 16 November 2018 and the 2019 first extraordinary general meeting, 2019 first A share class meeting and 2019 first H share class meeting held on 6 May 2019, Shanghai Electric proposes to use RMB342 million out of the proceeds to acquire the 100% equity interests of Wujiang Taihu Industrial Wastes Treatment Company Limited. (吳江市太湖工業廢棄物處理有限公司) through its wholly-owned subsidiary Shanghai Electric Investment Company Limited ("SEI") from Orient Landscape and Taizhou Zongze, and use RMB756 million out of the proceeds to acquire the 100% equity interests of Ningbo Hi-Firm Environmental Protection Company Limited (寧波海鋒環保有限公司) from Orient Landscape and Taizhou Zongze. Shanghai Electric intends to first proceed with the aforesaid acquisitions with its self-owned funds through its wholly-owned subsidiary SEI. Shanghai Electric has first completed the abovementioned acquisitions through its wholly-owned subsidiary SEI and supplemented the self-owned funds early invested with the proceeds. As considered and approved at the 20th meeting of the fifth session of the board of directors of the company on September 27 2019, and as considered and approved at the 2019 second extraordinary general meeting, the 2019 second A share class meeting and the 2019 second H share class meeting on November 14 2019, Shanghai Electric proposes to change the total investment and implementation mode of as well as the amount of proceeds earmarked for the Beinei Road Project. In particular, the total investment will be adjusted to RMB130 million; a project company will be jointly established by Shanghai Electric Group Property Company Limited (上海電氣集團置業有限公司) ("SEC Property") and Shanghai Yuanying Investment Management Co., Ltd. (上海元盈投資管理有限公司) ("Shanghai Yuanying"), a controlled subsidiary of Shanghai Guorun Investment and Development Company Limited (上海國潤投資發展有限公司) ("Guorun Investment") to function as the implementation entity. The project company (the name of which shall be subject to the approved business name) has a registered capital of RMB20 million, and is owned as to 60% by SEC Property through its contribution of self-financed funds in the amount of RMB12 million. Proceeds earmarked for the project will be reduced from RMB226 million to RMB66 million, which will be provided to SEC Property by Shanghai Electric through capital contribution, and in turn allocated to the project company by SEC Property by way of entrusted bank loans at an interest of 8% per annum for construction of No. 32 park zone reformation project at Beinei Road. In addition, upon intensive research and demonstration, Shanghai Electric proposed to appropriate RMB726 million from the RMB1,451 million previously set apart for proceeds-funded projects yet pending for confirmation to invest in the Shanghai Electric Nantong Central Research Institute Project, and use the remaining proceeds of RMB891 million (including interest income and the actual amount is subject to the balance after interest settlement of the bank on the date when the funds are transferred out. Such funds comprise proceeds of RMB885 million and interest income therefrom of RMB6 million) to replenish working capital permanently.
Upfront investment in the project to be invested through fund raising and replacement of such investment with the proceeds	On 17 April 2018, the Proposal in Relation to the Replacement of the Self-Pooled Upfront Investment in Projects to be Invested Through Fund Raising with the Proceeds was considered and approved at sixty-fourth meeting of the fourth session of the Board of the Company, which proposed to replace the self-pooled upfront investment in projects to be invested through fund raising with RMB88 million out of the proceeds. PricewaterhouseCoopers Zhong Tian LLP reviewed the upfront investment in relation to the fund raising through non-public issuance of A shares, and issued the PricewaterhouseCoopers Zhong Tian Te Shen Zi(2018) No.1870 document, i.e., the Report and Verification Report on Upfront Investment with Self-pooled Funds in the Project to be Invested Through Funds Raising. Guotai Junan Securities Co., Ltd. also expressed opinions on the Company's replacement of the self-pooled upfront investment in projects to be invested through fund raising with the proceeds.
Provisional replenishment of working capital with the idle proceeds from fund raising	On 18 January 2019, the Proposal in Relation to the Company's Provisional Replenishment of Working Capital with Certain Idle Proceeds from Fund Raising was considered and approved at sixth meeting of the fifth session of the Board of the Company. It was approved that idle proceeds totaling RMB2.5 billion would be used to replenish working capital on the condition that funding needs of the Projects to be Invested through Fund Raising can be assured and on a provisional basis. The Company utilized the aforesaid proceeds to replenish working capital on 21 January 2019 and returned all the abovementioned proceeds to the special account for proceeds on 9 November 2019.

Proposals for profit distribution or transfer capital reserves to share capital

As audited by PricewaterhouseCoopers Zhong Tian LLP, the net profit of the Company for 2019 as shown on the financial statements of the Company(not consolidated) prepared in accordance with the PRC GAAP was RMB2,554,286,000, and the undistributed profits at the beginning of 2019 was RMB10,528,372,000. After appropriation to statutory surplus reserves of RMB299,111,000 for the year 2019, deducting the effects of other adjustments (e.g., change in accounting policies) of RMB4,514,000 and dividends payable on ordinary shares of RMB931,270,000, the distributable profits amounted to RMB11,847,763,000.

The proposal for profit distribution for 2019: No cash dividend will be paid, no bonus shares will be distributed, and no capital reserves will be transferred to share capital, with the Company's undistributed profits carried forward for future distribution.

Final dividend

The Board resolved not to pay any final dividend for the year ended 31 December 2019, which is subject to approval at the annual general meeting of the Company.

Closure of Register of Members

The Company will notify shareholders on a later date about the date of the annual general meeting of the Company for the year ended 31 December 2019 and the corresponding arrangements for suspension of share transfer registration.

Contract of Significance

During the reporting period, save as disclosed in this report, neither the Company nor any of its subsidiaries had any contract of significance with its controlling shareholder or its subsidiaries, nor any contract of significance for the provision of services to the Company or any of its subsidiaries by a controlling shareholder or any of its subsidiaries (as defined in Appendix 16 to the Hong Kong Listing Rules).

Equity-linked Agreement

A Share Convertible Corporate Bonds

In January 2015, CSRC approved in writing the Company's public issuance of A share convertible corporate bonds in an aggregate sum of RMB6.0 billion. In February 2015, the Company completed issuing a total of 60,000,000 A share convertible corporate bonds with a nominal value of RMB100 each (the "Electric Convertible Bonds"), amounting to RMB6 billion in aggregate. The Electric Convertible Bonds were listed on the Shanghai Stock Exchange as from 16 February 2015 under the bond code of "113008". The initial conversion price of the Electric Convertible Bonds was RMB10.72 per A Share. The conversion price was adjusted from RMB10.72 per share to RMB10.66 per share from 2 July 2015, and further adjusted from RMB10.66 per share to RMB10.65 per share from 28 November 2016, from RMB10.65 per share to RMB10.46 per share from 24 October 2017, from RMB10.46 per share to RMB10.37 per share from 9 November 2017, from RMB 10.37 per share to RMB10.28 per share from 28 August 2018 from RMB10.28 per share to RMB5.19 per share from 12 December 2018, and from RMB5.19 per share to RMB5.13 per share from 8 August 2019. The term of the Electric Convertible Bonds commences from 2 February 2015 and ends on 1 February 2021 and the conversion period commences from 3 August 2015 and ends on 1 February 2021. Up to 31 December 2019, the Electric Convertible Bonds amounting to RMB1,531,835,000 have been converted into 294,407,617 A shares. During the reporting period, the Electric Convertible Bonds amounting to RMB1,524,298,000 have been converted into 293,696,959 A shares. As at 31 December 2019, the outstanding Electric Convertible Bonds amounted to RMB4,468,165,000.

As at the end of the reporting period, if all outstanding Electric Convertible Bonds of the Company were converted into A shares of the Company, the dilutive effect on shareholders would be as follows:

(i) if the outstanding Electric Convertible Bonds are fully converted, the number of shares to be issued will increase to 870,987,329 A shares; the total share capital of the Company

will increase from 15,152,462,418 shares to 16,023,449,747 shares. The consolidated shareholding of Shanghai Electric (Group) Corporation, the controlling shareholder of the Company, will drop from 59.18% to 55.96%; and

(ii) if the Electric Convertible Bonds were fully converted into A shares of the Company during the reporting period, there would be no material adverse impact on the financial and liquidity conditions of the Company.

For details, please refer to the announcements of the Company dated 20 January 2015, 28 January 2015, 11 February 2015, 25 June 2015, 27 July 2015, 24 November 2016, 22 October 2017, 7 November 2017, 20 August 2018, 10 December 2018 and 30 July 2019 and note 43 to the consolidated financial statements contained in this report.

Assets Restructuring and Placing of A shares

During the reporting period, save as the disclosed A share convertible corporate bonds, no other equity-linked agreements were entered into by the Company or subsisted during or at the end of the year that will or may result in the Company issuing shares, or requiring the Company to enter into any agreement that will or may result in the Company issuing shares.

Donations

The Group has earnestly performed its social responsibility. The total expenses of the Group for public welfare projects, charity donations, poverty alleviation donations and education sponsorship in 2019 amounted to RMB11.77 million.

Compliance with relevant laws and regulations

As a public company listed in both Mainland China and Hong Kong, the Company has formulated and continuously improved various rules and regulations in strict compliance with the requirements of relevant laws and regulations and normative documents of China and Hong Kong, including the Company Law of the People's Republic of China, the Code of Corporate Governance for Listed Companies in China, the Corporate Governance Code and Corporate Governance Report set out in Appendix 14 to Hong Kong Listing Rules as well as the provisions of the Articles of Association of the Company, to regulate the operations of the Company. The Company is committed to maintaining and improving the Company's good image in the market.

Environmental policies and performance of the Company

The Company insists on taking sustainable development as a key point in its strategic development, and endeavors to develop circular economy, improve resource utilization efficiency and build up an eco-friendly manufacturing system in pursuit of green development.

The Company has a production safety and environmental protection committee ("the Committee"). The Committee is chaired by the President of the Company and is responsible for the management and operation of the production safety and environmental protection systems of the Group. The Committee members comprise the main responsible persons of the Group's major business divisions and production departments.

During the reporting period, the Company advocated energy conservation and consumption reduction, and reduced pollution to the environment arising from each stage of production process and activities through technological innovation. In addition, the Company provided its suppliers and customers with solutions on factory energy conservation, building energy conservation and air-conditioning energy conservation so as to make its humble contribution in promoting the completion of an efficient, visible and sustainable target for energy conservation for the society. In recent years, on the one hand, the Company has been actively promoting high-end technology and making efforts in developing clean energy and green technology, trying to deepen its cultivation in technology fields for high efficiency and clean energy, as well as ultra-low emission and near zero emission, and to build up an industrial base; and on the other hand, the Company has been actively developing the environment protection business with a focus on environment protection facilities, integrated treatment of pollutants, and comprehensive utilization of resources. So far, the Company has built up its capability in general contracting in respect of power plant environmental facilities, solid waste treatment, sewage treatment, biomass power generation, and environment protection engineering projects.

During the reporting period, the Company has complied with the "Comply or Explain" provision under the Environmental, Social and Governance Reporting Guide as set out in Appendix 27 to Hong Kong Listing Rules. The Company will separately prepare the environmental, social and governance report for 2019, which will be separately published within three months after the publication of this report.

Purchase, redemption or sale of the Company's listed securities

No purchase, redemption or sale of the Company's listed securities has been made by the Company or any of its subsidiaries during the year.

Reserves

Details of the movements in the reserves of the Company and the Group during the year were set out in note 46 to the financial statements and the consolidated statement of changes in equity.

Property, plant and equipment

Details of the movements in the property, plant and equipment of the Company and the Group during the year were set out in note 14 to the financial statements.

Directors' rights to acquire shares and debentures

At no time during the year were rights to acquire benefits by means of an acquisition of shares or debentures of the Company granted to any Directors or their respective spouse or minor children; or was the Company, its holding company, or any of its subsidiaries or fellow subsidiaries a party to any arrangement to enable the Directors to acquire such rights in any other body corporate.

Sufficiency of Public float

Based on publicly available information and to the best knowledge of the Directors, the Board of the Directors confirms that the Company has maintained sufficient public float as at the date of this report.

Pre-emptive Rights Arrangement

Under the requirements of the PRC laws and the Articles of Association, the Company's shareholders have no preemptive rights.

Tax Relief and Exemption

The Board are not aware of any tax relief and exemption available to the Shareholders by reason of their holding of the Company's securities.

Zheng Jianhua
Chairman and CEO

Significant Events

The disclosure of the following matter will not, in the Directors' opinion, be harmful to the business of the Company.

Connected Transactions and Continuing Connected Transactions

According to the requirements of the Hong Kong Listing Rules, the connected transactions and continuing connected transactions between the Company and its subsidiaries (the "Group") and their connected persons for the year ended 31 December 2019 are disclosed in detail as follows:

Connected transactions

On 22 January 2019, the Board considered and approved the Relevant Resolution, pursuant to which the Company or Shanghai Electric Group Finance Co., Ltd. (上海電氣集團財務有限責任公司), a subsidiary of the Company, will provide a loan in an amount of not more than RMB1 billion to China Sino Electric Engineering Co., Ltd. (中機國能電力工程有限公司)(hereinafter referred to as "SINOMEC") for a term of one year provided that SINOMEC or a third party shall provide guarantee in a sufficient amount in line with requirements. The transaction was completed in the reporting period. The interest rate shall not be lower than 10% above the interest rate available to the Company for its capital obtained from banks. The resulting value-added tax and income tax costs are to be borne by SINOMEC.

On 17 April 2019, the Board considered and approved (i) the Onshore Contract to be entered into between Shanghai Electric Engineering Consulting Company Limited（上海電氣工程設計有限公司）(hereinafter referred to as "Electric Engineering"), a wholly-owned subsidiary of the Company, and Sino Sindh Resources (Pvt.) Ltd. （華信資源有限責任公司）(hereinafter referred to as "SSRL"), pursuant to which Electric Engineering will provide Onshore Services for the coal mine project in Thar Coal Block-1, Pakistan at the consideration of US$434,750,358, the relevant services provided by Electric Engineering including civil engineering relating to the Project, and service and production facilities of the Coal Mine, sewerage and drainage as well as the stripping of the mine construction under the Onshore Contract of the Project; and (ii) the Offshore Contract to be entered into among the Company, Shanghai Electric Hongkong International Engineering Company Limited（上海電氣香港國際工程有限公司）(hereinafter referred to as "Electric HK Engineering"), a wholly-owned subsidiary of the Company, and SSRL, pursuant to which the Company and Electric HK Engineering will provide Offshore Services for the coal mine project in Thar Coal Block-1, Pakistan at the consideration of US$467,956,549, the relevant services provided by the Company and Electric HK Engineering including the procurement of mining equipment for the Project, equipment renovation prior to commercial operation of the Coal Mine, design consultation and research services, and service and production facilities of the Coal Mine, sewerage and drainage as well as the stripping of the mine construction under the Offshore Contract of the Project. The total consideration of the Onshore Contract and the Offshore Contract is expected to be US$902,706,907. The transaction was completed in the reporting period.

On 9 December 2019, the Board considered and approved the Relevant Resolution, pursuant to which the Company was approved to transfer the 86.727% equity interests it held in Shanghai Marine Crankshaft Co., Ltd. (上海船用曲軸有限公司) to the Shanghai Electric Development Co., Ltd. (上海電氣企業發展有限公司), a wholly owned subsidiary of SEC at a consideration of RMB170,226,610.34. The transaction was completed in the reporting period.

Continuing Connected Transactions

Connected Transactions with Shanghai Electric (Group) Corporation

Framework sales agreement

The Company entered into a framework sales agreement with SEC on 14 November 2016, pursuant to which the Group agrees to provide electrical engineering products, electrical equipment, and other related services to SE Corporation and its subsidiaries and associates (the "Parent Group"). Pursuant to the agreement, the annual cap of the relevant sales for the year ended 31 December 2019 was estimated to be RMB 700,000,000.

The Directors of the Company believe that the above framework sales agreement is entered into in the ordinary course of business of the Group and is on normal commercial terms. The pricing basis shall be:

- prices as may be stipulated by the PRC Government (if any); and if there are no such stipulated prices;
- prices no less than any pricing guidelines or pricing recommendations set by the PRC Government (if any); and if there are no such pricing guidelines or recommendations;
- with reference to the market price; and if there is no market price for a particular product; and
- an agreed price consisting of the actual or reasonable cost incurred thereof plus a reasonable profit margin.

The term of the framework sales agreement is three years, renewable at the option of the Company for another term of three years by giving three months' notice prior to the expiry of the term and may be terminated by either party to the agreement by giving three months' notice.

The actual sales to the Parent Group for the year ended 31 December 2019 was RMB 170.37 million.

On October 29 2019, the Company and SEC once again entered into a framework sales agreement. For the years ended December 31 2020, 2021 and 2022, the approved annual cap of the relevant purchases is RMB700,000,000.

Framework purchase agreement

The Company entered into a framework purchase agreement with SEC on 14 November 2016, pursuant to which the Group agrees to purchase, on a nonexclusive basis, certain component parts, such as turbine blades, coupling, AC motor and emergency trip control cabinet, automatic instruments, other mechanical equipment and raw materials (including copper wires and insulation materials) from the Parent Group. Pursuant to the agreement, the annual cap of the relevant purchases for the year ended 31 December 2019 was estimated to be RMB700,000,000.

The Directors of the Company believe that the above framework purchase agreement is entered into in the ordinary course of business of the Group and is on normal commercial terms. The pricing basis shall be:

- prices as may be stipulated by the PRC Government (if any); and if there are no such stipulated prices;
- prices not exceeding any pricing guidelines or pricing recommendations set by the PRC Government (if any); and if there are no such pricing guidelines or recommendations;
- with reference to the market price; and if there is no market price for a particular product; and
- an agreed price consisting of the actual or reasonable cost incurred thereof plus a reasonable profit margin.

The term of the framework purchase agreement is three years, renewable at the option of the Company for another term of three years by giving three months' notice prior to the expiry of the term and may be terminated by either party to the agreement by giving three months' notice.

The actual purchase from the Parent Group for the year ended 31 December 2019 was RMB 51.64 million.

On October 29 2019, the Company and SEC once again entered into a framework purchase agreement. For the years ended December 31 2020, 2021 and 2022, the approved annual cap of the relevant purchases is RMB500,000,000.

Framework financial services agreement

On 14 November 2016 and 29 October 2019, Shanghai Electric Group Finance Co., Ltd. ("Finance Company"), a subsidiary of the Company, entered into various financial services agreements with SEC, pursuant to which Finance Company provides deposit and loan services to the Parent Group.

These framework financial services agreements are entered into in the ordinary course of business of the Group and are on normal commercial terms. The term of the framework financial services agreements is three years, renewable at the option of the Company for another term of three years by giving three months' notice prior to the expiry of the term and may be terminated by either party to the agreement by giving three months' notice.

The details of individual framework financial service agreement are as follows:

Framework deposit agreement

On 14 November 2016, Finance Company entered into a framework deposit agreement with SEC in relation to the deposit services for the Parent Group provided by Finance Company. Pursuant to the agreement, the approved annual cap, representing the maximum daily balance of funds (including interests) that may be deposited, for the year ended 31 December 2019 was estimated to be RMB7,500,000,000. The interest rates offered by Finance Company for the deposits placed by the Parent Group shall be:

- subject to the relevant guidelines and regulations of the People's Bank of China ("PBOC"); and
- with reference to the relevant savings rates set by PBOC from time to time and are in line with the market rates.

The actual daily balance of funds from the Parent Group for the year ended 31 December 2019 did not exceed the approved annual cap of RMB 7,500,000,000. Besides, the Parent Group received interest income of RMB 31.90 million for the deposits from Finance Company for the year ended 31 December 2019.

On October 29 2019, the Company and SEC once again entered into a framework deposit agreement. For the years ended December 31 2020, 2021 and 2022, the approved annual cap, representing the maximum daily balance of funds (including interests) that may be deposited, is RMB7,500,000,000.

Framework loan agreement

On 14 November 2016, Finance Company entered into a framework loan agreement with SEC in relation to the loan and bills services provided by Finance Company and the payment shall be in accordance with the face amount of the instrument. Pursuant to the agreement, the approved annual cap, representing the maximum daily balance of loans that may be extended and discounted bills that may be purchased (including interests), for the year ended 31 December 2019 was estimated to be RMB7,500,000,000. The interest rates offered by Finance Company for all loan services and purchases of discounted bills provided to the Parent Group shall be:

- subject to the relevant guidelines and regulations of the PBOC; and
- with reference to the relevant rates set by PBOC from time to time and are in line with the market rates.

The actual daily balance of outstanding loans and discounted bills from the Parent Group in the year ended 31 December 2019 did not exceed the approved annual cap of RMB7,500,000,000. Besides, the Parent Group paid interest of RMB 267.97million, which was derived from loans and discounted bills, to Finance Company for the year ended 31 December 2019.

On October 29 2019, the Company and SEC once again entered into a framework loan agreement. For the years ended December 31 2020, 2021 and 2022, the approved annual cap, representing the maximum daily balance of loans that may be extended and discounted bills that may be purchased (including interests), is RMB7,500,000,000.

Continuing connected transactions with Siemens

On 23 January 2009, the Company entered into a framework purchase and sales agreement with Siemens Aktiengesellschaft ("Siemens", who indirectly owns more than 10% of the registered capital in certain subsidiaries of the Company), pursuant to which the Group has agreed to purchase certain power generation, distribution and transmission related electrical and mechanical components from Siemens and its subsidiaries and associates ("Siemens Group") to be used in various projects and products of the Group, and the Group will sell certain power generation equipment and related components to Siemens Group.

The above framework purchase and sales agreement expired on 23 January 2012.

In October 2011, the Company applied to the Stock Exchange of Hong Kong Limited (the "Stock Exchange") for the waiver from strict compliance with Rule 14A.35 (1) of the Hong Kong Listing Rules, in accordance with which, the Company would be required to enter into a written agreement with Siemens in respect of the renewal continuing connected transactions (the "Renewal CCT"). The waiver has been conditionally granted by the Stock Exchange on 4 November 2011, subject to and on the waiver conditions. On 8 December 2011, the board of directors approved the waiver of written framework agreement and the Renewal CCT. On 29 May 2012, the Independent Shareholders approved the waiver of written framework agreement and the Renewal CCT.

In January 2015, the Company applied for exemption in strictly following Listing Rules 14A.34 and 14A.51 which provides that the Company shall enter into a framework agreement with Siemens on renewal continuing connected transactions. The waiver has been conditionally granted by the Stock Exchange on 10 February 2015, subject to and on the waiver conditions, and the framework agreement and the updated annual caps of continuing connected transactions were approved by the Board of Director.

In August 2017, the Company applied for exemption in strictly following Listing Rules 14A.34 and 14A.51 which provides that the Company shall enter into a framework agreement with Siemens on renewal continuing connected transactions. The waiver has been conditionally granted by the Stock Exchange on 14 September 2017 subject to and on the waiver conditions, and the framework agreement and the updated annual caps of continuing connected transactions were approved by the Board of Director.

As the Group expects that purchase amounts from the Siemens Group will increase in three years ending 31 December 2020, the Directors believe that the Existing Annual Caps will not be sufficient for the Group's business needs. Therefore, in September 2018, the Board proposed to revise the Existing Annual Caps to RMB2,700 million, RMB2,700 million and RMB2,700 million in respect of the Continuing Connected Transactions for the years ending 31 December 2018, 2019 and 2020, respectively.

The company will continuously enter into written agreement for undated continuing connected transactions and the cap of the updated continuing connected transactions will be priced according to the following pricing strategy now and in the future.

- in respect of the purchase transactions where the components and/or technologies are generally available in the market (mainly used in power transmission and distribution equipment), market price, which is determined by reference to the prevailing market rates for similar or the same components and/or technologies available on an arm's length basis from independent third parties, shall be considered for the consideration of the Continuing Connected Transactions to be determined. The marketing departments of the relevant subsidiaries of the Company have been obtaining and will continue to obtain price quotations from suppliers in the market (including both independent suppliers and Siemens) once the relevant subsidiaries receive orders from the customers and will choose the supplier who provides the most favourable terms (especially the lowest price per unit of the same quality). The marketing department of the relevant subsidiaries will compare the price quotations from Siemens with at least two price quotations from independent suppliers before making the commercial decision. The internal control department of the relevant subsidiaries has conducted and will continue to conduct annual review to make sure the abovementioned procedure has been complied with throughout the year. During the past three years, the Company has purchased the same products provided by the Siemens Group from more than two independent suppliers every year and expects to stick to such practice if there is no material change to the current market conditions. With the access to the independent suppliers in the market from time to time, the Company has the opportunity to learn the market conditions on a timely basis and make an informed commercial decision; and

- in respect of the purchase transactions where the components and/or technologies can only be provided by the Siemens Group due to its unique technology (mainly used in power equipment) while similar components and/or technologies provided by other suppliers currently do not match well with the Company's certain power equipment which renders the contemporaneous quotations from independent third parties not available, the Group may refer to (i) prices of relevant transactions for the last year, (ii) market trend of the prices for similar components and/or technologies domestically and internationally, which has been and will be assessed by the marketing department of the relevant subsidiaries based on the public information in the fourth quarter of every year and (iii) business plan of the Group, and negotiate with the Siemens Group in good faith. With the historical purchase price as a benchmark price and the roughly estimated percentage of the increase or decrease of the market prices for similar components and/or technologies domestically and internationally, the Company should be able to assess the fairness and reasonableness of price quotations from the Siemens Group and make an informed commercial decision based on the market information to the largest extent possible.

The actual purchase from the Siemens Group for the year ended 31 December 2019 was RMB 943.88 million.

Framework purchase agreement with Mitsubishi Electric

Mitsubishi Electric Corporation ("Mitsubishi Electric") holds more than 10% of the equity interest in Shanghai Mitsubishi Elevator Co., Ltd. ("SMEC"), being a subsidiary of the Company. Mitsubishi Electric Shanghai Mechanical & Electrical Elevator Co., Ltd. ("MESMEE") is held as to 40% by Shanghai Mechanical & Electrical Industry Co., Ltd., a 47.83% owned subsidiary of the Company, 40% by Mitsubishi Electric and 20% by Mitsubishi Electric Building Techno-service Co., Ltd., a wholly-owned subsidiary of Mitsubishi Electric.

SMEC entered into a framework purchase agreement with MESMEE on 28 March 2013, in relation to the purchase of certain elevators, related components and services from MESMEE by SMEC, and renewed the framework purchase agreement on 14 November 2016. On 14 November 2016, the Board (including the independent non-executive Directors) approved the MESMEE Framework Purchase Agreement and transactions contemplated under the MESMEE Framework Purchase Agreement and the independent non-executive directors confirmed that the terms of the transactions are on normal commercial terms, fair and reasonable, and in the interests of the Company and its shareholders as a whole.

Pursuant to the agreement, the annual caps of the relevant purchases for the three years ended 31 December 2019 were estimated to be RMB 4,000,000,000, RMB 4,500,000,000 and RMB 5,000,000,000, respectively. The price of products to be purchased from MESMEE is determined principally at arm's length by commercial negotiations in accordance with general principles of fairness and reasonableness with reference to the market price.

The Directors of the Company believe that the revisions of the annual caps are based on normal commercial terms, and are fair and reasonable and in the interests of the shareholders of the Company as a whole.

The term of the framework purchase agreement is three years commencing on 14 November 2016, renewable at the option of the Company by giving three months' notice prior to the expiry of the agreement.

The actual purchases from MESMEE by the Group for the year ended 31 December 2019 were RMB 2,632.31million.

On October 29 2019, SMEC and MESMEE once again entered into a framework purchase agreement. For the years ended December 31 2020, 2021 and 2022, the approved annual caps of the relevant purchases are RMB3,500,000,000 RMB3,500,000,000and RMB3,500,000,000.

Framework sales agreement with SMEPC

State Grid Shanghai Municipal Electric Power Company ("SMEPC") hold more than 10% equity interest of Shanghai Electric Transmission and Distribution Group Co., Ltd., a subsidiary of the Company, and purchases transmission and distribution products from the Group since 2012.

As the Company devotes to increase sales and profits of transmission and distribution products, the company anticipates that the Group will continuously trade with SMEPC Group over the next couple of years. Therefore, in February 2015, the Company applied to the Stock Exchange for the waiver from strict compliance with Rule 14A.34 and Rule 14A.51 of the Hong Kong Listing Rules. According to this listing rule, the Company needs to enter into a written framework agreement for continuing connected transactions. The waiver has been conditionally granted by the Stock Exchange on 22 April 2015, only if the company apply for and eligible for the exemption conditions, the grant will come into effect. On 24 April 2015, the Board of Directors of the Company approved the waiver of entering into framework agreement and the annual caps of continuing connected transactions.

In July 2017, the Company applied to the Stock Exchange for the waiver from strict compliance with Rule 14A.34 and Rule 14A.51 of the Hong Kong Listing Rules. According to this listing rule, the Company would be required to enter into a written framework agreement with SGSMEPC in respect of the Continuing Connected Transactions. The waiver has been conditionally granted by the Stock Exchange on 9 August 2017 and was approved by the Board (including the independent non-executive Directors) on 30 October 2017.The approved


38%
adipiscing
18%
19%
consectetur
21%
MACHINE MONITORING
PRESSURE
SPEED

annual caps for the three years ended 31 December 2020 were RMB 4,600,000,000, RMB 4,900,000,000 and RMB 5,100,000,000.

On April 29 2019, after considering the Group's further expansion in the transmission and distribution equipment market, the existing annual cap would not be able to meet the current business needs of the Group, and the Board approved to revise the upper limit amounts to RMB6,000,000,000 and RMB7,000,000,000 respectively for the years ended December 31 2019 and 2020.

As the Company needs to take part in open, strict and independent bidding process in order to obtain the orders and enter into each of the Continuing Connected Transactions, the Company will adopt the following methods and procedures to ensure that the bidding price is fair and reasonable:

- the sales department of the Joint Venture will collect all winning prices of the target product (including prices of other bid winners) in the preceding year and calculate an average winning price;

- the financial department of the Joint Venture will use such average winning price to calculate the profit margin based on its own costs;

- the sales department of the Joint Venture will propose a bidding price which represents a profit margin ranging from 5% to 10% upwards or downwards from the base margin based on the competition status for a particular bidding; and

- the management of the Joint Venture will review and decide whether or not to approve such bidding price according to market conditions.

The sales of the Group to the SMEPC Group is RMB 4,118.25million for the year ended 31 December 2019.

Framework Sales Agreement with SINOMEC

Framework Purchase Agreement

As at 22 March 2019, Thvow Technology, a subsidiary of the Company, entered into the Framework Purchase Agreement with SINOMEC, the approved annual cap of purchases of photovoltaic modules, frames, cables, wind turbine equipment and related auxiliary equipment and other products as well as supporting services from SINOMEC for the year was RMB500 million in 2019.

The consideration of each of the continuing connected transactions under the aforementioned Framework Purchase Agreement is and will continue to be determined in accordance with the following pricing policies: (i) the pricing basis will be made with reference to market price of the products as applicable. Such market price is determined by reference to the prevailing market prices for similar or the same equipment or raw materials available on an arm's length basis from independent third parties. The marketing departments of Thvow Technology have been obtaining and will continue to obtain price quotations from suppliers in the market (including both independent suppliers and SINOMEC) and will choose the supplier who provides the most favourable terms (especially the lowest price per unit of the same quality). The marketing department of Thvow Technology will compare the price quotations from SINOMEC with at least two price quotations from independent suppliers before making the commercial decision; (ii) when there are no market prices, Thvow Technology will seek a reasonable price by comparing the quotations from different suppliers and nail down the agreed price on normal commercial terms with SINOMEC. The senior management of Thvow Technology will review the pricing of transactions under the Framework Purchase Agreement and compare the terms of agreements entered into between Thvow Technology and independent third parties in relation to the purchases of the products with similar specifications to ensure that the prices and terms offered by SINOMEC is no less favourable to Thvow Technology than those offered by independent third parties. In addition, the internal control department of Thvow Technology will conduct annual review to make sure the abovementioned procedure has been complied with throughout the year.

The purchase of Thvow Technology from SINOMEC is RMB 3.58million for the year ended 31 December 2019.

Framework Sales Agreement

As at 22 March 2019, Thvow Technology, a subsidiary of the Company, entered into the Framework Sales Agreement with SINOMEC with the approved annual cap of sales in the field of power generation and provide engineering project management and technical consulting services to SINOMEC for the year was RMB2,500 million in 2019.

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Pursuant to the Framework Sales Agreement, prices of products and services to be provided to SINOMEC by Thvow Technology will be determined principally by arm's length commercial negotiations with reference to the market price and the historical transaction price by taking into account the actual cost plus a reasonable profit margin. Thvow Technology has taken sufficient internal control measures to ensure that the gross profit margin from sales of products and services to SINOMEC will be no less than that from sales of similar products and services to independent third parties. The senior management of Thvow Technology will review the pricing of transactions under the Framework Sales Agreement and compare the terms of agreements entered into between Thvow Technology and independent third parties with the terms of the Framework Sales Agreement in relation to sales of similar products or services to ensure that the price and terms offered to SINOMEC is no more favourable than those offered to independent third parties. In addition, the internal control department of Thvow Technology will conduct annual review to make sure the abovementioned procedure has been complied with throughout the year.

The sales of Thvow Technology to SINOMEC is RMB 100.47 million for the year ended 31 December 2019.

The independent non-executive directors of the Company have reviewed the abovementioned continuing connected transactions and confirmed that the transactions have been entered into:

- in the ordinary and usual course of business of the Company;
- on normal commercial terms or better; and
- according to the agreement governing them on terms that are fair and reasonable and in the interests of the shareholders of the Company as a whole.

The auditors of the Company have provided a letter to the board of directors of the Company confirming:

- nothing has come to their attention that causes them to believe that such disclosed continuing connected transactions have not been approved by the board of directors of the Company;
- nothing has come to their attention that causes them to believe that the continuing connected transactions were not, in all material respects, in accordance with the pricing policies of the Company in relation to the transactions involve the provision of goods or services by the Company;
- nothing has come to their attention that causes them to believe that such continuing connected transactions were not entered into, in all material respects, in accordance with the relevant agreement governing the transactions; and
- nothing has come to their attention that causes them to believe that such continuing connected transactions have exceeded the annual cap made by the Company.

Significant related party transactions

The Company confirms that it has complied with the requirements in accordance with Chapter 14A of the Hong Kong Listing Rules in respect of the above connected transactions. Save as disclosed above, significant related party transactions which do not constitute the connected transactions under the Hong Kong Listing Rules during the year have been disclosed in note 53 to the annual financial statements prepared in accordance with the Hong Kong Financial Reporting Standards.

Other major events

On 20 June 2019, the Board considered and approved the implementation of market-based debt-to-equity conversion by way of accepting the proposed cash capital contribution to Shanghai Electric International Economic and Trade Co., Ltd. (上海電氣國際經濟貿易有限公司), Shanghai Electric Industrial Company Limited (上海電氣實業有限公司), Shanghai Electric

Group Shanghai Electric Machinery Co., Ltd. (上海電氣集團上海電機廠有限公司), Shanghai Institute of Mechanical and Electrical Engineering Co., Ltd. (上海市機電設計研究院有限公司) and Shanghai Electric Nuclear Power Equipment Co., Ltd. (上海電氣核電設備有限公司), all being wholly-owned subsidiaries of the Company (collectively referred to as "Target Companies"), with cash so received to be used for repayment of debts, and the introduction of ICBC Financial Asset Investment Co., Ltd. (工銀金融資產投資有限公司), BOCOM Financial Asset Investment Company Limited (交銀金融資產投資有限公司) and BOC Financial Asset Investment Co., Ltd. (中銀金融資產投資有限公司) to make cash contribution of RMB10 billion in aggregate to the abovementioned five Target Companies. The proceeds from the Capital Contribution are proposed to be used for repayment of borrowings of the Company or the Target Companies from financial institutions. The transaction was completed in the reporting period.

In December 2019, the Company and Jing'an Land Reserve Center of Shanghai entered into the State-owned Land Use Rights Resumption Contract, pursuant to which, both parties reached consensus on the resumption of the state-owned land use rights of the properties located at No. 400 Wenshui Road and No. 450 Wenshui Road, Jing'an District. Total resumption prices of the properties located at No. 400 Wenshui Road and No. 450 Wenshui Road were RMB1,091.40 million and RMB484.92 million, respectively, amounting to RMB1,576.32 million in aggregate. The transaction was completed in the reporting period.

Material events after the period

On 6 January 2020, the Board considered and approved the resolution in relation to the proposed spin-off and listing of Shanghai Electric Wind Power Group Co., Ltd. on the Science and Technology Innovation Board of Shanghai Stock Exchange. The resolution shall become effective upon consideration and approval in an extraordinary general meeting of the Company.

As at 15 April 2020, the Board considered and approved the Relevant Resolution, pursuant to which Thvow Technology, a subsidiary of the Company, entered into the Framework Purchase Agreement with SINOMEC, the approved annual cap of purchases for the year was RMB 1,500 million with a term of one year. The consideration of each of the continuing connected transactions under the aforementioned Framework Purchase Agreement is and will continue to be determined in accordance with the following pricing policies: (i) the pricing basis will be made with reference to market price of the products as applicable. Such market price is determined by reference to the prevailing market prices for similar or the same equipment or raw materials available on an arm's length basis from independent third parties. The marketing departments of Thvow Technology have been obtaining and will continue to obtain price quotations from suppliers in the market (including both independent suppliers and SINOMEC) and will choose the supplier who provides the most favourable terms (especially the lowest price per unit of the same quality). The marketing department of Thvow Technology will compare the price quotations from SINOMEC with at least two price quotations from independent suppliers before making the commercial decision; (ii) when there are no market prices, Thvow Technology will seek a reasonable price by comparing the quotations from different suppliers and nail down the agreed price on normal commercial terms with SINOMEC. The senior management of Thvow Technology will review the pricing of transactions under the Framework Purchase Agreement and compare the terms of agreements entered into between Thvow Technology and independent third parties in relation to the purchases of the products with similar specifications to ensure that the prices and terms offered by SINOMEC is no less favourable to Thvow Technology than those offered by independent third parties. In addition, the internal control department of Thvow Technology will conduct annual review to make sure the abovementioned procedure has been complied with throughout the year.

As at 15 April 2020, the Board considered and approved the Relevant Resolution, pursuant to which Thvow Technology, a subsidiary of the Company, entered into the Framework Sales Agreement with SINOMEC, the approved annual cap of sales for the year was RMB 2,500 million with a term of one year. Pursuant to the Framework Sales Agreement, prices of products and services to be provided to SINOMEC by Thvow Technology will be determined principally by arm's length commercial negotiations with reference to the market price and the historical transaction price by taking into account the actual cost plus a reasonable profit margin. Thvow Technology has taken sufficient internal control measures to ensure that the gross profit margin from sales of products and services to SINOMEC will be no less than that from sales of similar products and services to independent third parties. The senior management of Thvow Technology will review the pricing of transactions under the Framework Sales Agreement and compare the terms of agreements entered into between Thvow Technology and independent third parties with the terms of the Framework Sales Agreement in relation to sales of similar products or services to ensure that the price and terms offered to SINOMEC is no more favourable than those offered to independent third parties. In addition, the internal control department of Thvow Technology will conduct annual review to make sure the abovementioned procedure has been complied with throughout the year.

Appointment, removal and remuneration of auditors

Particulars of change in auditors in the preceding three years	2019	2018	2017
Name of the PRC auditor	PricewaterhouseCoopers Zhong Tian LLP	PricewaterhouseCoopers Zhong Tian LLP	PricewaterhouseCoopers Zhong Tian LLP
Name of the international auditor	PricewaterhouseCoopers LLP	PricewaterhouseCoopers LLP	PricewaterhouseCoopers LLP

Services provided by auditors

Unit: '000; Currency: RMB
(unless otherwise specified)

	Remuneration
Name of the PRC auditor	PricewaterhouseCoopers Zhong
Name of the international auditor	Tian LLP
Number of years of continued services provided by auditors	PricewaterhouseCoopers LLP
Annual audit fee for the Company	6 Years
Statutory audit fee for subsidiaries	12,849
Total fee	14,701
Total	27,550

	Firm Name	Remuneration
Auditors for Internal controls review	PricewaterhouseCoopers Zhong Tian LLP	2,250

INDEPENDENT AUDITOR'S REPORT

To the shareholders of Shanghai Electric Group Company Limited

(incorporated in the People's Republic of China with limited liability)

Opinion

What we have audited

The consolidated financial statements of Shanghai Electric Group Company Limited (the "Company") and its subsidiaries (the "Group") set out on pages 92 to 260, which comprise:

- the consolidated balance sheet as at 31 December 2019;
- the consolidated statement of profit or loss for the year then ended;
- the consolidated statement of comprehensive income for the year then ended;
- the consolidated statement of changes in equity for the year then ended;
- the consolidated statement of cash flows for the year then ended; and
- the notes to the consolidated financial statements, which include a summary of significant accounting policies.

Our opinion

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 2019, 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 believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Independence

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.

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 matters identified in our audit are summarised as follows:

- Revenue recognition relating to sales of goods, construction services and provision for onerous contracts
- Impairment provision of trade receivables, contract assets, loan and lease receivables
- Impairment assessment on goodwill

Key Audit Matter	How our audit addressed the Key Audit Matter
1. Revenue recognition relating to sales of goods, construction services and provision for onerous contracts	
Referring to note 2.29, note 2.30, note 4.1(a), note 4.1(c), note 6 and note 42 to the consolidated financial statements. In 2019, consolidated revenue of the Group amounted to RMB127,509 million, of which approximately 67.8% was resulted from sales of goods and approximately 23.3% was resulted from construction services. In 2019, the amount of provision for onerous contracts charged to the profit or loss was RMB596 million. When the customers gain control over the relevant goods or services, the Group recognises the revenue in accordance with the amount of consideration which the Group expects to be entitled to receive. Macroeconomic factors, such as commodity price and industry competition can have a significant impact on the gross profits of the contracts.	For sales of goods, we gained an understanding, evaluated the design and tested the operating effectiveness of the key controls in respect of the Group's sales transactions from order approval to sales recording. We discussed with management and understood the revenue recognition policy for sales of goods of the Group. By inspecting sales contracts on a sample basis, we analysed and evaluated whether the point of time when control transfer was consistent with the relevant accounting policies disclosed in the notes to the consolidated financial statements. Furthermore, we tested revenue from sales of goods on a sample basis by performing the following procedures: • examined the relevant supporting documents, including customer orders, sales contracts, goods delivery notes, customers' acceptance notes, invoices, etc.; • tested sales transactions recorded before and after the balance sheet date by tracing to the supporting documents including the relevant customers' acceptance notes, etc. to assess whether revenue was recognised in the correct reporting periods. For revenue relating to construction services and provision for onerous contracts, we gained an understanding, evaluated the design and tested the operating effectiveness of the key controls in respect of the Group's process to record contract revenue, contract costs and the estimated unavoidable cost of the onerous contracts, including the controls related to recording of the actual cost incurred and the estimation of the total contract costs.

Key Audit Matter	How our audit addressed the Key Audit Matter
1. Revenue recognition relating to sales of goods, construction services and provision for onerous contracts (Continued)	
We focused on revenue recognition relating to sales of goods, construction services and provision for onerous contracts and identify these as key audit matters based on the following reasons: The focus on the revenue from sales of goods is due to its huge volume, large number of customers involved with goods distributed to many different areas. The amount of sales of goods recognised has a significant impact on the consolidated financial statements. Therefore, we need to deploy significant audit resources to execute the necessary audit procedures. The focus on the revenue relating to construction services and provision for onerous contracts is due to the significant estimations and judgements involved. The Group adopted the percentage of completion method to account for the revenue relating to construction services. Except for the revenues of a portion of contracts that were recorded by reference to the proportion of completed certified value to total contract value as the basis to estimate the progress, the revenues for the majority of contracts were recognised by reference to the proportion of costs incurred to date to the estimated total costs of the relevant contracts.	We compared the actual total costs of a sample of completed projects to management's prior estimation of projected total contract costs to assess management's historical estimation accuracy. We obtained the analyses on revenue and cost relating to construction services calculated by managements, and agreed the total amount to the sales and cost of sales ledgers. Meanwhile, we obtained the schedule of onerous contracts prepared by management, and checked the mathematical accuracy of the calculation of the analyses on revenue and cost relating to construction services and the schedule of onerous contracts. For the revenue of construction services recognised by reference to the proportion of completed certified value to total contract amount, we tested the completed certified value on a sample basis by performing the following procedures: • obtained the certified value confirmed by the customers, the certifiers and the Group; and • sent confirmations to the customers to verify the completed certified value.; For the revenue of construction services recognised by reference to the proportion of costs incurred to date to the estimated total costs of the relevant contracts, we tested the costs incurred on a sample basis by performing the following procedures: • examined the supporting documents, including the contracts, invoices, equipment acceptance documents, progress confirmation slips, etc.; and • tested the actual costs incurred before and after the balance sheet date by tracing to the supporting documents, including the equipment acceptance documents, progress confirmation slips, etc., to assess whether the actual costs incurred were recognised in the correct reporting periods.

Key Audit Matter	How our audit addressed the Key Audit Matter
1. Revenue recognition relating to sales of goods, construction services and provision for onerous contracts (Continued)	
Meanwhile, the management assessed whether the unavoidable contracts costs to fulfil contractual obligations exceeded the economic benefits expected to be received at balance sheet date, and set aside the provision for the onerous contracts based on the estimated least net cost of exiting from the contracts. We focused on revenue recognition relating to construction services and provision for onerous contracts due to the significant estimations and judgements involved in the estimation of the total contract costs, including existing or potential unpredictable expenditures to be incurred before completion or delivery.	Furthermore, for these construction services together with the onerous contracts asserted by management, we tested the estimated total costs of such contracts on a sample basis by performing the following procedures: • checked the components of the estimated total costs to the supporting documents, including purchase contracts, to identify any missing cost components; • assessed the reasonableness of the estimated total costs through discussions with the project engineers and reviewing the supporting documents; and • assessed the reasonableness of the estimated total contract cost by comparing the estimated total contract cost with the actual total costs for similar completed projects. We recalculated the percentage of completion to assess the accuracy of revenue recognition relating to construction services. Based on the work performed, we found that the Group's key estimations and judgments associated with revenue recognition relating to sales of goods, construction services and provision for onerous contracts were supported by the available evidences.

Key Audit Matter	How our audit addressed the Key Audit Matter
2.Impairment provision of trade receivables, contract assets, loan and lease receivables	
Referring to note 2.13, note 3.1(b), note 4.2(b), note 4.2(d), note 6, note 20 and note 30 to the consolidated financial statements. As at 31 December 2019, the net carrying amount of the Group's trade receivables was RMB29,337 million, after netting off the accumulated provision for impairment of RMB7,381 million. Contract assets as at the same date amounted to RMB33,402 million, after netting off the accumulated provision for impairment of RMB1,047 million. The Group provided for impairment of trade receivables and contract assets based on the expected credit loss during lifetime. For the trade receivables and contract assets with objective evidence of impairment, and other trade receivables and contract assets subject to separate assessment for impairment provision, impairment tests were conducted to calculate the expected credit loss and to provide an individual impairment allowance. For the trade receivables and contract assets without objective evidence of impairment or the expected credit loss cannot be estimated for an individual financial asset at a reasonable cost, the Group grouped trade receivables and contract assets in accordance with credit risk characteristics and calculated the expected credit loss based on groups.	We gained an understanding and evaluated management's design and tested the operating effectiveness of key controls in respect of the impairment provisions of trade receivables, contract assets, loan and lease receivables. By comparing the actual write-offs or losses of trade, loan and lease receivables and contract assets with the impairment provisions accrued in previous years, we evaluated the reliability of management's historical judgements adopted in estimating these impairment provisions. We performed the following procedures on assessing expected credit loss of trade receivables and contract assets: • for the trade receivables and contract assets with objective evidence of impairment, and other trade receivables and contract assets subject to separate assessment for impairment provision, we performed the following procedures: - obtained and understood management's assessment of the collectability of trade receivables and contract assets subject to separate assessment for impairment provision that took into consideration of both current and future economic situations; - examined the supporting documents on a sample basis for management's assessment of the customers' financial and operating status, including the customer's credit history and cash collections after the reporting date; - tested the accuracy of the aging of trade receivables and contract assets on a sample basis;

Key Audit Matter	How our audit addressed the Key Audit Matter
2.Impairment provision of trade receivables, contract assets, loan and lease receivables (Continued) For the trade receivable and contract assets in groups, the Group made reference to the historical experience of credit losses, combining with the current situation and forecast of economic situation in the future, and prepared the model which refers to the days overdue and rate of the expected credit loss during lifetime in order to calculate the expected credit loss. As at 31 December 2019, the net carrying amounts of Group's loan and lease receivables were RMB7,699 million and RMB9,167 million, respectively, after netting off accumulated allowances for impairment losses of RMB443 million and RMB1,068 million, respectively. The Group used a three-stage impairment model to calculate expected credit loss by assessing if the credit risk has significantly increased since initial recognition for loan and lease receivables. For the loan and lease receivables with objective evidence of impairment, and other loan and lease receivables subject to separate assessment for impairment provision, impairment tests were conducted to calculate the expected credit loss and to provide for individual impairment allowances. For the loan and lease receivables without objective evidence of impairment or the expected credit loss cannot be estimated for an individual financial asset at a reasonable cost, the Group grouped loan and lease receivables in accordance with credit risk characteristics and calculated the expected credit loss based on groups.	- understood and evaluated the key parameters, assumptions and basis adopted in management's estimates of expected future cash flow of trade receivables and contract assets by independently assessing and comparing with relevant data of companies in the same industry, and tested the accuracy of management's estimated future cash flow calculation. • for the model used by management to calculate expected credit losses in groups, we performed the following procedures: - evaluated the appropriateness of the models adopted in calculating the expected credit loss; - tested on a sample basis the accuracy of the historical credit default data used in the model to assess the rate of historical default loss; - reviewed the appropriateness of the economic indicators, economic scenarios and weights selected by management by assessing the historical correlation between asset portfolios and economic indicators, and verified the economic indicators adopted in the model against external data; - evaluated the results of management's sensitivity analysis of the forward-looking factors using reasonably possible changes of the relevant key parameters;

Key Audit Matter	How our audit addressed the Key Audit Matter
2.Impairment provision of trade receivables, contract assets, loan and lease receivables (Continued) The major management judgments and assumptions adopted in the measurement of expected credit loss mainly include: (1) selecting appropriate models to measure expected credit loss and grouping businesses with similar credit risk characteristics into one separate portfolios; (2) establishing criteria for significant increase of credit risk and occurrence of default credit impairment; (3) selecting appropriate economic indices, economic scenarios and the weights used in forward-looking parameters, as well as establishing future cash flow forecasts for separate assessments of the loan and lease receivables at the third stage.	- tested the accuracy of the aging analyses of trade receivables and contract assets on a sample basis; - re-calculated the expected credit losses after adjusting the historical rates of default loss using forward-looking factors. We performed the following procedures on impairment provision of loan and lease receivables: • evaluated the appropriateness of the calculation methods adopted in the models used to arrive at expected credit losses, as well as evaluating the reasonableness of the grouping of assets, selection of models, and the key parameters involved in the significant estimations and judgements; • based on the financial and non-financial information of the leasees and borrowers and other external evidence and considerations, assessed on a sample basis the reasonableness of the classification of the three stages adopted in the model; • inspected on a sample basis the accuracy and completeness of the critical data used in the model to calculate the expected credit loss, including the historical data and the current data used; for the loan and lease receivables classified in the third stage that are subject to separate impairment assessment, assessed on a sample basis the reasonableness of the discounted cash flow models used by management;

Key Audit Matter	How our audit addressed the Key Audit Matter
2.Impairment provision of trade receivables, contract assets, loan and lease receivables (Continued) We considered impairment provision of trade receivables, contract assets, loan and lease receivables as a key audit matter since the Group's measurement of expected credit loss based on separate assessment involves significant managerial judgements and assumptions, and the Group's measurement of expected credit losses based on groups involves complex models, significant managerial judgements and assumptions.	• reviewed the appropriateness of the economic indicators, economic scenarios and weights selected by management by assessing the historical correlation between asset portfolios and economic indicators, and verified the economic indicators adopted in the model against external data; • evaluated the results of management's sensitivity analysis of the forward-looking factors using reasonably possible changes of the relevant key parameters; Based on the work we performed, we found that management's key judgements used in its assessment of impairment provision of trade receivables, contract assets, loan and lease receivables were supported by the available evidences.

Key Audit Matter	How our audit addressed the Key Audit Matter
3.Impairment assessment on goodwill	
Referring to note 2.10(a), note 4.1(h) and note 18 to the consolidated financial statements. As at 31 December 2019, the net carrying amount of goodwill of the Group was RMB3,641 million, after netting off impairment for goodwill of RMB397 million. In 2019, the amount of goodwill impairment charged to the profit and loss was RMB89 million. The Group recognised the corresponding impairment based on the excess of the book carrying amount over the recoverable amount of the assets group or assets group portfolio. The recoverable amount is determined by the higher of the fair value less cost of disposal of the asset group or assets group portfolio and its value-in-use calculated based on the present value of its expected future cash flow. The key assumptions adopted in the calculation of the present value of the relevant expected future cash flows include: • annual sales growth rates within the estimation period; • long term sales growth rate; • gross margin rate; and • discount rate.	We gained an understanding and evaluated the design and tested the operating effectiveness of management's key controls in respect of impairment assessment on goodwill prepared by the management, including the review and approval of the key assumptions adopted and the impairment allowance calculations. For the value-in-use calculations using present value of projected future cash flows, we conducted the following procedures: • compared and analysed the actual financial results of the relevant asset groups during the current year against the respective forecasts in previous year to evaluate the reliability of management's historical prediction of future cash flows; • obtained the management's calculation schedules of goodwill impairment and evaluated the appropriateness of the valuation methods associated with the discounted cash flow by reference to the industry practice; • compared the key important parameters and input data used in the cash flow forecasts against the historical figures and approved budgets, etc. • we evaluated management's key assumptions by: - compared the annual sales growth rates within the estimation period with the Group's historical growth rates, relevant business plans and industry historical data; - compared the long term growth rates with our independent expectation based on economic data; - compared the gross margin rate with the Group's past performance, taking into consideration of market trends; - for the discount rate used in the model, we estimated an acceptable range independently by considering external data sources (including the market risk-free rate and the debt to asset ratio) and geographical factors, and compared that with the discount rate used in the cash flow model;

Key Audit Matter	How our audit addressed the Key Audit Matter
3.Impairment assessment on goodwill (Continued)	
In 2019, the management also used the market approach to determine the fair value less cost of disposal of an asset group. The method adopted is the price/book value ratio after applying the necessary adjustments, in which the key assumption used was the price/book value ratios for comparable enterprises. We identified goodwill impairment assessment as a key audit matter since the balance of goodwill is significant and testing of goodwill impairment involves significant judgments.	• based on the sensitivity analysis prepared by management, assessed the extent and likelihood of impairment due to reasonably possible changes in key assumptions that have a significant impact on the value-in-use calculations; • tested the accuracy of the calculation of the net present value of future cash flows. For the fair value less cost of disposal, we have conducted the following procedures: • obtained the management's calculation schedule of goodwill impairment and assessed the appropriateness of the valuation approach used by management by reference to the industry practice. • evaluated the appropriateness of the selected comparable price/book value ratios by assessing the industry, capital structure and operating scale of comparable enterprises; • tested the accuracy of the fair value less cost of disposal calculation. Based on the work we performed, we found that the estimations and judgements applied in goodwill impairment assessment were supported by available evidences.

OTHER INFORMATION

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

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

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

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

RESPONSIBILITIES OF 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. We report our opinion solely to you, as a body, and for no other purpose. We do not assume responsibility towards or accept liability to any other person for the contents of this report. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with HKSAs will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these consolidated financial statements.

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

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

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

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

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

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

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

We communicate with 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 this independent auditor's report is Mang, Kwong Fung Frederick.

PricewaterhouseCoopers
Certified Public Accountants

Hong Kong, 15 April 2020

CONSOLIDATED STATEMENT OF PROFIT OR LOSS

FOR THE YEAR ENDED 31 DECEMBER 2019

	Notes	Year ended 31 December 2019 RMB'000	2018 RMB'000
Revenue	6	127,508,964	101,157,525
Cost of sales	8	(105,518,456)	(82,707,754)
Gross profit		21,990,508	18,449,771
Other income	7	1,846,756	1,375,023
Other gains, net	7	1,410,992	390,451
Distribution costs	8	(2,898,062)	(2,759,312)
Administrative expenses	8	(12,807,003)	(10,818,664)
Net impairment losses on financial and contract assets	3.1(b), 8	(1,726,849)	(355,736)
Operating profit		7,816,342	6,281,533
Finance income	10	392,022	213,893
Finance costs	10	(1,704,659)	(1,153,456)
Finance costs - net	10	(1,312,637)	(939,563)
Share of net profits/(losses) of associates and joint ventures accounted for using the equity method:			
Joint ventures	24	(83,082)	(167,798)
Associates	25	842,411	833,944
Profit before income tax		7,263,034	6,008,116
Income tax expense	11	(1,279,161)	(676,865)
Profit for the year		5,983,873	5,331,251
Profit is attributable to:			
Owners of the Company	12	3,719,804	2,980,460
Non-controlling interests		2,264,069	2,350,791
		5,983,873	5,331,251
EARNINGS PER SHARE FOR PROFIT ATTRIBUTABLE TO THE ORDINARY EQUITY HOLDERS OF THE COMPANY (expressed in RMB Yuan per share)			
Basic earnings per share	12	0.25	0.20
Diluted earnings per share	12	0.25	0.20

The above consolidated statement of profit or loss should be read in conjunction with the accompanying notes.

CONSOLIDATED STATEMENT OF COMPREHENSIVE INCOME

FOR THE YEAR ENDED 31 DECEMBER 2019

	Year ended 31 December	
	2019 RMB'000	2018 RMB'000
Profit for the year	5,983,873	5,331,251
Other comprehensive income:		
Items that may be reclassified to profit or loss		
Changes in the fair value of debt instruments at fair value through other comprehensive income	18,172	(32,093)
Changes in the fair value of trade receivables at fair value through other comprehensive income	(72,608)	(101,909)
Gains/(losses) on cash flow hedges	1,436	(10,414)
Exchange differences on translation of foreign operations	136,403	(22,382)
Gains on net investment hedging	14,982	20,262
Share of other comprehensive income of associates and joint ventures accounted for using the equity method	(30,908)	-
	67,477	(146,536)
Items that will not be reclassified to profit or loss		
Remeasurements of defined benefit obligations	(11,383)	620
Other comprehensive income for the year, net of tax	56,094	(145,916)
Total comprehensive income for the year	6,039,967	5,185,335
Attributable to:		
– Owners of the Company	3,816,785	2,899,714
– Non-controlling interests	2,223,182	2,285,621
	6,039,967	5,185,335

The above consolidated statement of comprehensive income should be read in conjunction with the accompanying notes.

CONSOLIDATED BALANCE SHEET

AS AT 31 DECEMBER 2019

	Notes	As at 31 December 2019 RMB'000	As at 31 December 2018 RMB'000
Assets			
Non-current assets			
Property, plant and equipment	14	24,039,337	16,179,074
Right-of-use assets	15	6,445,336	—
Investment properties	16	1,134,391	814,069
Prepaid land lease payments	17	-	5,870,721
Goodwill	18	3,641,102	3,398,942
Intangible assets	19	2,541,630	2,933,962
Investments in joint ventures	24	2,218,703	4,957,373
Investments in associates	25	12,900,068	8,606,062
Deferred tax assets	26	5,771,190	4,801,223
Contract assets	6	8,417,270	8,133,980
Debt investments at fair value through other comprehensive income	21	61,729	261,372
Lease receivables	20	5,675,369	5,190,459
Other long term receivables	20	1,566,333	5,682
Financial assets at fair value through profit or loss	29	5,432,302	5,360,846
Other non-current assets	27	1,477,884	280,153
Total non-current assets		81,322,644	66,793,918
Current assets			
Inventories	28	27,004,499	27,929,297
Contract assets	6	24,984,702	12,229,782
Trade receivables and notes receivable at fair value through other comprehensive income	21	5,440,954	3,329,753
Debt investments at fair value through other comprehensive income	21	7,972,990	5,787,735
Financial assets at fair value through profit or loss	29	6,964,752	4,419,450
Trade receivables	30	29,337,049	18,840,593
Loan receivables	20	7,699,285	6,378,870
Lease receivables	20	3,492,112	4,180,012
Reverse repurchase agreements	20	30,800	2,308,712
Discounted notes receivable	31	350,515	317,917
Notes receivable	32	6,221,789	5,485,044
Prepayments, deposits and other receivables	33	24,888,564	18,044,189
Derivative financial instruments	22	2,381	788
Due from the Central Bank*	35	2,459,256	2,577,728
Restricted deposits	35	1,583,225	702,980
Time deposits with original maturity over three months	35	8,326,808	7,352,953
Cash and cash equivalents	35	42,431,476	31,842,144
		199,191,157	151,727,947
Assets classified as held for sale	36	9,788	-
Total current assets		199,200,945	151,727,947
Total assets		280,523,589	218,521,865

* Central Bank is the abbreviation of the People's Bank of China.

CONSOLIDATED BALANCE SHEET (CONTINUED)

AS AT 31 DECEMBER 2019

	Notes	As at 31 December	
		2019 RMB'000	2018 RMB'000
Equity and liabilities			
Liabilities			
Non-current liabilities			
Bonds	43	6,917,727	12,749,245
Bank and other borrowings	41	11,268,418	9,588,836
Lease liabilities	15	734,513	—
Provisions	42	1,543,716	281,167
Deferred government grants	38	1,631,710	1,004,508
Other non-current liabilities	44	1,876,301	1,009,326
Deferred tax liabilities	26	900,890	628,895
Total non-current liabilities		24,873,275	25,261,977
Current liabilities			
Bonds	43	4,688,134	-
Trade payables	37	57,922,655	38,880,814
Contract liabilities	6	38,584,900	36,566,071
Financial liabilities at fair value through profit or loss	34	33,097	104,540
Notes payable	37	8,506,993	6,387,498
Deferred government grants	38	-	414,545
Other payables and accruals	39	21,591,198	17,165,670
Derivative financial instruments	22	6,096	5,168
Financial liabilities sold for repurchase		4,050	-
Customer deposits	40	7,208,955	4,431,761
Bank and other borrowings	41	20,402,567	10,351,116
Lease liabilities	15	238,016	—
Taxes payable		1,724,567	1,183,926
Provisions	42	3,149,914	4,132,159
Total current liabilities		164,061,142	119,623,268
Total liabilities		188,934,417	144,885,245

CONSOLIDATED BALANCE SHEET (CONTINUED)

AS AT 31 DECEMBER 2019

	Notes	As at 31 December	
		2019 RMB'000	2018 RMB'000
Equity			
Equity attributable to owners of the Company			
Share capital	45	15,152,463	14,725,188
Reserves	46	24,055,207	20,726,678
Retained earnings		24,138,186	21,838,330
		63,345,856	57,290,196
Non-controlling interests		28,243,316	16,346,424
Total equity		91,589,172	73,636,620
Total equity and liabilities		280,523,589	218,521,865

The above consolidated balance sheet should be read in conjunction with the accompanying notes.

The financial statements on pages 92 to 260 were approved by the Board of Directors on 15 April 2020 and were signed on its behalf.

Mr. Zheng Jianhua	Mr. Huang Ou
Chairman and CEO	Executive Director and President

CONSOLIDATED STATEMENT OF CHANGES IN EQUITY

FOR THE YEAR ENDED 31 DECEMBER 2019

		Attributable to owners of the Company											
	Note	Share capital RMB'000	Capital reserve RMB'000	Treasury stock RMB'000	Surplus reserves RMB'000	Defined benefit plans reserve RMB'000	Hedging reserve RMB'000	FVOCI reserve RMB'000	Exchange difference reserve RMB'000	Retained earnings RMB'000	Total RMB'000	Non-controlling interests RMB'000	Total equity RMB'000
Balance at 31 December 2018		14,725,188	17,575,988	-	3,345,427	4,157	37,948	(59,607)	(177,235)	21,838,330	57,290,196	16,346,424	73,636,620
Change in accounting policies	2.1.3	-	-		-	-	-	-	-	(12,083)	(12,083)	(6,092)	(18,175)
Balance at 1 January 2019		14,725,188	17,575,988	-	3,345,427	4,157	37,948	(59,607)	(177,235)	21,826,247	57,278,113	16,340,332	73,618,445
Profit for the year		-	-	-	-	-	-	-	-	3,719,804	3,719,804	2,264,069	5,983,873
Other comprehensive income:													
Remeasurement of defined benefit plans		-	-	-	-	(6,267)	-	-	-	-	(6,267)	(5,116)	(11,383)
FVOCI reserve		-	-	-	-	-	-	(12,643)	-	-	(12,643)	(41,793)	(54,436)
Gains on cash flow hedges, net of tax		-	-	-	-	-	1,436	-	-	-	1,436	-	1,436
Currency translation differences		-	-	-	-	-	-	-	130,381	-	130,381	6,022	136,403
Share of other comprehensive income of associates and joint ventures accounted for using the equity method		-	-	-	-	-	-	(30,908)	-	-	(30,908)	-	(30,908)
Gains on net investment hedging, net of tax		-	-	-	-	-	14,982	-	-	-	14,982	-	14,982
Total comprehensive income		-	-	-	-	(6,267)	16,418	(43,551)	130,381	3,719,804	3,816,785	2,223,182	6,039,967
Convertible bond		293,697	1,008,465	-	-	-	-	-	-	-	1,302,162	-	1,302,162
Addition of subsidiaries		-	-	-	-	-	-	-	-	-	-	2,930,927	2,930,927
Disposal of subsidiaries		-	(1,848)	-	-	-	-	-	-	-	(1,848)	(25,209)	(27,057)
Dividend paid to non-controlling shareholders		-	-	-	-	-	-	-	-	-	-	(1,254,997)	(1,254,997)
Transaction with NCI		-	-	-	-	-	-	-	-	-	-	(163,722)	(163,722)
Injection of capital from non-controlling interests		-	1,813,863	-	-	-	-	-	-	-	1,813,863	8,190,057	10,003,920
Issue of shares under employee share scheme		133,578	271,163	(404,741)	-	-	-	-	-	-	-	-	-
Employee share schemes - value of employee services - Staff service value		-	66,656	-	-	-	-	-	-	-	66,656	-	66,656
Dividends provided for or paid		-	-	-	-	-	-	-	-	(931,270)	(931,270)	-	(931,270)
Appropriation to general risk reserve		-	-	-	177,484	-	-	-	-	(177,484)	-	-	-
Transfer from retained profits		-	-	-	299,111	-	-	-	-	(299,111)	-	-	-
Others		-	1,395	-	-	-	-	-	-	-	1,395	2,746	4,141
At 31 December 2019		15,152,463	20,735,682	(404,741)	3,822,022	(2,110)	54,366	(103,158)	(46,854)	24,138,186	63,345,856	28,243,316	91,589,172

CONSOLIDATED STATEMENT OF CHANGES IN EQUITY (CONTINUED)

FOR THE YEAR ENDED 31 DECEMBER 2019

		Attributable to owners of the Company										
	Note	Share capital RMB'000	Capital reserve RMB'000	Surplus reserves RMB'000	Defined benefit plans reserve RMB'000	Hedging reserve RMB'000	FVOCI reserve RMB'000	Exchange difference reserve RMB'000	Retained earnings RMB'000	Total RMB'000	Non-controlling interests RMB'000	Total equity RMB'000
Balance at 31 December 2017		14,725,181	17,553,804	3,193,254	3,816	27,517	13,826	(154,723)	20,174,408	55,537,083	15,184,504	70,721,587
Change in accounting policies	2.1.3	-	-	(32,253)	-	-	(4,427)	-	498,150	461,470	(10,592)	450,878
Balance at 1 January 2018		14,725,181	17,553,804	3,161,001	3,816	27,517	9,399	(154,723)	20,672,558	55,998,553	15,173,912	71,172,465
Profit for the year		-	-	-	-	-	-	-	2,980,460	2,980,460	2,350,791	5,331,251
Other comprehensive income:												
Remeasurement of defined benefit plans		-	-	-	341	-	-	-	-	341	279	620
FVOCI reserve		-	-	-	-	-	(69,006)	-	-	(69,006)	(64,996)	(134,002)
Cash flow hedges, net of tax		-	-	-	-	(9,831)	-	-	-	(9,831)	(583)	(10,414)
Currency translation differences		-	-	-	-	-	-	(22,512)	-	(22,512)	130	(22,382)
Overseas net investment hedging, net of tax		-	-	-	-	20,262	-	-	-	20,262	-	20,262
Total comprehensive income		-	-	-	341	10,431	(69,006)	(22,512)	2,980,460	2,899,714	2,285,621	5,185,335
Convertible bond - equity component		7	24	-	-	-	-	-	-	31	-	31
Disposal of subsidiaries		-	2,083	-	-	-	-	-	-	2,083	2,332	4,415
Dividend paid to non-controlling interests		-	-	-	-	-	-	-	-	-	(1,352,780)	(1,352,780)
Dividend paid to shareholders		-	-	-	-	-	-	-	(1,353,980)	(1,353,980)	-	(1,353,980)
Absorption of non-controlling interests' investment		-	-	-	-	-	-	-	-	-	247,235	247,235
Withdrawal of non-controlling interests		-	-	-	-	-	-	-	-	-	(9,302)	(9,302)
Appropriation to general risk reserve		-	-	44,201	-	-	-	-	(44,201)	-	-	-
Transfer from retained earnings		-	-	140,225	-	-	-	-	(140,225)	-	-	-
Transfer of loss on disposal of equity investments at fair value through other comprehensive income to retained earnings		-	-	-	-	-	-	-	(276,282)	(276,282)	-	(276,282)
Others		-	20,077	-	-	-	-	-	-	20,077	(594)	19,483
At 31 December 2018		14,725,188	17,575,988	3,345,427	4,157	37,948	(59,607)	(177,235)	21,838,330	57,290,196	16,346,424	73,636,620

The above consolidated statement of changes in equity should be read in conjunction with the accompanying notes.

CONSOLIDATED STATEMENT OF CASH FLOWS

FOR THE YEAR ENDED 31 DECEMBER 2019

	Note	Year ended 31 December	
		2019 RMB'000	2018 RMB'000
Cash flows from operating activities			
Cash inflow from operations	47	11,983,540	7,078,285
Income taxes paid		(1,478,402)	(1,271,700)
Net cash inflow from operating activities		10,505,138	5,806,585
Cash flows from investing activities			
Dividends from joint ventures		185,409	265,934
Dividends from associates		647,195	781,803
Dividends from other investments		394,243	16,546
Payments for property, plant and equipment		(6,063,725)	(3,099,564)
Payments for investment properties		(129,478)	(34,916)
Realised fair value gains/(losses) on financial assets at fair value through profit or loss		55,975	(72,955)
Payments for land lease		-	(39,675)
Purchases of right-of-use asset		(174,341)	—
Disposal of right-of-use asset		1,761,070	—
Proceeds from sales of property, plant and equipment		591,967	246,531
Proceeds from sales of subsidiaries		176,103	229,384
Payment for acquisition of subsidiaries, net of cash acquired	51	1,298,820	(1,429,533)
Capital injection in joint ventures		(1,643)	(975,407)
Capital injection in associates		(2,606,682)	(2,285,558)
Proceeds from disposal of associates		87,952	74,987
Proceeds from disposal of joint ventures		-	199
Increase in other non-current investments		(1,333,161)	(3,552,660)
Payments for other intangible assets		(321,859)	(189,994)
Proceeds from disposal of other intangible assets		30,157	25,228
Proceeds from disposal of prepaid land lease payments		-	103,706
Payment for acquisition of other non-current assets		(156,033)	(105,901)
Increase in restricted deposits		(280,815)	(137,659)
(Increase)/Decrease in non-restricted time deposits with original maturity of over three months when acquired		(973,855)	3,569,249
Increase in short-term investments		(4,620,601)	(175,794)
Others		(842,759)	196,005
Net cash outflow from investing activities		(12,276,061)	(6,590,044)

CONSOLIDATED STATEMENT OF CASH FLOWS (CONTINUED)

FOR THE YEAR ENDED 31 DECEMBER 2019

	Year ended 31 December	
	2019 RMB'000	2018 RMB'000
Cash flows from financing activities		
Capital injection by non-controlling interests	10,069,654	195,836
Proceeds from bank and other borrowings	34,916,294	24,784,874
Repayments of bank and other borrowings	(30,464,697)	(12,166,278)
Cash received from issuing of shares under employee share scheme	404,741	-
Issue of bonds	-	2,472,500
Repayment of bonds	-	(1,600,000)
Dividends paid to non-controlling interests	(1,314,538)	(1,352,780)
Dividends paid by the Company	(931,270)	(1,353,980)
Others	(396,978)	(907,528)
Net cash inflow from financing activities	12,283,206	10,072,644
Net increase in cash and cash equivalents	10,512,283	9,289,185
Cash and cash equivalents at beginning of year	31,842,144	22,469,071
Effect of exchange rate changes on cash and cash equivalents, net	77,049	83,888
Cash and cash equivalents at end of year	42,431,476	31,842,144

The above consolidated statement of cash flows should be read in conjunction with the accompanying notes.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

FOR THE YEAR ENDED 31 DECEMBER 2019

1. GENERAL INFORMATION

Shanghai Electric Group Company Limited (the "Company") is a joint stock limited liability company established in the People's Republic of China (the "PRC" or "Mainland China") on 1 March 2004. The registered office of the Company is located on 30th floor, No. 8 Xing Yi Road, Shanghai, the PRC.

During the year, the Company and its subsidiaries (together the "Group") are engaged in the following principal activities:

- the energy equipment segment : design, manufacture and sale of coal-fired power generation and corollary equipment, gas-fired power generation equipment, wind power equipment, nuclear power equipment, energy storage equipment and high-end vessels for chemical industry; and provision of power grid and industrial intelligent power supply system solutions;

- the industrial equipment segment : design, manufacture and sale of elevators, large and medium-sized electric motors, intelligent manufacturing equipment, industrial basic parts, environmental protection equipment and construction industrialization equipment;

- the integrated services segment: provision of energy, environmental protection and automation engineering and services, covering traditional and new energy, comprehensive use of solid wastes, sewage treatment, flue gas treatment, rail transit and etc.; provision of industrial internet services; provision of financial services, covering financing leases and insurance brokerage; provision of international trade services; provision of high-end property services and etc.

The parent company and the ultimate holding company of the Group is Shanghai Electric (Group) Corporation ("SEC"), a state-owned enterprise established in the PRC.

The Company has its ordinary shares listed on both the Stock Exchange of Hong Kong Limited and the Stock Exchange of Shanghai Limited.

These financial statements are presented in Renminbi ("RMB"), unless otherwise stated.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

This note provides a list of the significant accounting policies adopted in the preparation of these consolidated financial statements. These policies have been consistently applied to all the years presented, unless otherwise stated. The financial statements are for the Group consisting of Shanghai Electric Group Company Limited and its subsidiaries.

2.1.1 Basis of preparation

The consolidated financial statements of the Group have been prepared in accordance with all applicable Hong Kong Financial Reporting Standards ("HKFRS") and disclosure requirements of the Hong Kong Companies Ordinance Cap.622. The consolidated financial statements have been prepared on a historical cost basis, except for certain financial assets and liabilities which are measured at fair value and assets held for sale which are measured at fair value less cost to sell.

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

The Group adopts the going concern basis in preparing its consolidated financial statements.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

FOR THE YEAR ENDED 31 DECEMBER 2019

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

2.1.2 New accounting policy and disclosure requirement

(a) New and amended standards adopted by the Group

The Group has applied the following standards and amendments for the first time for their annual reporting period commencing 1 January 2019:

- HKFRS 16 Leases
- Prepayment Features with Negative Compensation – Amendments to HKFRS 9
- Long-term Interests in Associates and Joint Ventures – Amendments to HKAS 28
- Annual Improvements to HKFRS Standards 2015 – 2017 Cycle
- Plan Amendment, Curtailment or Settlement – Amendments to HKAS 19
- Interpretation 23 Uncertainty over Income Tax Treatments.

The Group had to change its accounting policies as a result of adopting HKFRS 16. The Group elected to adopt the new rules retrospectively but recognised the cumulative effect of initially applying the new standard on 1 January 2019. This is disclosed in note 2.1.3. Most of the other amendments listed above did not have any impact on the amounts recognised in prior periods and are not expected to significantly affect the current or future periods.

(b) New standards and interpretations not yet adopted

Certain new accounting standards and interpretations have been published that are not mandatory for 31 December 2019 reporting periods and have not been early adopted by the Group. These standards are not expected to have a material impact on the entity in the current or future reporting periods and on foreseeable future transactions.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

2.1.3 Changes in accounting policies

This note explains the impact of the adoption of HKFRS 16 Leases on the Group's financial statements.

As indicated in note 2.1.2 above, the Group has adopted HKFRS 16 *Leases* retrospectively from 1 January 2019, but has not restated comparatives for the 2018 reporting period, as permitted under the specific transition provisions in the standard. The reclassifications and the adjustments arising from the new leasing rules are therefore recognised in the opening balance sheet on 1 January 2019. The new accounting policies are disclosed in note 2.34.

On adoption of HKFRS 16, the Group recognised lease liabilities in relation to leases which had previously been classified as 'operating leases' under the principles of HKAS 17 *Leases*. These liabilities were measured at the present value of the remaining lease payments, discounted using the Group's incremental borrowing rate as of 1 January 2019. The weighted average incremental borrowing rate applied to the lease liabilities on 1 January 2019 was between 2.59%-4.90%.

(i) Practical expedients applied

In applying HKFRS 16 for the first time, the Group has used the following practical expedients permitted by the standard:

- applying a single discount rate to a portfolio of leases with reasonably similar characteristics;
- relying on previous assessments on whether leases are onerous as an alternative to performing an impairment; review – there were no onerous contracts as at 1 January 2019;
- accounting for operating leases with a remaining lease term of less than 12 months as at 1 January 2019 as short-term leases;
- excluding initial direct costs for the measurement of the right-of-use asset at the date of initial application, and
- using hindsight in determining the lease term where the contract contains options to extend or terminate the lease.

The Group has also elected not to reassess whether a contract is, or contains a lease at the date of initial application. Instead, for contracts entered into before the transition date the Group relied on its assessment made applying HKAS 17 and Interpretation 4 Determining Whether an Arrangement Contains a Lease.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

FOR THE YEAR ENDED 31 DECEMBER 2019

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

2.1.3 Changes in accounting policies (continued)

(ii) Measurement of lease liabilities

	2019 RMB'000
Operating lease commitments disclosed as at 31 December 2018	639,527
Discounted using the lessee's incremental borrowing rate of at the date of initial application	571,050
(Less): short-term leases not recognised as a liability	(75,139)
(Less): low-value leases not recognised as a liability	(34)
Lease liability recognised as at 1 January 2019	495,877
Of which are:	
Current lease liabilities	171,734
Non-current lease liabilities	324,143

(iii) Measurement of right-of-use assets

Right-of-use assets were measured retrospectively using a discount rate based on the lessee's incremental borrowing rate at the date of initial application.

(iv) Adjustments recognised in the balance sheet on 1 January 2019

The change in accounting policy affected the following items in the balance sheet on 1 January 2019:
- right-of-use assets – increase by RMB6,365,476,000
- deferred tax assets – increase by RMB6,059,000
- prepaid land lease payments – decrease by RMB5,870,721,000
- prepayments, deposits and other receivables – decrease by RMB6,005,000
- other non-current assets– decrease by RMB17,107,000
- lease liabilities – increase by RMB495,877,000.

The net impact on retained earnings and non-controlling interests on 1 January 2019 was a decrease of RMB12,083,000 and RMB6,092,000.

(v) Lessor accounting

The Group did not need to make any adjustments to the accounting for assets held as lessor under operating leases as a result of the adoption of HKFRS 16.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

2.2 PRINCIPLES OF CONSOLIDATION AND EQUITY ACCOUNTING

(a) Subsidiaries

Subsidiaries are all entities (including structured entities) over which the Group has control. The Group controls an entity when the Group is exposed to, or has rights to, variable returns from its involvement with the entity and has the ability to affect those returns through its power to direct the activities of the entity. Subsidiaries are fully consolidated from the date on which control is transferred to the Group. They are deconsolidated from the date that control ceases.

The acquisition method of accounting is used to account for business combinations by the Group (Note 2.3).

Intercompany transactions, balances and unrealised gains on transactions between group companies are eliminated. Unrealised losses are also eliminated unless the transaction provides evidence of an impairment of the transferred asset. Accounting policies of subsidiaries have been changed where necessary to ensure consistency with the policies adopted by the Group.

Non-controlling interests in the results and equity of subsidiaries are shown separately in the consolidated statement of profit or loss, statement of comprehensive income, statement of changes in equity and balance sheet respectively.

(b) Associates

Associates are all entities over which the Group has significant influence but not control or joint control. This is generally the case where the Group holds between 20% and 50% of the voting rights. Investments in associates are accounted for using the equity method of accounting (see 2.2(d) below), after initially being recognised at cost.

(c) Joint arrangements

Under HKFRS 11, joint arrangements investments in joint arrangements are classified as either joint operations or joint ventures. The classification depends on the contractual rights and obligations of each investor, rather than the legal structure of the joint arrangement. The Group has assessed the nature of its joint arrangements and determined them to be joint ventures.

Interests in joint ventures are accounted for using the equity method (see 2.2(d) below), after initially being recognised at cost in the consolidated balance sheet.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

FOR THE YEAR ENDED 31 DECEMBER 2019

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

2.2 PRINCIPLES OF CONSOLIDATION AND EQUITY ACCOUNTING (CONTINUED)

(d) Equity accounting

Under the equity method of accounting, the investments are initially recognised at cost and adjusted thereafter to recognise the Group's share of the post-acquisition profits or losses of the investee in profit or loss, and the Group's share of movements in other comprehensive income of the investee in other comprehensive income. Dividends received or receivable from associates and joint ventures are recognised as a reduction in the carrying amount of the investment.

When the Group's share of losses in an equity-accounted investment equals or exceeds its interest in the entity, including any other unsecured long-term receivables, the Group does not recognise further losses, unless it has incurred obligations or made payments on behalf of the other entity.

Unrealised gains on transactions between the Group and its associates and joint ventures are eliminated to the extent of the Group's interest in these entities. Unrealised losses are also eliminated unless the transaction provides evidence of an impairment of the asset transferred. Accounting policies of equity accounted investees have been changed where necessary to ensure consistency with the policies adopted by the Group.

The carrying amount of equity-accounted investments is tested for impairment in accordance with the policy described in Note 2.11.

(e) Changes in ownership interests

The Group treats transactions with non-controlling interests that do not result in a loss of control as transactions with equity owners of the Group. A change in ownership interest results in an adjustment between the carrying amounts of the controlling and non-controlling interests to reflect their relative interests in the subsidiary. Any difference between the amount of the adjustment to non-controlling interests and any consideration paid or received is recognised in a separate reserve within equity attributable to owners of the Company.

When the Group ceases to consolidate or equity account for an investment because of a loss of control, joint control or significant influence, any retained interest in the entity is remeasured to its fair value with the change in carrying amount recognised in profit or loss. This fair value becomes the initial carrying amount for the purposes of subsequently accounting for the retained interest as an associate, joint venture or financial asset. In addition, any amounts previously recognised in other comprehensive income in respect of that entity are accounted for as if the Group had directly disposed of the related assets or liabilities. This may mean that amounts previously recognised in other comprehensive income are reclassified to profit or loss or transferred to another category of equity as specified/ permitted by applicable HKFRSs.

If the ownership interest in a joint venture or an associate is reduced but joint control or significant influence is retained, only a proportionate share of the amounts previously recognised in other comprehensive income are reclassified to profit or loss where appropriate.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

2.3 BUSINESS COMBINATIONS

(a) Business combination under common control

The Group has applied merger accounting as prescribed in Hong Kong Accounting Guideline 5 Merger Accounting for Common Control Combinations issued by the HKCPA to account for the purchase of the equity interests in the acquired subsidiary under common control (the "Acquired Subsidiary"), as if the acquisition had occurred and the Acquired Subsidiary had been combined from the beginning of the earliest financial period presented.

The net assets of the Group and the Acquired Subsidiary are combined using the existing book values from the controlling party's perspective. No amount is recognised in respect of goodwill or excess of the Group's interest in the net fair value of the Acquired Subsidiary's identifiable assets, liabilities and contingent liabilities over the cost of acquisition at the time of the business combinations under common control. The consolidated statement of comprehensive income includes the results of the Group and the Acquired Subsidiary from the earliest date presented, regardless of the date of the business combinations under common control.

The comparative amounts in the consolidated financial statements are restated and presented as if the Acquired Subsidiary had been combined at the beginning of the previous reporting period or when it first came under common control, whichever is shorter.

Transaction costs incurred in relation to business combinations under common control that are accounted for by using merger accounting are recognised as an expense in the year in which they are incurred.

(b) Business combination not under common control

The acquisition method of accounting is used to account for business combinations not under common control, regardless of whether equity instruments or other assets are acquired. The consideration transferred for the acquisition of a subsidiary comprises the:

- fair values of the assets transferred
- liabilities incurred to the former owners of the acquired business
- equity interests issued by the group
- fair value of any asset or liability resulting from a contingent consideration arrangement, and
- fair value of any pre-existing equity interest in the subsidiary.

Identifiable assets acquired and liabilities and contingent liabilities assumed in a business combination are, with limited exceptions, measured initially at their fair values at the acquisition date. The group recognises any non-controlling interest in the acquired entity on an acquisition-by-acquisition basis either at fair value or at the non-controlling interest's proportionate share of the acquired entity's net identifiable assets.

Acquisition-related costs are expensed as incurred.

The excess of the:

- consideration transferred,
- amount of any non-controlling interest in the acquired entity, and
- acquisition-date fair value of any previous equity interest in the acquired entity

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

FOR THE YEAR ENDED 31 DECEMBER 2019

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

2.3 BUSINESS COMBINATIONS (CONTINUED)

(b) Business combination not under common control (continued)

over the fair value of the net identifiable assets acquired is recorded as goodwill. If those amounts are less than the fair value of the net identifiable assets of the business acquired, the difference is recognised directly in profit or loss as a bargain purchase.

Where settlement of any part of cash consideration is deferred, the amounts payable in the future are discounted to their present value as at the date of exchange. The discount rate used is the entity's incremental borrowing rate, being the rate at which a similar borrowing could be obtained from an independent financier under comparable terms and conditions. Contingent consideration is classified either as equity or a financial liability. Amounts classified as a financial liability are subsequently remeasured to fair value with changes in fair value recognised in profit or loss.

If the business combination is achieved in stages, the acquisition date carrying value of the acquirer's previously held equity interest in the acquiree is remeasured to fair value at the acquisition date. Any gains or losses arising from such remeasurement are recognised in profit or loss.

2.4 SEPARATE FINANCIAL STATEMENTS

Investments in subsidiaries are accounted for at cost less impairment. Cost includes direct attributable costs of investment. The results of subsidiaries are accounted for by the Company on the basis of dividend received and receivable.

Impairment testing of the investments in subsidiaries is required upon receiving a dividend from these investments if the dividend exceeds the total comprehensive income of the subsidiary in the period the dividend is declared or if the carrying amount of the investment in the separate financial statements exceeds the carrying amount in the consolidated financial statements of the investee's net assets including goodwill.

2.5 FAIR VALUE MEASUREMENT

The Group measures its derivative financial instruments and some equity investments at fair value at the end of each reporting period. 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. The fair value measurement is based on the presumption that the transaction to sell the asset or transfer the liability takes place either in the principal market for the asset or liability, or in the absence of a principal market, in the most advantageous market for the asset or liability. The principal or the most advantageous market must be accessible by the Group. The fair value of an asset or a liability is measured using the assumptions that market participants would use when pricing the asset or liability, assuming that market participants act in their economic best interest.

A fair value measurement of a non-financial asset takes into account a market participant's ability to generate economic benefits by using the asset in its highest and best use or by selling it to another market participant that would use the asset in its highest and best use.

The Group uses valuation techniques that are appropriate in the circumstances and for which sufficient data are available to measure fair value, maximising the use of relevant observable inputs and minimising the use of unobservable inputs.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

2.5 FAIR VALUE MEASUREMENT (CONTINUED)

All assets and liabilities for which fair value is measured or disclosed in the financial statements are categorised within the fair value hierarchy, described as follows, based on the lowest level input that is significant to the fair value measurement as a whole:

Level 1	–	based on quoted prices (unadjusted) in active markets for identical assets or liabilities;
Level 2	–	based on valuation techniques for which the lowest level input that is significant to the fair value measurement is observable, either directly or indirectly;
Level 3	–	based on valuation techniques for which the lowest level input that is significant to the fair value measurement is unobservable.

For assets and liabilities that are recognised in the financial statements on a recurring basis, the Group determines whether transfers have occurred between levels in the hierarchy by reassessing categorisation (based on the lowest level input that is significant to the fair value measurement as a whole) at the end of each reporting period.

2.6 SEGMENT REPORTING

Operating segments are reported in a manner consistent with the internal reporting provided to the chief operating decision-maker. The chief operating decision-maker, who is responsible for allocating resources and assessing performance of the operating segments, makes strategic decisions. The executive directors are chief decision-makers for each decision.

2.7 FOREIGN CURRENCY TRANSLATION

(a) Functional and presentation currency

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

(b) Transactions and balances

Foreign currency transactions are translated into the functional currency using the exchange rates at the dates of the transactions. Foreign exchange gains and losses resulting from the settlement of such transactions and from the translation of monetary assets and liabilities denominated in foreign currencies at year end exchange rates are generally recognised in profit or loss. They are deferred in equity if they relate to qualifying cash flow hedges and qualifying net investment hedges or are attributable to part of the net investment in a foreign operation.

Foreign exchange gains and losses that relate to borrowings are presented in the statement of profit or loss, within finance costs. All other foreign exchange gains and losses are presented in the statement of profit or loss on a net basis within other gains.

Non-monetary items that are measured at fair value in a foreign currency are translated using the exchange rates at the date when the fair value was determined. Translation differences on assets and liabilities carried at fair value are reported as part of the fair value gain or loss. For example, translation differences on non-monetary assets and liabilities such as equities held at fair value through profit or loss are recognised in profit or loss as part of the fair value gain or loss and translation differences on non-monetary assets such as equities classified as fair value through other comprehensive income are recognised in other comprehensive income.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

FOR THE YEAR ENDED 31 DECEMBER 2019

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

2.7 FOREIGN CURRENCY TRANSLATION (CONTINUED)

(c) Group companies

The results and financial position of foreign operations (none of which has the currency of a hyper-inflationary economy) that have a functional currency different from the presentation currency are translated into the presentation currency as follows:

(i) assets and liabilities for each balance sheet presented are translated at the closing rate at the date of that balance sheet;

(ii) income and expenses for each statement of profit and loss and statement of comprehensive income are translated at average exchange rates (unless this average is not a reasonable approximation of the cumulative effect of the rates prevailing on the transaction dates, in which case income and expenses are translated at the rate on the dates of the transactions); and

(iii) all resulting currency translation differences are recognised in other comprehensive income.

On consolidation, exchange differences arising from the translation of any net investment in foreign operations, and of borrowings designated as hedges of such investments, are recognised in other comprehensive income. When a foreign operation is to the extent of the effective portion disposed, the associated exchange differences are reclassified to profit or loss, as part of the gain or loss on disposal.

Goodwill and fair value adjustments arising on the acquisition of a foreign operation are treated as assets and liabilities of the foreign operation and translated at the closing rate.

(d) Disposal of foreign operation and partial disposal

On the disposal of a foreign operation (that is, a disposal of the Group's entire interest in a foreign operation, or a disposal involving loss of control over a subsidiary that includes a foreign operation, a disposal involving loss of joint control over a joint venture that includes a foreign operation, or a disposal involving loss of significant influence over an associate that includes a foreign operation), all of the currency translation differences accumulated in equity in respect of that operation attributable to the owners of the Company are reclassified to profit or loss.

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

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

2.8 PROPERTY, PLANT AND EQUIPMENT

Property, plant and equipment, other than construction in progress, are stated at cost less accumulated depreciation and any impairment losses. The cost of an item of property, plant and equipment comprises its purchase price and any directly attributable costs of bringing the asset to its working condition and location for its intended use.

Expenditure incurred after items of property, plant and equipment have been put into operation, such as repairs and maintenance, is normally charged to the consolidated statement of profit and loss in the period in which it is incurred. In situations where the recognition criteria are satisfied, the expenditure for a major inspection is capitalised in the carrying amount of the asset as a replacement. Where significant parts of property, plant and equipment are required to be replaced at intervals, the Group recognises such parts as individual assets with specific useful lives and depreciates them accordingly.

Depreciation is calculated using the straight-line method to allocate their cost or revalued amounts, net of their residual values, over their estimated useful lives or, in the case of leasehold improvements and certain leased plant and equipment, the shorter lease term as follows:

– Buildings	10-50 years
– Plant and machinery	5-20 years
– Motor vehicles	5-12 years
– Office equipment	3-10 years

Where parts of an item of property, plant and equipment have different useful lives, the cost of that item is allocated on a reasonable basis among the parts and each part is depreciated separately. Residual values, useful lives and the depreciation method are reviewed, and adjusted if appropriate, at least at the end of each reporting period.

Construction in progress representing property, plant and equipment under construction and installation is stated at cost less any impairment losses, and is not depreciated. Cost comprises the direct costs of construction and capitalised borrowing costs on related borrowed funds during the period of construction. Construction in progress is reclassified to the appropriate category of property, plant and equipment when completed and ready for use.

An asset's carrying amount is written down immediately to its recoverable amount if the asset's carrying amount is greater than its estimated recoverable amount (Note 2.11).

Gains and losses on disposals are determined by comparing the proceeds with the carrying amount and are recognised within 'other gains - net' in the consolidated statement of profit or loss.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

FOR THE YEAR ENDED 31 DECEMBER 2019

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

2.9 INVESTMENT PROPERTY

Investment properties are interests in land and buildings held to earn rental income and/or for capital appreciation, rather than for use in the production or supply of goods or services or for administrative purposes; or for sale in the ordinary course of business. Such properties are measured initially at cost, including transaction costs. Subsequent to initial recognition, investment properties are stated at cost less accumulated depreciation and any impairment losses.

Depreciation is calculated on the straight-line basis to write off the cost of each item of investment properties to its residual value over its estimated useful life. The principle useful lives used for this purpose are 20 to 40 years.

2.10 INTANGIBLE ASSETS

Intangible assets acquired separately are measured on initial recognition at cost. The cost of intangible assets acquired in a business combination not under common control is the fair value at the date of acquisition. The useful lives of intangible assets are assessed to be either finite or indefinite. Intangible assets with finite lives are subsequently amortised over the useful economic life and assessed for impairment whenever there is an indication that the intangible asset may be impaired. The amortisation period and the amortisation method for an intangible asset with a finite useful life are reviewed at least at the end of each reporting period.

(a) Goodwill

Goodwill arises on the acquisition of subsidiaries represents the excess of the consideration transferred, the amount of any non-controlling interest in the acquiree and the acquisition-date fair value of any previous equity interest in the acquiree over the fair value of the identified net assets acquired.

For the purpose of impairment testing, goodwill acquired in a business combination is allocated to each of the cash-generating units ("CGUs"), or groups of CGUs, that is expected to benefit from the synergies of the combination. Each unit or group of units to which the goodwill is allocated represents the lowest level within the entity at which the goodwill is monitored for internal management purposes. Goodwill is monitored at the operating segment level.

Goodwill impairment reviews are undertaken annually or more frequently if events or changes in circumstances indicate a potential impairment. The carrying value of goodwill is compared to the recoverable amount, which is the higher of value in use and the fair value less costs of disposal. Any impairment is recognised immediately as an expense and is not subsequently reversed.

(b) Patents and licenses

Purchased patents and licenses are stated at cost less any impairment losses and are amortised on the straight-line basis over their estimated useful lives of 5 to 40 years.

(c) Technology know-how

Purchased technology know-how is stated at cost less any impairment losses and is amortised on the straight-line basis over its estimated useful life of 5 to 15 years.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

2.10 INTANGIBLE ASSETS (CONTINUED)

(d) Concession intangible assets

Concession intangible assets represent the rights to charge users of the public service that the Group obtains under the service concession arrangements. Concession intangible assets are stated at cost, that is, the fair value of the consideration received or receivable in exchange for the construction services provided under the service concession arrangements, less accumulated amortisation and any impairment losses.

Subsequent expenditures such as repairs and maintenance are charged to the consolidated statement of profit or loss in the period in which they are incurred. In situations where it can be clearly demonstrated that the expenditure has resulted in an increase in the future economic benefits expected to be obtained from the use of the item, and where the cost of the item can be measured reliably, the expenditures are capitalised as an additional cost of concession intangible assets.

Amortisation of service concession arrangements is calculated to write off their costs on a straight-line basis throughout the periods for which the Group is granted to operate those concession intangible assets.

(e) Research and development costs

All research costs are charged to the consolidated statement of profit or loss as incurred.

Expenditure incurred on projects to develop new products is capitalised and deferred only when the Group can demonstrate the technical feasibility of completing the intangible asset so that it will be available for use or sale, its intention to complete and its ability to use or sell the asset, how the asset will generate future economic benefits, the availability of resources to complete the project and the ability to measure reliably the expenditure during the development. Product development expenditure which does not meet these criteria is expensed when incurred.

Deferred development costs are stated at cost less any impairment losses and are amortised using the straight-line basis over the commercial lives of the underlying products not exceeding 10 years, commencing from the date when the products are put into commercial production.

2.11 IMPAIRMENT OF NON-FINANCIAL ASSETS

Assets that have an indefinite useful life — for example, goodwill or intangible assets not ready to use — are not subject to amortisation and are tested annually for impairment. Assets that are subject to amortisation are reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount may not be recoverable. An impairment loss is recognised for the amount by which the asset's carrying amount exceeds its recoverable amount. The recoverable amount is the higher of an asset's fair value less costs to sell and value in use. For the purposes of assessing impairment, assets are grouped at the lowest levels for which there are separately identifiable cash flows (cash-generating units). Non-financial assets other than goodwill that suffered an impairment are reviewed for possible reversal of the impairment at each reporting date.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

FOR THE YEAR ENDED 31 DECEMBER 2019

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

2.12 NON-CURRENT ASSETS (OR DISPOSAL GROUPS) HELD FOR SALE AND DISCONTINUED OPERATIONS

Non-current assets (or disposal groups) are classified as held for sale if their carrying amount will be recovered principally through a sale transaction rather than through continuing use and a sale is considered highly probable. They are measured at the lower of their carrying amount and fair value less costs to sell, except for assets such as deferred tax assets, assets arising from employee benefits, financial assets and investment property that are carried at fair value and contractual rights under insurance contracts, which are specifically exempt from this requirement.

An impairment loss is recognised for any initial or subsequent write-down of the asset (or disposal group) to fair value less costs to sell. A gain is recognised for any subsequent increases in fair value less costs to sell of an asset (or disposal group), but not in excess of any cumulative impairment loss previously recognised. A gain or loss not previously recognised by the date of the sale of the non-current asset (or disposal group) is recognised at the date of derecognition.

Non-current assets (including those that are part of a disposal group) are not depreciated or amortised while they are classified as held for sale. Interest and other expenses attributable to the liabilities of a disposal group classified as held for sale continue to be recognised.

Non-current assets classified as held for sale and the assets of a disposal group classified as held for sale are presented separately from the other assets in the balance sheet. The liabilities of a disposal group classified as held for sale are presented separately from other liabilities in the balance sheet.

2.13 INVESTMENTS AND OTHER FINANCIAL ASSETS

2.13.1 Classification

The Group classifies its financial assets in the following measurement categories:

- those to be measured subsequently at fair value (either through OCI, or through profit or loss), and
- those to be measured at amortised cost.

The classification depends on the entity's business model for managing the financial assets and the contractual terms of the cash flows.

For assets measured at fair value, gains and losses will either be recorded in profit or loss or OCI. For investments in equity instruments that are not held for trading, this will depend on whether the Group has made an irrevocable election at the time of initial recognition to account for the equity investment at fair value through other comprehensive income (FVOCI).

The Group reclassifies debt investments when and only when its business model for managing those assets changes.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

2.13 INVESTMENTS AND OTHER FINANCIAL ASSETS (CONTINUED)

2.13.2 Recognition and derecognition

Regular way purchases and sales of financial assets are recognised on trade-date, the date on which the Group commits to purchase or sell the asset. Financial assets are derecognised when the rights to receive cash flows from the financial assets have expired or have been transferred and the Group has transferred substantially all the risks and rewards of ownership.

2.13.3 Measurement

At initial recognition, the Group measures a financial asset at its fair value plus, in the case of a financial asset not at fair value through profit or loss (FVPL), transaction costs that are directly attributable to the acquisition of the financial asset. Transaction costs of financial assets carried at FVPL are expensed in profit or loss.

Financial assets with embedded derivatives are considered in their entirety when determining whether their cash flows are solely payment of principal and interest.

Debt instruments

Subsequent measurement of debt instruments depends on the Group's business model for managing the asset and the cash flow characteristics of the asset. There are three measurement categories into which the Group classifies its debt instruments:

Amortised cost: Assets that are held for collection of contractual cash flows where those cash flows represent solely payments of principal and interest are measured at amortised cost. Interest income from these financial assets is included in profit or loss using the effective interest rate method. Any gain or loss arising on derecognition is recognised directly in profit or loss and presented in other gains/(losses), together with foreign exchange gains and losses. Impairment losses are presented as separate line item in the statement of profit or loss.

FVOCI: Assets that are held for collection of contractual cash flows and for selling the financial assets, where the assets' cash flows represent solely payments of principal and interest, are measured at FVOCI. Movements in the carrying amount are taken through OCI, except for the recognition of impairment gains or losses, interest revenue and foreign exchange gains and losses which are recognised in profit or loss. When the financial asset is derecognised, the cumulative gain or loss previously recognised in OCI is reclassified from equity to profit or loss and recognised in other gains/(losses). Interest income from these financial assets is included in profit or loss using the effective interest rate method. Foreign exchange gains and losses are presented in other gains/(losses) and impairment expenses are presented as separate line item in the statement of profit or loss.

FVPL: Assets that do not meet the criteria for amortised cost or FVOCI are measured at FVPL. A gain or loss on a debt investment that is subsequently measured at FVPL is recognised in profit or loss and presented net within other gains/(losses) in the period in which it arises.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

FOR THE YEAR ENDED 31 DECEMBER 2019

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

2.13 INVESTMENTS AND OTHER FINANCIAL ASSETS (CONTINUED)

2.13.3 Measurement (continued)

Equity instruments

The Group subsequently measures all equity investments at fair value. Where the Group's management has elected to present fair value gains and losses on equity investments in OCI, there is no subsequent reclassification of fair value gains and losses to profit or loss following the derecognition of the investment. Dividends from such investments continue to be recognised in profit or loss as other income when the Group's right to receive payments is established.

Changes in the fair value of financial assets at FVPL are recognised in other gains/(losses) in the statement of profit or loss as applicable. Impairment losses (and reversal of impairment losses) on equity investments measured at FVOCI are not reported separately from other changes in fair value.

2.13.4 Impairment

The Group assesses on a forward-looking basis the expected credit losses associated with its debt instruments carried at amortised cost and FVOCI. The impairment methodology applied depends on whether there has been a significant increase in credit risk.

For trade receivables, contract assets and notes receivable, the Group applies the simplified approach permitted by HKFRS 9, which requires expected lifetime losses to be recognised from initial recognition of the receivables.

2.14 FINANCIAL LIABILITIES

2.14.1 Initial recognition and measurement

Financial liabilities are classified, at initial recognition, as financial liabilities at fair value through profit or loss and loans and borrowings as appropriate.

All financial liabilities are recognised initially at fair value and, in the case of loans and borrowings, net of directly attributable transaction costs.

The Group's financial liabilities include trade and other payables, customer deposits, bonds, derivative financial instruments and bank and other borrowings.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

2.14 FINANCIAL LIABILITIES (CONTINUED)

2.14.2 Subsequent measurement

The subsequent measurement of financial liabilities depends on their classification as follows:

(a) Financial liabilities at fair value through profit or loss

Financial liabilities at fair value through profit or loss include financial liabilities held for trading and financial liabilities designated upon initial recognition as at fair value through profit or loss.

Financial liabilities are classified as held for trading if they are incurred for the purpose of repurchasing in the near term. This category also includes derivative financial instruments entered into by the Group that are not designated as hedging instruments in hedge relationships as defined by HKFRS 9.

Gains or losses on liabilities held for trading are recognised in the statement of profit or loss.

Financial liabilities designated upon initial recognition at fair value through profit or loss are designated at the initial date of recognition, and only if the criteria in HKFRS 9 are satisfied. The Group has not designated any financial liability as at fair value through profit or loss.

(b) Loans and borrowings

After initial recognition, bank and borrowings are subsequently measured at amortised cost, using the effective interest rate method unless the effect of discounting would be immaterial, in which case they are stated at cost. Gains and losses are recognised in the consolidated statement of profit or loss when the liabilities are derecognised as well as through the effective interest rate amortisation process.

Amortised cost is calculated by taking into account any discount or premium on acquisition and fees or costs that are an integral part of the effective interest rate. The effective interest rate amortisation is included in 'finance costs' in the consolidated statement of profit or loss.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

FOR THE YEAR ENDED 31 DECEMBER 2019

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

2.14 FINANCIAL LIABILITIES (CONTINUED)

2.14.3 Derecognition

A financial liability is derecognised when the obligation under the liability is discharged or cancelled or expires. When an existing financial liability is replaced by another from the same lender on substantially different terms, or the terms of an existing liability are substantially modified, such an exchange or modification is treated as the derecognition of the original liability and the recognition of a new liability. The difference in the respective carrying amounts is recognised in the statement of profit or loss.

2.15 OFFSETTING OF FINANCIAL INSTRUMENTS

Financial assets and financial liabilities are offset and the net amount is reported in the consolidated balance sheet if there is a legally enforceable legal right to offset the recognised amounts and there is an intention to settle on a net basis, or realise the assets and settle the liabilities simultaneously. The legally enforceable right must not be contingent on future events and must be enforceable in the normal course of business and in the event of default, insolvency of bankruptcy of the Company or the counterparty.

2.16 FINANCIAL GUARANTEE CONTRACTS

Financial guarantee contracts are recognised as a financial liability at the time the guarantee is issued. The liability is initially measured at fair value and subsequently at the higher of:

- the amount determined in accordance with the expected credit loss model under HKFRS 9 Financial Instruments and

- the amount initially recognised less, where appropriate, the cumulative amount of income recognised in accordance with the principles of HKFRS 15 Revenue from Contracts with Customers.

The fair value of financial guarantees is determined based on the present value of the difference in cash flows between the contractual payments required under the debt instrument and the payments that would be required without the guarantee, or the estimated amount that would be payable to a third party for assuming the obligations.

2.17 REVERSE REPURCHASE TRANSACTIONS

Assets purchased under agreements to resell at a specified future date with fixed price are not recognised in the consolidated balance sheet. The corresponding cash paid, including accrued interest, is recognised in the consolidated balance sheet as an 'Investments'. The difference between the purchase and resale prices is treated as an interest income and is accrued over the life of the agreement using the effective interest rate method.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

2.18 DERIVATIVE FINANCIAL INSTRUMENTS AND HEDGE ACCOUNTING

Derivatives are initially recognised at fair value on the date a derivative contract is entered into and are subsequently re-measured at their fair value. The method of recognising the resulting gain or loss depends on whether the derivative is designated as a hedging instrument, and if so, the nature of the item being hedged. The Group designates certain derivatives as either:

(a) hedges of the fair value of recognised assets or liabilities or a firm commitment (fair value hedge);

(b) hedges of a particular risk associated with a recognised asset or liability or a highly probable forecast transaction (cash flow hedge); or

(c) hedges of a net investment in a foreign operation (net investment hedge).

The Group documents at the inception of the transaction the relationship between hedging instruments and hedged items, as well as its risk management objectives and strategy for undertaking various hedging transactions. The Group also documents its assessment, both at hedge inception and on an ongoing basis, of whether the derivatives that are used in hedging transactions are highly effective in offsetting changes in fair values or cash flows of hedged items.

The full fair value of a hedging derivative is classified as a non-current asset or liability when the remaining hedged item is more than 12 months, and as a current asset or liability when the remaining maturity of the hedged item is less than 12 months. Trading derivatives are classified as a current asset or liability.

(a) Fair value hedge

Changes in the fair value of derivatives that are designated and qualified as fair value hedges are recorded in the consolidated statement of profit or loss, together with any changes in the fair value of the hedged asset or liability that are attributable to the hedged risk.

(b) Cash flow hedge

The effective portion of changes in the fair value of derivatives that are designated and qualify as cash flow hedges is recognised in cash flow hedge reserve within equity. The gain or loss relating to the ineffective portion is recognised immediately in profit or loss within other income or other gains/(losses).

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

FOR THE YEAR ENDED 31 DECEMBER 2019

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

2.18 DERIVATIVE FINANCIAL INSTRUMENTS AND HEDGE ACCOUNTING (CONTINUED)

(b) Cash flow hedge (continued)

Amounts accumulated in equity are reclassified in the periods when the hedged item affects profit or loss, as follows:

The gain or loss relating to the effective portion of the interest rate swaps hedging variable rate borrowings is recognised in profit or loss within finance cost at the same time as the interest expense on the hedged borrowings.

When a hedging instrument expires, or is sold or terminated, or when a hedge no longer meets the criteria for hedge accounting, any cumulative deferred gain or loss and deferred costs of hedging in equity at that time remains in equity until the forecast transaction occurs, resulting in the recognition of a non-financial asset such as inventory. When the forecast transaction is no longer expected to occur, the cumulative gain or loss and deferred costs of hedging that were reported in equity are immediately reclassified to profit or loss.

(c) Net investment hedge

Hedges of net investments in foreign operations are accounted for similarly to cash flow hedges. Any gain or loss on the hedging instrument relating to the effective portion of the hedge is recognised in other comprehensive income and accumulated in reserves in equity. The gain or loss relating to the ineffective portion is recognised in the consolidated statement of profit or loss.

Gains and losses accumulated in other comprehensive income are reclassified to the consolidated statement of profit or loss when the foreign operation is partially disposed of or sold.

(d) Derivatives that do not qualify for hedge accounting

Certain derivative instruments do not qualify for hedge accounting. Changes in the fair value of any derivative instrument that does not qualify for hedge accounting are recognised immediately in statement of profit or loss and are included in other gains.

2.19 INVENTORIES

Inventories are stated at the lower of cost and net realisable value. Cost is determined on the weighted average basis or individual basis and, in the case of work in progress and finished goods, comprises direct materials, direct labor and an appropriate proportion of variable and fixed overhead expenditure, the latter being allocated on the basis of normal operating capacity. Net realisable value is based on estimated selling prices in the ordinary course of business less the estimated costs to be incurred to completion and the estimated costs necessary to make the sale.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

2.20 TRADE AND OTHER RECEIVABLES

Trade receivables are amounts due from customers for goods sold or services performed in the ordinary course of business. If collection of trade and other receivables is expected in one year or less (or in the normal operating cycle of the business if longer), they are classified as current assets. If not, they are presented as non-current assets.

Trade and other receivables are recognised initially at fair value and subsequently measured at amortised cost using the effective interest method, less provision for impairment.

2.21 CASH AND CASH EQUIVALENTS

In the consolidated statement of cash flows, cash and cash equivalents includes cash in hand, deposits held at call with banks and other short-term highly liquid investments with original maturities of three months or less.

2.22 SHARE CAPITAL

Ordinary shares are classified as equity.

Incremental costs directly attributable to the issue of new shares are shown in equity as a deduction, net of tax, from the proceeds.

2.23 TRADE AND OTHER PAYABLES

Trade and other payables are obligations to pay for goods or services provided to the Group prior to the end of financial year which are unpaid. Trade and other payables are classified as current liabilities if payment is due within one year or less (or in the normal operating cycle of the business if longer). If not, they are presented as non-current liabilities.

Trade payables are recognised initially at fair value and subsequently measured at amortised cost using the effective interest method.

2.24 BORROWINGS

Borrowings are initially recognised at fair value, net of transaction costs incurred. Borrowings are subsequently measured at amortised cost. Any difference between the proceeds (net of transaction costs) and the redemption amount is recognised in profit or loss over the period of the borrowings using the effective interest method. Fees paid on the establishment of loan facilities are recognised as transaction costs of the loan to the extent that it is probable that some or all of the facility will be drawn down. In this case, the fee is deferred until the draw down occurs. To the extent there is no evidence that it is probable that some or all of the facility will be drawn down, the fee is capitalised as a prepayment for liquidity services and amortised over the period of the facility to which it relates.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

FOR THE YEAR ENDED 31 DECEMBER 2019

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

2.24 BORROWINGS (CONTINUED)

The fair value of the liability portion of a convertible bond is determined using a market interest rate for an equivalent non-convertible bond. This amount is recorded as a liability on an amortised cost basis until extinguished on conversion or maturity of the bonds. The remainder of the proceeds is allocated to the conversion option. This is recognised and included in shareholders' equity, net of income tax effects.

Borrowings are removed from the balance sheet when the obligation specified in the contract is discharged, cancelled or expired. The difference between the carrying amount of a financial liability that has been extinguished or transferred to another party and the consideration paid, including any non-cash assets transferred or liabilities assumed, is recognised in profit or loss as other income or finance costs.

Where the terms of a financial liability are renegotiated and the entity issues equity instruments to a creditor to extinguish all or part of the liability (debt for equity swap), a gain or loss is recognised in profit or loss, which is measured as the difference between the carrying amount of the financial liability and the fair value of the equity instruments issued.

Borrowings are classified as current liabilities unless the Group has an unconditional right to defer settlement of the liability for at least 12 months after the reporting period.

2.25 BORROWING COSTS

General and specific borrowing costs directly attributable to the acquisition, construction or production of qualifying assets, which are assets that necessarily take a substantial period of time to get ready for their intended use or sale, are added to the cost of those assets, 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 the consolidated statement of profit or loss in the period in which they are incurred.

2.26 CURRENT AND DEFERRED INCOME TAX

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

(a) Current income tax

The current income tax charge is calculated on the basis of the tax laws enacted or substantively enacted at the balance sheet date in the countries where the Company's subsidiaries, associates and joint ventures operate and generate taxable income. Management periodically evaluates positions taken in tax returns with respect to situations in which applicable tax regulation is subject to interpretation. It establishes provisions where appropriate on the basis of amounts expected to be paid to the tax authorities.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

2.26 CURRENT AND DEFERRED INCOME TAX (CONTINUED)

(b) Deferred income tax

Inside basis differences

Deferred income tax is recognised, using the liability method, on temporary differences arising between the tax bases of assets and liabilities and their carrying amounts in the consolidated financial statements. However, deferred tax liabilities are not recognised if they arise from the initial recognition of goodwill, the deferred income tax is not accounted for if it arises from initial recognition of an asset or liability in a transaction other than a business combination that at the time of the transaction affects neither accounting nor taxable profit or loss. Deferred income tax is determined using tax rates (and laws) that have been enacted or substantively enacted by the balance sheet date and are expected to apply when the related deferred income tax asset is realised or the deferred income tax liability is settled.

Deferred income tax assets are recognised only to the extent that it is probable that future taxable profit will be available against which the temporary differences can be utilised.

Outside basis differences

Deferred income tax liabilities are provided on taxable temporary differences arising from investments in subsidiaries, associates and joint arrangements, except for deferred income tax liability where the timing of the reversal of the temporary difference is controlled by the Group and it is probable that the temporary difference will not reverse in the foreseeable future.

Deferred income tax assets are recognised on deductible temporary differences arising from investments in subsidiaries, associates and joint arrangements only to the extent that it is probable the temporary difference will reverse in the future and there is sufficient taxable profit available against which the temporary difference can be utilised.

(c) Offsetting

Deferred income tax assets and liabilities are offset when there is a legally enforceable right to offset current tax assets against current tax liabilities and when the deferred income taxes assets and liabilities relate to income taxes levied by the same taxation authority on either the taxable entity or different taxable entities where there is an intention to settle the balances on a net basis.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

FOR THE YEAR ENDED 31 DECEMBER 2019

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

2.27 EMPLOYEE BENEFITS

(a) Short-term obligations

Liabilities for wages and salaries, including non-monetary benefits that are expected to be settled wholly within 12 months after the end of the period in which the employees render the related service are recognised in respect of employees' services up to the end of the reporting period and are measured at the amounts expected to be paid when the liabilities are settled. The liabilities are presented as other payables and accruals in the balance sheet.

(b) Post-employment obligations

The Group operates various post-employment schemes, including both defined benefit and defined contribution pension plans and post-employment medical plans.

Pension obligations

A defined contribution plan is a pension plan under which the Group pays fixed contributions into a separate entity. The Group has no legal or constructive obligations to pay further contributions if the fund does not hold sufficient assets to pay all employees the benefits relating to employee service in the current and prior periods.

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

A defined benefit plan is a pension plan that is not a defined contribution plan.

Typically defined benefit plans define an amount of pension benefit that an employee will receive on retirement, usually dependent on one or more factors such as age, years of service and compensation.

The liability recognised in the balance sheet in respect of defined benefit pension plans is the present value of the defined benefit obligation at the end of the reporting period less the fair value of plan assets. The defined benefit obligation is calculated annually by independent actuaries using the projected unit credit method. The present value of the defined benefit obligation is determined by discounting the estimated future cash outflows using interest rates of high-quality corporate bonds that are denominated in the currency in which the benefits will be paid, and that have terms to maturity approximating to the terms of the related pension obligation. In countries where there is no deep market in such bonds, the market rates on government bonds are used.

Past-service costs are recognised immediately in the consolidated statement of profit or loss. Changes in the present value of the defined benefit obligation resulting from plan amendments or curtailments are recognised immediately in profit or loss as past service costs.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

2.27 EMPLOYEE BENEFITS (CONTINUED)

(b) Post-employment obligations (continued)

Defined benefit

Payments to defined contributions retirement benefits plans, state-managed retirement benefit schemes and Mandatory Provident Fund Scheme ("MPF Scheme"), are recognised as an expense when employees have rendered service entitling them to the contributions. For defined benefit retirement benefit plans, the cost of providing benefits is determined using the projected unit credit method, with actuarial valuations being carried out at the end of each annual reporting period. Remeasurement, comprising actuarial gains and losses, the effect of the changes to the asset ceiling (if applicable) and the return on plan assets (excluding interest), is reflected immediately in the consolidated balance sheet with a charge or credit recognised in other comprehensive income in the period in which they occur. Remeasurement recognised in other comprehensive income is reflected immediately in retained earnings and will not be reclassified to profit or loss. Past service cost is recognised in profit or loss in the period of a plan amendment. Net interest is calculated by apply the discount rate at the beginning of the period to the net defined benefit liability or asset.

Defined benefit costs are categorised as follows:

- service cost (including current service cost, past service cost, as well as gains and losses on curtailments and settlements);
- net interest expense or income; and
- remeasurement.

The Group presents the first two component of defined benefit costs in profit or loss. Curtailment gains and losses are accounted for as past service costs. The retirement benefit obligation recognised in the consolidated balance sheet represents the actual deficit or surplus in the Group's defined benefit plan. Any surplus resulting from the calculation is limited to the present value of any economic benefits available in the form of refunds from the plans or reductions in future contribution to the plans.

(c) Termination benefits

Termination benefits are payable when employment is terminated by the Group before the normal retirement date, or whenever an employee accepts voluntary redundancy in exchange for these benefits. The Group recognises termination benefits at the earlier of the following dates: (a) when the Group can no longer withdraw the offer of those benefits; and (b) when the entity recognises costs for a restructuring that is within the scope of HKAS 37 and involves the payment of termination benefits. In the case of an offer made to encourage voluntary redundancy, the termination benefits are measured based on the number of employees expected to accept the offer. Benefits falling due more than 12 months after the end of the reporting period are discounted to their present value. A liability for a termination benefit is recognised at the earlier of when the Group entity can no longer withdraw the offer of the termination benefit and when it recognised any related restructuring cost.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

FOR THE YEAR ENDED 31 DECEMBER 2019

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

2.28 SHARE-BASED PAYMENTS

Share-based compensation benefits are provided to employees via the equity-based restricted share incentive scheme. Information relating to the scheme is set out in note 56.

Equity based restricted share incentive scheme

The fair value of options granted under the equity-based restricted share incentive scheme is recognised as an employee benefits expense with a corresponding increase in equity. The total amount to be expensed is determined by reference to the fair value of the options granted:

- including any market performance conditions (eg. the entity's share price)

- excluding the impact of any service and non-market performance vesting conditions (eg. profitability, sales growth targets and remaining an employee of the entity over a specified time period), and

- including the impact of any non-vesting conditions (eg. the requirement for employees to save or hold shares for a specific period of time).

The total expense is recognised over the vesting period, which is the period over which all of the specified vesting conditions are to be satisfied. At the end of each period, the entity revises its estimates of the number of options that are expected to vest based on the non-market vesting and service conditions. It recognises the impact of the revision to original estimates, if any, in profit or loss, with a corresponding adjustment to equity.

2.29 PROVISIONS

Provisions for legal claims, service warranties and make good obligations are recognised when the Group has a present legal or constructive obligation as a result of past events, it is probable that an outflow of resources will be required to settle the obligation and the amount can be reliably estimated. Provisions are not recognised for future operating losses.

Where there are a number of similar obligations, the likelihood that an outflow will be required in settlement is determined by considering the class of obligations as a whole. A provision is recognised even if the likelihood of an outflow with respect to any one item included in the same class of obligations may be small.

Provisions are measured at the present value of management's best estimate of the expenditure required to settle the present obligation at the end of the reporting period. The discount rate used to determine the present value is a pre-tax rate that reflects current market assessments of the time value of money and the risks specific to the liability. The increase in the provision due to the passage of time is recognised as interest expense. For loan commitments and financial guarantee contracts, the loss allowance is recognised as a provision.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

2.30 REVENUE RECOGNITION

The Group recognises revenue to depict the transfer of control to customers in an amount that reflects the consideration to which the entity expects to be entitled in exchange for goods or services.

Sales of goods

Sales are recognised when the products have been shipped to the specific location in accordance with the sales contract and the customers have inspected and accepted the products. There is no significant financing component as the sales are made with a credit term varied by customers' credit risk characteristics, which is consistent with market practices.

Rendering services

Revenue from providing services to external parties is recognised over a period of time based on the stage of completion of such service, which is determined by the proportion of costs incurred to the estimated total costs. As at the balance sheet date, the Group reassesses the stage of completion so as to better reflect the changes in obligation performance.

Revenue is recognised by the stage of completion of the services. Trade receivables are recognised when the Group has an unconditional right to payment. For the remaining part of the services, a contract asset is recognised. The Group recognises the loss provision using the expected credit loss model for its trade receivables and contract assets. If the payments received or receivable exceed the services rendered, a contract liability is recognised for the excess. Contract assets and contract liabilities under the same contract are presented on a net basis.

Construction services

Revenue from providing construction services to external parties is recognised over a period of time based on the stage of completion of such service which is determined by the proportion of costs incurred to the estimated total costs or by the proportion of certified value to total contract value. As at the balance sheet date, the Group reassesses the stage of completion so as to better reflect the changes in obligation performance.

Revenue is recognised by the stage of completion of the construction services. Trade receivables are recognised when the Group has an unconditional right to payment. For the remaining part of the services, a contract asset is recognised. The Group recognises the loss provision using the expected credit loss model for its trade receivables and contract assets. If the payments received or receivable exceed the services rendered, a contract liability is recognised for the excess. Contract assets and contract liabilities under the same contract are presented on a net basis.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

FOR THE YEAR ENDED 31 DECEMBER 2019

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

2.31 GOVERNMENT GRANTS

Grants from the government are recognised at their fair value where there is a reasonable assurance that the grant will be received and the group will comply with all attached conditions.

Government grants relating to costs are deferred and recognised in the profit or loss over the period necessary to match them with the costs that they are intended to compensate.

Government grants relating to the purchase of property, plant and equipment are included in non-current liabilities as deferred income and are credited to profit or loss on a straight-line basis over the expected lives of the related assets.

2.32 INTEREST INCOME

Interest income from financial assets at FVPL is included in the net fair value gains/(losses) on these assets, see note 7 below.

Interest income on financial assets at amortised cost and financial assets at FVOCI calculated using the effective interest method is recognised in the statement of profit or loss as part of other income. Interest income is presented as finance income where it is earned from financial assets that are held for cash management purposes, see note 10 below. Any other interest income is included in other income.

Interest income is calculated by applying the effective interest rate to the gross carrying amount of a financial asset except for financial assets that subsequently become credit-impaired. For credit-impaired financial assets the effective interest rate is applied to the net carrying amount of the financial asset (after deduction of the loss allowance).

2.33 DIVIDEND INCOME

Dividends are received from financial assets measured at fair value through profit or loss (FVPL) and at fair value through other comprehensive income (FVOCI). Dividends are recognised as other income in profit or loss when the right to receive payment is established. This applies even if they are paid out of pre-acquisition profits, unless the dividend clearly represents a recovery of part of the cost of an investment. In this case, the dividend is recognised in OCI if it relates to an investment measured at FVOCI. However, the investment may need to be tested for impairment as a consequence.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

2.34 LEASES

As explained in note 2.1.2 above, the Group has changed its accounting policy for leases where the Group is the lessee. The new policy is described below and the impact of the change in note 2.1.2.

Until 31 December 2018, leases of property, plant and equipment where the Group, as lessee, had substantially all the risks and rewards of ownership were classified as finance leases (note 15). Finance leases were capitalised at the lease's inception at the fair value of the leased property or, if lower, the present value of the minimum lease payments. The corresponding rental obligations, net of finance charges, were included in other short-term and long-term payables. Each lease payment was allocated between the liability and finance cost. The finance cost was charged to profit or loss over the lease period so as to produce a constant periodic rate of interest on the remaining balance of the liability for each period. The property, plant and equipment acquired under finance leases was depreciated over the asset's useful life or over the shorter of the asset's useful life and the lease term if there is no reasonable certainty that the Group will obtain ownership at the end of the lease term.

Leases in which a significant portion of the risks and rewards of ownership were not transferred to the Group as lessee were classified as operating leases (note 49). Payments made under operating leases (net of any incentives received from the lessor) were charged to profit or loss on a straight-line basis over the period of the lease.

From 1 January 2019, leases are recognised as a right-of-use asset and a corresponding liability at the date at which the leased asset is available for use by the Group.

Contracts may contain both lease and non-lease components. The Group allocates the consideration in the contract to the lease and non-lease components based on their relative stand-alone prices. However, for leases of real estate for which the Group is a lessee, it has elected not to separate lease and non-lease components and instead accounts for these as a single lease component.

Assets and liabilities arising from a lease are initially measured on a present value basis. Lease liabilities include the net present value of the following lease payments:

- fixed payments (including in-substance fixed payments), less any lease incentives receivable
- variable lease payment that are based on an index or a rate, initially measured using the index or rate as at the commencement date
- amounts expected to be payable by the Group under residual value guarantees
- the exercise price of a purchase option if the Group is reasonably certain to exercise that option, and
- payments of penalties for terminating the lease, if the lease term reflects the Group exercising that option.

Lease payments to be made under reasonably certain extension options are also included in the measurement of the liability.

The lease payments are discounted using the interest rate implicit in the lease. If that rate cannot be readily determined, which is generally the case for leases in the Group, the lessee's incremental borrowing rate is used, being the rate that the individual lessee would have to pay to borrow the funds necessary to obtain an asset of similar value to the right-of-use asset in a similar economic environment with similar terms, security and conditions.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

FOR THE YEAR ENDED 31 DECEMBER 2019

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

2.34 LEASES (CONTINUED)

To determine the incremental borrowing rate, the Group:

- where possible, uses recent third-party financing received by the individual lessee as a starting point, adjusted to reflect changes in financing conditions since third party financing was received
- uses a build-up approach that starts with a risk-free interest rate adjusted for credit risk for leases held by Shanghai Electric Group Company Limited, which does not have recent third party financing, and makes adjustments specific to the lease, eg term, country, currency and security.

Lease payments are allocated between principal and finance cost. The finance cost is charged to profit or loss over the lease period so as to produce a constant periodic rate of interest on the remaining balance of the liability for each period.

Right-of-use assets are measured at cost comprising the following:

- the amount of the initial measurement of lease liability
- any lease payments made at or before the commencement date less any lease incentives received
- any initial direct costs, and
- restoration costs.

Right-of-use assets are generally depreciated over the shorter of the asset's useful life and the lease term on a straight-line basis. If the Group is reasonably certain to exercise a purchase option, the right-of-use asset is depreciated over the underlying asset's useful life.

Payments associated with short-term leases of equipment and vehicles and all leases of low-value assets are recognised on a straight-line basis as an expense in profit or loss. Short-term leases are leases with a lease term of 12 months or less. Low-value assets comprise IT equipment and small items of office furniture.

Leases: Accounting by lessor

When assets are leased out under a finance lease, the present value of the lease payments is recognised as a receivable. The difference between the gross receivable and the present value of the receivable is recognised as unearned finance income.

The method for allocating gross earnings to accounting periods is referred to a as the "actuarial method". The actuarial method allocates rentals between finance income and repayment of capital in each accounting period in such a way that finance income will emerge as a constant rate of return on the lessor's net investment in the lease.

When assets are leased out under an operating lease, the asset is included in the balance sheet based on the nature of the asset.

Lease income from operating leases where the Group is a lessor is recognised in income on a straight-line basis over the lease term (note 15). Initial direct costs incurred in obtaining an operating lease are added to the carrying amount of the underlying asset and recognised as expense over the lease term on the same basis as lease income. The respective leased assets are included in the balance sheet based on their nature. The Group did not need to make any adjustments to the accounting for assets held as lessor as a result of adopting the new leasing standard.

2.35 DIVIDEND DISTRIBUTION

Dividend distribution to the Company's shareholders is recognised as a liability in the Group's and the Company's financial statements in the period in which the dividends are approved by the Company's shareholders, where appropriate.

3. FINANCIAL RISK MANAGEMENT

3.1 FINANCIAL RISK FACTORS

The Group's principal financial instruments, other than derivatives, comprise bank and other borrowings, bonds, customer deposits and cash and time deposits. The main purpose of these financial instruments is to raise finance for the Group's operations. The Group has various other financial assets and liabilities such as trade and notes receivables, trade and notes payable and lease receivables and lease payment receivables, which arise directly from its operations.

The Group also enters into derivative transactions, including principally forward currency contracts. The purpose is to manage the foreign currency risks arising from the Group's operations.

The main risks arising from the Group's financial instruments are market risk, credit risk and liquidity risk. The Group's policies for managing each of these risks are summarised below. The Group's accounting policies in relation to derivatives are set out in Note 2.18 to the financial statements.

(a) Market risk

(i) Foreign exchange risk

The Group operates internationally and is exposed to foreign exchange risk arising from various currency exposures, primarily with respect to the US dollar, Euro, Hong Kong dollar and Japanese Yen ("JPY"). Foreign exchange risk arises from future commercial transactions, recognised assets and liabilities and net investments in foreign operations.

The Management has established a policy that requires the Group to manage the foreign currency risk of its functional currency. The Group's treasury function at its headquarters is responsible for monitoring the amount of assets and liabilities, and transactions denominated in foreign currencies to minimise the foreign exchange risk. Therefore, the Group may consider to enter into forward exchange contracts or currency swap contracts to mitigate the foreign exchange risk.

As at December 31, 2019 and 2018, the amount of foreign currency financial assets and foreign currency financial liabilities held by companies whose bookkeeping base currency is RMB is listed as follows:

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

FOR THE YEAR ENDED 31 DECEMBER 2019

3. FINANCIAL RISK MANAGEMENT (CONTINUED)

3.1 FINANCIAL RISK FACTORS (CONTINUED)

(a) Market risk (continued)

(i) Foreign exchange risk (continued)

	31 December 2019				
	USD project	**JPY project**	**EUR project**	**HKD project**	**Total**
Foreign currency financial assets -					
Cash and bank balance	2,541,323	3,943	264,322	134,541	2,944,129
Trade receivables	4,377,974	-	190,921	-	4,568,895
Other receivables	1,062	-	1,504	-	2,566
	6,920,359	3,943	456,747	134,541	7,515,590
Foreign currency financial liabilities -					
Trade payables	302,896	6,472	1,484	-	310,852
Other payables	3,360	-	-	-	3,360
Current bank loan	1,478,650	-	277,431	741,706	2,497,787
Non-current bank loan	1,523,864	6,383	1,477,005	-	3,007,252
Current portion of long-term bank loan	31,407	-	72,271	-	103,678
	3,340,177	12,855	1,828,191	741,706	5,922,929

3. FINANCIAL RISK MANAGEMENT (CONTINUED)

3.1 FINANCIAL RISK FACTORS (CONTINUED)

(a) Market risk (continued)

(i) Foreign exchange risk (continued)

	31 December 2018				
	USD project	**JPY project**	**EUR project**	**HKD project**	**Total**
Foreign currency financial assets -					
Cash and bank balance	2,096,533	8,766	329,291	210,213	2,644,803
Trade receivables	4,272,270	-	171,282	-	4,443,552
Other receivables	4,805	-	78,128	-	82,933
	6,373,608	8,766	578,701	210,213	7,171,288
Foreign currency financial liabilities -					
Trade payables	10,844	8,458	103,119	-	122,421
Other payables	46,809	352	115,935	-	163,096
Current bank loan	345,905	-	306,855	-	652,760
Non-current bank loan	-	-	64,020	-	64,020
Current portion of long-term bank loan	971,157	-	1,920	-	973,077
	1,374,715	8,810	591,849	-	1,975,374

As of December 31, 2019, if RMB appreciates or depreciates 10% of the above foreign currency financial assets and foreign currency financial liabilities of the group, other factors remain unchanged and changes in the fair value of the company's purchased forward foreign exchange contracts are taken into account, the group will reduce or increase the net profit as follows：

	Appreciation	**Depreciation**
EUR	102,858	(102,858)
HKD	45,537	(45,537)
JPY	668	(668)
USD	(268,514)	268,514

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

FOR THE YEAR ENDED 31 DECEMBER 2019

3. FINANCIAL RISK MANAGEMENT (CONTINUED)

3.1 FINANCIAL RISK FACTORS (CONTINUED)

(a) Market risk (continued)

(ii) Equity price risk

Equity price risk is the risk that the fair values of equity securities decrease as a result of changes in the value of individual securities. The Group was exposed to equity price risk arising from individual equity investments and trust product classified as investments at fair value through profit or loss and investments at fair value through other comprehensive income as at 31 December 2019. The Group's listed investments are listed on the Shenzhen Stock Exchange ("SZSE"), the Shanghai Stock Exchange ("SHSE") and Hong Kong Stock Exchange ("HKEX") are valued at quoted market prices at the end of the reporting period.

The following table demonstrates the sensitivity to every 5% change in the fair values of the equity investments, with all other variables held constant, based on their carrying amounts at the end of the reporting period.

	Carrying amount RMB'000	Increase/ (decrease) in profit after tax RMB'000	Increase/ (decrease) in other comprehensive income RMB'000
2019			
Equity investments:			
SZSE – At fair value through profit or loss	139,366	5,226	-
SHSE – At fair value through profit or loss	974,692	36,551	-
HKEX – At fair value through profit or loss	106,959	4,011	-
Others – At fair value through profit or loss	65,921	2,472	-
2018			
Equity investments:			
SZSE – At fair value through profit or loss	1,839	69	-
SHSE – At fair value through profit or loss	1,072,677	40,225	-
Others – At fair value through profit or loss	57,653	2,162	-

3. FINANCIAL RISK MANAGEMENT (CONTINUED)

3.1 FINANCIAL RISK FACTORS (CONTINUED)

(a) Market risk (continued)

(iii) Interest rate risk

The interest rate risk of the Group mainly arises from long-term interest-bearing debts such as long-term bank loans and bonds payable. Financial liabilities with floating interest rate expose the Group to cash flow interest rate risk, and financial liabilities with fixed interest rate expose the Group to fair value interest rate risk. The Group determines the relative proportion of fixed-rate and floating-rate contracts based on the market environment at the time. As of 31 December 2019, the Group's floating interest-bearing debts were mainly floating-rate borrowing contracts denominated in RMB and Euro, with an amount of RMB3,893,175,000 (31 December 2018: RMB6,659,455,000).

Interest rate risk is the risk that the value/future cash flows of a financial instrument will fluctuate because of changes in market interest rates.

The following table sets out the Group's financial instruments exposed to interest rate risk by maturity and their effective interest rates:

Financial liabilities

	2019	
	Bank and other borrowings with variable rates RMB'000	Customer deposits* RMB'000
Within 1 year	6,028,941	7,208,955
1 to 5 years	3,893,175	-
Total	9,922,116	7,208,955
Effective interest rate (% per annum)	0.80-5.64	0.35-2.31

	2018	
	Bank and other borrowings with variable rates RMB'000	Customer deposits* RMB'000
Within 1 year	1,508,582	4,431,761
1 to 5 years	6,689,455	-
Total	8,198,037	4,431,761
Effective interest rate (% per annum)	1.35-4.51	0.35-2.31

* Customer deposits represent the deposits placed in the Shanghai Electric Group Finance Co., Ltd. ("Finance Company").

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

FOR THE YEAR ENDED 31 DECEMBER 2019

3. FINANCIAL RISK MANAGEMENT (CONTINUED)

3.1 FINANCIAL RISK FACTORS (CONTINUED)

(b) Credit risk

Credit risk arises from deposit with banks, contractual cash flows of debt instruments carried at amortised cost, at fair value through comprehensive income (FVOCI) and at fair value through profit or loss (FVPL), and trade and other receivables (excluding prepayment and value-added tax recoverable).

The Group has five types of financial assets that are subject to the expected credit loss model:
- trade receivables at amortised cost;
- trade receivables at FVOCI;
- debt investments at FVOCI;
- contract assets; and
- other financial assets at amortised cost.

While notes receivables, deposit with banks, including time deposits, restricted cash, cash and cash equivalents, are also subject to the impairment requirements of HKFRS 9, identified impairment loss was not significant.

Trade receivables and contract assets

The Group applies the HKFRS 9 simplified approach to measuring expected credit losses which uses a lifetime expected loss allowance for all trade receivables and contract assets.

To measure the expected credit losses, trade receivables and contract assets have been grouped based on shared credit risk characteristics and the days past due. The contract assets relate to unbilled work in progress and have substantially the same risk characteristics as the trade receivables for the same types of contracts. The Group has therefore concluded that the expected loss rates for trade receivables are a reasonable approximation of the loss rates for the contract assets.

The expected loss rates are based on the corresponding historical credit losses and adjusted to reflect current and forward-looking information on macroeconomic factors affecting the ability of the customers to settle the receivables. The Group has identified the GDP, PPI and M2 Growth Rate of the countries in which it sells its goods and services to be the most relevant factors, and accordingly adjusts the historical loss rates based on expected changes in these factors.

3. FINANCIAL RISK MANAGEMENT (CONTINUED)

3.1 FINANCIAL RISK FACTORS (CONTINUED)

(b) Credit risk (continued)

On that basis, the loss allowance as at 31 December 2019 and 31 December 2018 was determined as follows for both trade receivables and contract assets:

As of 31 December 2019, the original carrying value of individually impaired trade receivables was RMB927,839,000, the loss allowance was RMB901,067,000 such that the net carrying value of individually impaired trade receivables was RMB26,772,000. The original carrying value of individually impaired contract assets was RMB512,042,000, the loss allowance was RMB439,648,000 and the net carrying value of individually impaired contract assets was RMB72,394,000.

As of 31 December 2019, the original carrying value, loss allowance and net carrying value of the Group's trade receivables included trade receivable from countries with sovereign financial risk of RMB2,870,973,000, RMB1,174,559,000 and RMB1,696,414,000 respectively (31 December 2018: RMB3,370,518,000, RMB1,000,424,000 and RMB2,370,094,000 respectively).

31 December 2019	Current	Up to 1 year past due	More than 1 year past due	More than 2 years past due	More than 3 years past due	More than 4 years past due	More than 5 years past due	Total
Expected loss rate	0.1%-2%	1%-13%	5%-37%	31%-82%	47%-100%	72%-100%	90%-100%	
Gross carrying amount – trade receivables by group	11,997,564	11,500,695	3,621,937	1,863,120	1,421,663	1,297,682	1,216,602	32,919,263
Gross carrying amount – contract assets by group	33,936,982	-	-	-	-	-	-	33,936,982
Loss allowance – HKFRS9 by group	747,097	739,086	556,133	662,522	887,668	1,148,541	1,171,757	5,912,804

As of 31 December 2018, the original carrying value of individually impaired trade receivables was RMB1,106,519,000, the loss allowance was RMB1,094,933,000 such that the net carrying value of individually impaired trade receivables was RMB11,586,000. The original carrying value of individually impaired contract assets was RMB761,607,000, the loss allowance was RMB572,200,000 and the net carrying value of individually impaired contract assets was RMB189,407,000.

As of 31 December 2018, the original carrying value, loss allowance and net carrying value of the Group's trade receivables included a receivable from a country with sovereign financial risk of RMB3,370,518,000, RMB1,000,424,000 and RMB2,370,094,000 respectively.

31 December 2018	Current	Up to 1 year past due	More than 1 year past due	More than 2 years past due	More than 3 years past due	More than 4 years past due	More than 5 years past due	Total
Expected loss rate	0.1%-2%	1%-13%	5%-37%	31%-82%	47%-100%	72%-100%	90%-100%	
Gross carrying amount – trade receivables by group	6,498,935	6,909,514	3,144,923	1,481,872	1,631,810	603,080	896,447	21,166,581
Gross carrying amount – contract assets by group	20,662,164	-	-	-	-	-	-	20,662,164
Loss allowance - by group	524,306	502,348	593,102	784,304	1,362,390	552,191	876,837	5,195,478

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

FOR THE YEAR ENDED 31 DECEMBER 2019

3. FINANCIAL RISK MANAGEMENT (CONTINUED)

3.1 FINANCIAL RISK FACTORS (CONTINUED)

(b) Credit risk (continued)

The closing loss allowances for trade receivables and contract assets as at 31 December 2019 reconcile to the opening loss allowances as follows:

	Contract assets RMB'000	Trade receivables RMB'000
Opening loss allowance as at 31 December 2018	1,060,009	6,553,937
Increase in loan loss allowance recognised in profit or loss during the year	190,816	1,575,046
Receivables written off during the year as uncollectible	(19,641)	(16,333)
Unused amount reversed	(184,132)	(562,941)
Realised losses on derecognition of trade receivables	-	(168,683)
At 31 December 2019	1,047,052	7,381,026

Trade receivables and contract assets are written off when there is no reasonable expectation of recovery. Indicators that there is no reasonable expectation of recovery include, amongst others, the failure of a debtor to engage in a repayment plan with the Group, and a failure to make contractual payments.

Impairment losses on trade receivables and contract assets are presented as net impairment losses within operating profit. Subsequent recoveries of amounts previously written off are credited against the same line item.

3. FINANCIAL RISK MANAGEMENT (CONTINUED)

3.1 FINANCIAL RISK FACTORS (CONTINUED)

(b) Credit risk (continued)

Financial assets at amortised cost

Financial assets at amortised cost include loan receivables, lease receivables, notes receivable and others.

The loss allowance for financial assets at amortised cost as at 31 December 2018 reconciles to the opening loss allowance on 31 December 2018 and to the closing loss allowance as at 31 December 2019 as follows:

	Loan receivables	Lease receivables	Notes receivable	Discounted notes receivable	Other receivables	Other financial assets	Total
	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000
Opening loss allowance as at 31 December 2018	381,630	910,135	-	10,466	159,239	2,742	1,464,212
Increase in the allowance recognised in profit or loss during the year	61,585	208,028	44,990	8,495	25,168	255,209	603,475
Realised losses on derecognition of lease receivables	-	(50,066)	-	-	-	-	(50,066)
Closing loss allowance as at 31 December 2019	443,215	1,068,097	44,990	18,961	184,407	257,951	2,017,621

Debt investments at fair value through other comprehensive income

Debt investments at fair value through other comprehensive income (FVOCI) include trade receivables, notes receivable, listed and unlisted debt securities. The loss allowance for debt investments amounted to RMB124,061,000 was recognised in the consolidated statement of profit or loss this year.

Loan and lease receivables

The Group uses three categories for loan and lease receivables which reflect their credit risk and how the loss provision is determined for each of those categories. These internal credit risk ratings are aligned to external credit ratings.

A summary of the assumptions underpinning the Group's expected credit loss model is as follows:

Category	Group definition of category	Basis for recognition of expected credit loss provision
Performing	Loans and leases whose credit risk are in line with original expectations	12 month expected losses. Where the expected lifetime of an asset is less than 12 months, expected losses are measured at its expected lifetime (stage 1).
Underperforming	Loans and leases for which a significant increase has occurred compared to original expectations; a significant increase in credit risk is presumed if interest and/or principal repayments are 30 days past due.	Lifetime expected losses (stage 2).
Non-performing (credit impaired)	Interest and/or principal repayments are 90 days past due or it becomes probable a customer will enter bankruptcy.	Lifetime expected losses (stage 3).

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

FOR THE YEAR ENDED 31 DECEMBER 2019

3. FINANCIAL RISK MANAGEMENT (CONTINUED)

3.1 FINANCIAL RISK FACTORS (CONTINUED)

(b) Credit risk (continued)

Net impairment losses on financial and contract assets recognised in profit or loss (including provisions for financial guarantee contracts)

During the year, the following gains/(losses) were recognised in profit or loss in relation to impaired financial assets:

	2019 RMB'000	2018 RMB'000
Impairment losses/(Reversal of losses) on trade receivables at amortised cost	1,012,105	(277,737)
Impairment losses on other financial assets	255,209	2,742
Impairment losses on lease receivables	208,028	213,319
Impairment losses on trade receivables at FVOCI	124,061	8,305
Impairment losses on loan receivables	61,585	7,257
Impairment losses on notes receivable	44,990	-
Impairment losses on other receivables	25,168	25,133
Impairment losses on discounted notes receivable	8,495	4,283
Impairment losses on contract assets	6,684	372,434
(Reversal of)/Impairment losses on financial guarantee contracts	(19,476)	-
	1,726,849	355,736

(c) Liquidity risk

Liquidity risk is the risk of not having access to sufficient funds to meet the Group's obligations as they become due. The Group seeks to manage its liquidity risk by matching the duration of its investment assets with the duration of its debts and customer deposits to the extent possible.

Each subsidiary within the Group is responsible for its own cash flow forecast. Headquarters finance department continuously monitors the short-term and long-term capital requirements at the Group level on the basis of summarizing the cash flow forecasts of each subsidiary to ensure that sufficient cash reserves and marketable securities are available at any time. The agreement stipulates that major financial institutions should obtain a commitment to provide sufficient reserve funds to meet short-term and long-term funding needs.

3. FINANCIAL RISK MANAGEMENT (CONTINUED)

3.1 FINANCIAL RISK FACTORS (CONTINUED)

(c) Liquidity risk (continued)

	2019				
	Less than 1 year RMB'000	1 to 2 years RMB'000	2 to 5 years RMB'000	Over 5 years RMB'000	Total RMB'000
Current bank and other borrowings	17,094,480	-	-	-	17,094,480
Transaction financial liabilities and derivative financial liabilities	39,193	-	-	-	39,193
Notes payable	8,506,993	-	-	-	8,506,993
Trade payables	57,922,655	-	-	-	57,922,655
Customer deposits	7,234,186	-	-	-	7,234,186
Current portion of long-term bank and other borrowings	3,841,778	-	-	-	3,841,778
Long-term bank and other borrowings	456,423	2,651,153	5,214,990	4,900,426	13,222,992
Bonds	4,880,777	6,274,523	2,603,750	-	13,759,050
Long-term payables	1,688,887	255,607	1,236,313	224,458	3,405,265
Lease liabilities	266,803	193,328	334,514	298,860	1,093,505
Other financial liabilities	5,351,220	-	-	-	5,351,220
	107,283,395	9,374,611	9,389,567	5,423,744	131,471,317

	2018				
	Less than 1 year RMB'000	1 to 2 years RMB'000	2 to 5 years RMB'000	Over 5 years RMB'000	Total RMB'000
Current bank and other borrowings	8,737,559	-	-	-	8,737,559
Transaction financial liabilities and derivative financial liabilities	109,708	-	-	-	109,708
Notes payable	6,387,498	-	-	-	6,387,498
Trade payables	38,880,814	-	-	-	38,880,814
Customer deposits	4,447,272	-	-	-	4,447,272
Current portion of long-term bank and other borrowings	1,848,603	-	-	-	1,848,603
Long-term bank and other borrowings	-	4,276,418	3,960,971	3,217,875	11,455,264
Bonds	243,030	4,951,410	8,895,278	-	14,089,718
Long-term payables	1,424,099	336,976	467,407	52,085	2,280,567
Other financial liabilities	3,681,371	-	-	-	3,681,371
	65,759,954	9,564,804	13,323,656	3,269,960	91,918,374

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

FOR THE YEAR ENDED 31 DECEMBER 2019

3. FINANCIAL RISK MANAGEMENT (CONTINUED)

3.2 CAPITAL MANAGEMENT

The primary objectives of the Group's capital management are to safeguard the Group's ability to continue as a going concern and to maintain healthy capital ratios in order to support its business and maximise shareholders' value.

The Group manages its capital structure and makes adjustments to it in the light of changes in economic conditions and the risk characteristics of the underlying assets. To maintain or adjust the capital structure, the Group may adjust the dividend payment to shareholders, return capital to shareholders or issue new shares. No changes were made in the objectives, policies or processes for managing capital during the years ended 31 December 2019 and 31 December 2018.

The Group monitors capital using a gearing ratio, which is debt divided by total equity plus debt. Debt includes bank and other borrowings and bonds.

The gearing ratios as at the end of the reporting periods were as follows:

	2019 RMB'000	2018 RMB'000
Bank and other borrowings	31,670,985	19,939,952
Bonds	11,605,861	12,749,245
Lease liabilities	972,529	—
Customer deposits	7,208,955	4,431,761
Debt	51,458,330	37,120,958
Total equity	91,589,172	73,636,620
Total equity and net debt	143,047,502	110,757,578
Gearing ratio	35.97%	33.52%

3.3 FAIR VALUE ESTIMATION

The carrying amounts and fair values of the Group's financial instruments, other than those with carrying amounts that reasonably approximate to fair values, are as follows:

	Carrying amounts		Fair values	
	2019 RMB'000	2018 RMB'000	2019 RMB'000	2018 RMB'000
Financial liabilities				
Non-current portion of bank and other borrowings	11,268,418	9,588,836	11,233,768	9,460,972
Non-current portion of bonds	11,605,862	12,749,245	11,657,468	13,200,843
	22,874,280	22,338,081	22,891,236	22,661,815

3. FINANCIAL RISK MANAGEMENT (CONTINUED)

3.3 FAIR VALUE ESTIMATION (CONTINUED)

Management has assessed that the fair values of financial instruments included in current assets and liabilities approximate to their carrying amounts largely due to the short term maturities of these instruments.

The Group's corporate finance team is responsible for determining the policies and procedures for the fair value measurement of financial instruments. The corporate finance team reports directly to the chief financial officer and the audit committee. At each reporting date, the corporate finance team analyses the movements in the values of financial instruments and determines the major inputs applied in the valuation. The valuation is reviewed and approved by the chief financial officer. The valuation process and results are discussed with the audit committee regularly.

The fair values of the financial assets and liabilities are included at the amount at which the instrument could be exchanged in a current transaction between willing parties, other than in a forced or liquidation sale. The following methods and assumptions were used to estimate the fair values.

The fair values of non-current portion of loan and lease receivables, financial assets included in other non-current assets and liabilities, bank and other borrowings have been calculated by discounting the expected future cash flows using rates currently available for instruments with similar terms, credit risk and remaining maturities.

The fair values of listed equity investments and bonds are based on quoted market prices. The fair values of unlisted equity investments have been estimated using a discounted cash flow valuation model based on assumptions that are not supported by observable market prices or rates. The valuation requires the directors to make estimates about the expected future cash flows including expected future dividends and proceeds on subsequent disposal of the shares. The directors believe that the estimated fair values resulting from the valuation technique are reasonable, and that they were the most appropriate values at the end of the reporting period.

For the fair value of the unlisted equity investments, management has estimated the potential effect of using reasonably possible alternatives as inputs to the valuation model.

The Group enters into derivative financial instruments with various financial instruments, including forward currency contracts, are measured using valuation techniques similar to a forward pricing model, using present value calculations. The models incorporate various market observable inputs including the credit quality of counterparties, foreign exchange spot and forward rates. The carrying amounts of forward currency contracts are the same as their fair values.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

FOR THE YEAR ENDED 31 DECEMBER 2019

3. FINANCIAL RISK MANAGEMENT (CONTINUED)

3.3 FAIR VALUE ESTIMATION (CONTINUED)

(a) Fair value hierarchy

The following tables illustrate the fair value measurement hierarchy of the Group's financial instruments:

(i) assets measured at fair value:

	As at 31 December 2019 Fair value measurement using			
	Quoted prices in active markets (level 1) RMB'000	Significant observable inputs (level 2) RMB'000	Significant unobservable inputs (level 3) RMB'000	Total RMB'000
Investments at fair value through profit or loss:				
Investment funds	4,620,801	-	-	4,620,801
Equity investments	857,967	-	55,142	913,109
Debt investments	429,003	-	-	429,003
Investment products	-	660,490	-	660,490
Non-hedging derivative financial Instruments	-	341,349	-	341,349
Derivative financial instruments				
Forward foreign exchange contract	-	2,381	-	2,381
Other Current assets:				
Notes receivable measured at fair value and recorded in other comprehensive income	-	-	719,663	719,663
Interbank negotiable certificates of deposit	-	7,972,990	-	7,972,990
Trade receivables measured at FVOCI	-	-	4,721,291	4,721,291
Other non-current financial assets at FVPL	367,440	-	5,064,862	5,432,302
Other non-current debt investments	-	61,729	-	61,729
	6,275,211	9,038,939	10,560,958	25,875,108

3. FINANCIAL RISK MANAGEMENT (CONTINUED)

3.3 FAIR VALUE ESTIMATION (CONTINUED)

(a) Fair value hierarchy (continued)

(i) assets measured at fair value (continued):

	As at 31 December 2018 Fair value measurement using			
	Quoted prices in active markets (level 1) RMB'000	Significant observable inputs (level 2) RMB'000	Significant unobservable inputs (level 3) RMB'000	Total RMB'000
Investments at fair value through profit or loss:				
Investment funds	3,541,849	-	-	3,541,849
Equity investments	57,653	-	-	57,653
Debt investments	19,805	-	-	19,805
Investment products	-	466,255	-	466,255
Non-hedging derivative financial				
Instruments	-	333,888	-	333,888
Derivative financial instruments				
Forward foreign exchange contract	-	788	-	788
Other Current assets:				
Notes receivable measured at fair value and recorded in other comprehensive income	-	-	604,834	604,834
Interbank negotiable certificates of deposit	-	5,787,735	-	5,787,735
Trade receivables measured at FVOCI	-	-	2,724,919	2,724,919
Other non-current financial assets at FVPL	1,087,735	-	4,273,111	5,360,846
Other non-current debt investments	-	261,372	-	261,372
	4,707,042	6,850,038	7,602,864	19,159,944

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

FOR THE YEAR ENDED 31 DECEMBER 2019

3. FINANCIAL RISK MANAGEMENT (CONTINUED)

3.3 FAIR VALUE ESTIMATION (CONTINUED)

(a) Fair value hierarchy (continued)

(ii) Financial liabilities measured at fair values:

	As at 31 December 2019 Fair value measurement using			
	Quoted prices in active markets (level 1) RMB'000	Significant observable inputs (level 2) RMB'000	Significant unobservable inputs (level 3) RMB'000	Total RMB'000
Forward interest rate contract	-	6,096	-	6,096
Transaction financial liabilities	-	33,097	-	33,097
	-	39,193	-	39,193

	As at 31 December 2018 Fair value measurement using			
	Quoted prices in active markets (level 1) RMB'000	Significant observable inputs (level 2) RMB'000	Significant unobservable inputs (level 3) RMB'000	Total RMB'000
Forward interest rate contract	-	5,168	-	5,168
Transaction financial liabilities	-	104,540	-	104,540
	-	109,708	-	109,708

3. FINANCIAL RISK MANAGEMENT (CONTINUED)

3.3 FAIR VALUE ESTIMATION (CONTINUED)

(a) Fair value hierarchy (continued)

(iii) Liabilities for which fair values are disclosed:

	As at 31 December 2019 Fair value measurement using			
	Quoted prices in active markets (level 1) RMB'000	Significant observable inputs (level 2) RMB'000	Significant unobservable inputs (level 3) RMB'000	Total RMB'000
Non-current portion of interest-bearing bank and other borrowings	-	11,268,418	-	11,268,418
Non-current portion of bonds	-	11,605,862	-	11,605,862
	-	22,874,280	-	22,874,280

	As at 31 December 2018 Fair value measurement using			
	Quoted prices in active markets (level 1) RMB'000	Significant observable inputs (level 2) RMB'000	Significant unobservable inputs (level 3) RMB'000	Total RMB'000
Non-current portion of interest-bearing bank and other borrowings	-	9,588,836	-	9,588,836
Non-current portion of bonds	-	12,749,245	-	12,749,245
	-	22,338,081	-	22,338,081

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

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

FOR THE YEAR ENDED 31 DECEMBER 2019

4. CRITICAL ACCOUNTING ESTIMATES AND JUDGEMENTS

The preparation of financial statements requires the use of accounting estimates which, by definition, will seldom equal the actual results. Management also needs to exercise judgement in applying the group's accounting policies.

Estimates and judgements are continually evaluated. They are based on historical experience and other factors, including expectations of future events that may have a financial impact on the entity and that are believed to be reasonable under the circumstances.

4.1 CRITICAL ACCOUNTING ESTIMATES

(a) Revenue recognition on construction contracts

The Group uses the percentage of completion to recognise revenue of constrction contracts over a period of time when the outcome of the construction services could be estimated reliably. The performance of the contract is recognised in accordance with the method described in revenue recognition of Note 2.30, and is cumulatively calculated in each fiscal year in which each construction service is performed.

When determining the percentage of completion, significant estimates and judgements are made as to the performance costs incurred, certified value, estimated contract revenue and contract costs, total contract value and collectability. Management relies mainly on past experience to make judgments. Changes in estimates of contract revenue or contract costs, certified value or total contract value or changes in the estimated outcome of a contract could impact the amounts of revenue and expenses recognised in the consolidated statement of profit or loss in the period in which the change is made and in subsequent periods.

(b) Write-down of inventories to net realisable value

Write-down of inventories to net realisable value is made based on assessment of the sale ability and net realisable value of inventories. The identification of write-down of inventories requires management's judgement and estimates. Where the actual outcome of expectation in future is different from the original estimate, the differences will impact the carrying value of the inventories and write-down loss/reversal of write-down in the period in which the estimate has been changed.

(c) Provisions

The Group makes provisions for product warranty, onerous contracts, staff early retirement. Management estimates the related provisions based on contract terms, available knowledge and past experience. The Group recognises provisions to the extent that it has a present legal or constructive obligation as a result of a past event; it is more likely than not that an outflow of resources will be required to settle the obligation; and that the amount can be reliably estimated. The carrying amount of the provisions at 31 December 2019 was RMB4,693,630,000 (2018: RMB4,413,326,000). More details are described in Note 42 to the consolidated financial statements.

As for onerous contracts, macroeconomic factors, such as commodity price, and industry competition can have a significant impact on the profitability of the contracts. The Group assesses at balance sheet date on whether unavoidable costs of meeting contractual obligations have exceeded the economic benefits expected to be received, and makes provision for these onerous contracts based on the estimated least net cost of exiting from the contracts.

4. CRITICAL ACCOUNTING ESTIMATES AND JUDGEMENTS (CONTINUED)

4.1 CRITICAL ACCOUNTING ESTIMATES (CONTINUED)

(d) Income tax

The Group is subject to income taxes in numerous jurisdictions. Significant judgement is required in determining the worldwide provision for income taxes. There are many transactions and calculations for which the ultimate tax determination is uncertain. The Group recognises liabilities for anticipated tax audit issues based on estimates of whether additional taxes will be due. Where the final tax outcome of these matters is different from the amounts that were initially recorded, such differences will impact the current and deferred income tax assets and liabilities in the period in which such determination is made.

(e) Deferred tax assets

Deferred tax assets are recognised for all deductible temporary differences, carryforward of unused tax credits and unused tax losses to the extent that it is probable that taxable profits will be available against which the deferred tax asset can be utilised. Significant management judgement is required to determine the amount of deferred tax assets that can be recognised, based upon the likely timing and level of future taxable profits together with future tax planning strategies. The carrying value of deferred tax assets at 31 December 2019 was RMB5,771,190,000 (2018: RMB4,801,223,000). The amount of unrecognised tax losses and deductible temporary differences at 31 December 2019 was RMB7,619,342,000 (2018: RMB7,004,276,000). Further details are described in Note 26 to the consolidated financial statements.

Certain PRC subsidiaries were subject to a corporate income tax rate of 15% as they have been assessed as 'High-New Technology Enterprises' under the Corporate Income Tax Law as at 31 December 2019. Those subsidiaries provided income tax and recognised the deferred tax assets and liabilities at tax rate of 15%.

(f) Useful lives of property, plant and equipment

The property, plant and equipment are depreciated on the straight-line basis by taking into account the residual value. The Group reviews the estimated useful lives periodically to determine the related depreciation charges for its items of property, plant and equipment. The estimation is based on the historical experience of the actual useful lives of items of property, plant and equipment of similar nature and functions with consideration of expected technology renovation. Depreciation charges may be adjusted if there are significant changes in prior assumptions and estimation.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

FOR THE YEAR ENDED 31 DECEMBER 2019

4. CRITICAL ACCOUNTING ESTIMATES AND JUDGEMENTS (CONTINUED)

4.1 CRITICAL ACCOUNTING ESTIMATES (CONTINUED)

(g) Impairment of non-financial assets (other than goodwill)

The Group assesses whether there are any indicators of impairment for all non-financial assets at the end of each reporting period. Non-financial assets are tested for impairment when there are indicators that the carrying amounts may not be recoverable. An impairment exists when the carrying value of an asset or a cash-generating unit exceeds its recoverable amount, which is the higher of its fair value less costs of disposal and its value in use. The calculation of the fair value less costs of disposal is based on available data from binding sales transactions in an arm's length transaction of similar assets or observable market prices less incremental costs for disposing of the asset. When value in use calculations are undertaken, management must estimate the expected future cash flows from the asset or cash-generating unit and choose a suitable discount rate in order to calculate the present value of those cash flows.

(h) Estimated impairment of goodwill

The Group determines whether goodwill is impaired at least on an annual basis. This requires an estimation of the recoverable amount of the cash-generating units to which the goodwill is allocated.

Estimating the recoverable amount requires the Group to make an estimate of the expected future cash flows from the cash-generating unit and also to choose suitable gross profit margin rate, sales growth rate during estimation period, long-term sales growth rate and discount rate etc. in order to calculate the present value of those cash flows. If the Group revised the assumptions and the revised gross profit margin rate, sales growth rate during estimation period and long-term sales growth rate were lower than original estimation, the Group would have to provide for more impairment on goodwill of TEC4AERO GmbH. If the Group revised the pre-tax discount rate within the reasonable range and the revised discount rate was higher than original estimation, the Group also would have to provide more impairment. If the actual gross profit margin rate, sales growth rate during estimation period, long-term sales growth rate would be higher than estimation or the discount rate would be lower, the impairment of goodwill cannot be reversed. For the goodwills impaired, the Group also estimates the fair value less cost of disposals ("FVLCOD"), for example, using adjusted price to book ratio. The recoverable amount is higher of FVLCOD and value in use calculation using discounted expected future cash flows.

The carrying amount of goodwill at 31 December 2019 was RMB3,641,102,000 (2018: RMB3,398,942,000). More details are described in Note 18 to the consolidated financial statements.

(i) Fair value of derivatives and other financial instruments

The fair value of financial instruments that are not traded in an active market is determined by using valuation techniques. The Group uses its judgement to select a variety of methods and make assumptions that are mainly based on market conditions existing at the end of each reporting period.

4. CRITICAL ACCOUNTING ESTIMATES AND JUDGEMENTS (CONTINUED)

4.2 JUDGEMENTS

In the process of applying the Group's accounting policies, management has made the following judgements, apart from those involving estimations, which have the most significant effect on the amounts recognised in the financial statements:

(a) Consolidation of entities in which the Group holds less than 50% ownership

The Group considers that it controls Shanghai Mechanical & Electrical Industry Co., Ltd. ("SMEI") even though it owns less than 50% of the voting rights. This is because the Group is the single largest shareholder of SMEI with a 48.81% equity interest. The remaining 51.19% equity shares in SMEI are widely held by many other shareholders, none of whose equity shares is significant individually (since the date of the acquisition of the equity interest in SMEI by the Group). Since the date of acquisition, there has been no history of the other shareholders collaborating to exercise their votes collectively or to outvote the Group.

The Group considers it controls Shanghai Electric Transmission and Distribution Group Co., Ltd. even though it owns 50% of the voting rights. This is because the Group has the contractual right to acquire an additional 1% equity from the counterparty at the Group's discretion. Meanwhile, the Group controls the daily operation of Shanghai Electric Transmission and Distribution Group Co., Ltd. and therefore it has been included in the consolidation scope of the Group's consolidated financial statements.

The Group is the single largest shareholder of Suzhou Thvow Technology Co., Ltd. ("Suzhou Thvow") with a 15% equity interest. Meanwhile, Yuzhong Chen, the second largest shareholder of Suzhou Thvow with a 14.87% equity interest, entrusts his voting rights to the Group and pledges the shareholding to the Group. The Group also has the priority to purchase the equity interest held by Yuzhong Chen. Therefore, the Group holds 29.87% of the voting rights of Suzhou Thvow. The remaining equity shares of Suzhou Thvow are widely held by other shareholders, none of whose equity shares is individually significant. Meanwhile, Suzhou Thvow's advantages in the new energy market and high-quality business qualifications are conducive to improve the business capacity of the integrated services segment of the Group. The management believes that the Group has gained the control over Suzhou Thvow, so it has been included in the consolidation scope of the Group's consolidated financial statements.

(b) Measurement of expected credit losses

The Group calculates expected credit losses through default risk exposure and expected credit loss rate, and determines the expected credit loss rate based on default probability and default loss rate. In determining the expected credit loss rate, the Group uses data such as internal historical credit loss experience and adjusts historical data based on current conditions and forward-looking information. When considering forward-looking information, the indicators used by the Group include the risk of GDP, PPI and M2. The Group regularly monitors and reviews assumptions related to the calculation of expected credit losses.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

FOR THE YEAR ENDED 31 DECEMBER 2019

4. Critical accounting estimates and judgements (continued)

4.2 Judgements (continued)

(c) Classification of financial assets

The significant judgments the Company has in determining the classification of financial assets include analysis of business models and characteristics of contractual cash flows.

The Company determines the business model for managing financial assets at the level of financial asset portfolio. The factors considered include evaluation and reporting of financial asset performance to key management personnel, risks affecting the performance of financial assets and their management methods, and the manner in which relevant management personnel are paid, etc.

When assessing whether the contractual cash flow of financial assets is consistent with the basic lending arrangement, the Company has the following main judgments: Whether the principal may be subject to change in the duration or amount of money during the duration due to prepayments; This includes currency time value, credit risk, other basic borrowing risks, and considerations for costs and profits.

(d) Judgment of significant increase in credit risk

The main criteria for the Company to judge the significant increase in credit risk is that the number of overdue days exceeds 30 days, or one or more of the following indicators change significantly: the operating environment of the debtor, internal and external credit ratings, significant changes in actual or expected operating results, the value of guarantees and the significant decrease in the credit rating of the guarantor.

The Company's main criteria for determining the credit impairment have been overdue for more than 90 days (i.e., defaults have occurred), or one or more of the following conditions: the debtor has significant financial difficulties, other debt restructuring or likely bankruptcy.

5. SEGMENT INFORMATION

The Group organises and manages its operating business in accordance with the nature of business and provision of goods and services. Each business segment of the Group is one operating group, providing goods and services with risks and rewards different from those of the other business segments.

In order to evaluate the nature and financial impact of the Group's business activities and the economic environment, the Group changed the composition of its business segments in the current year, and the corresponding comparative figures have been restated.

The details of operating segments are as follows:

(a) the energy equipment segment: coal-fired power generation and corollary equipment, gas-fired power generation equipment, wind power equipment, nuclear power equipment, energy storage equipment, high-end vessels for chemical industry as well as power grid and industrial intelligent power supply system solutions;

(b) the industrial equipment segment: elevators, large and medium-sized electric motors, intelligent manufacturing equipment, industrial basic parts, environmental protection equipment and construction industrialization equipment;

(c) the integrated services segment: energy, environmental protection and automation engineering and services, covering traditional and new energy, comprehensive use of solid wastes, sewage treatment, flue gas treatment, rail transit and etc.; industrial internet services; financial services, covering financing leases and insurance brokerage; international trade services; high-end property services and etc.

Management monitors the results of the Group's operating segments separately for the purpose of making decisions about resources allocation and performance assessment. Segment performance is evaluated based on reportable segment profit, which is a measure of adjusted profit before tax. The adjusted profit before tax is measured consistently with the Group's profit before tax except that interest income, finance costs, dividend income, earnings from fair value changes in financial instruments and headquarters expenses.

Segment assets do not include trading financial assets, derivatives, dividends receivable, interest receivable, long-term equity investment, debt investment, other debt investment, other equity instrument investment, other non current financial assets, goodwill, deferred income tax assets and other undistributed headquarters assets, which are under the unified management of the Group.

Segment liabilities do not include trading financial liabilities, derivatives, dividends payable, interest payable, borrowings, income tax payable, deferred income tax liabilities and other undistributed headquarters liabilities, which are under the unified management of the Group.

The transfer pricing between segments shall be determined by reference to the price adopted by the exchange to the third party.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

FOR THE YEAR ENDED 31 DECEMBER 2019

5. SEGMENT INFORMATION (CONTINUED)

Year ended 31 December 2019	Energy equipment RMB'000	Industrial equipment RMB'000	Integrated services RMB'000	Others RMB'000	Corporate and other unallocated amounts RMB'000	Inter segmented eliminations RMB'000	Total RMB'000
Segment revenue:							
Sales to external customers	41,987,786	45,108,260	40,315,903	83,531	13,484	-	127,508,964
Intersegment sales	3,955,827	1,300,994	3,999,731	326,984	91,844	(9,675,380)	-
Total revenue	45,943,613	46,409,254	44,315,634	410,515	105,328	(9,675,380)	127,508,964
Cost of sales	39,661,961	38,370,137	36,902,341	312,482	41,875	(9,770,340)	105,518,456
Net impairment losses on financial and contract assets	200,850	195,299	1,493,867	(1,295)	-	(161,872)	1,726,849
Operating profit/(loss)	844,643	3,178,396	3,852,706	(245,889)	(92,433)	278,919	7,816,342
Finance costs – net							(1,312,637)
Share of profits and losses of:							
Joint ventures							(83,082)
Associates							842,411
Profit before tax							7,263,034
Income tax expense							(1,279,161)
Profit for the year							5,983,873
Assets and liabilities							
Total assets	88,552,096	60,645,276	149,395,732	1,330,437	62,457,726	(81,857,678)	280,523,589
Total liabilities	58,966,161	32,093,872	110,187,919	502,651	56,213,265	(69,029,451)	188,934,417
Other segment information:							
Capital expenditure	2,579,760	1,789,693	4,377,865	46,247	23,172	-	8,816,737
Depreciation and amortization	1,068,859	800,468	590,686	48,147	274,193	-	2,782,353
Other non-cash expenses	1,955,806	179,417	219,589	4,424	11,438	-	2,370,674

5. SEGMENT INFORMATION (CONTINUED)

Year ended 31 December 2018	Energy equipment RMB'000	Industrial equipment RMB'000	Integrated services RMB'000	Others RMB'000	Corporate and other unallocated amounts RMB'000	Inter segmented eliminations RMB'000	Total RMB'000
Segment revenue:							
Sales to external customers	37,891,858	40,719,316	22,457,536	45,513	43,302	-	101,157,525
Intersegment sales	3,105,887	849,606	1,691,518	111,384	92,888	(5,851,283)	-
Total revenue	40,997,745	41,568,922	24,149,054	156,897	136,190	(5,851,283)	101,157,525
Cost of sales	34,834,853	33,821,384	19,718,600	103,261	47,787	(5,818,131)	82,707,754
Net impairment losses on financial andcontract assets	(342,280)	150,058	413,806	-	47,770	86,382	355,736
Operating profit/(loss)	1,548,249	3,049,853	2,644,771	(202,902)	(669,701)	(88,737)	6,281,533
Finance costs – net							(939,563)
Share of profits and losses of:							
Joint ventures							(167,798)
Associates							833,944
Profit before tax							6,008,116
Income tax expense							(676,865)
Profit for the year							5,331,251
Assets and liabilities							
Total assets	79,766,558	53,062,673	98,770,676	344,344	50,660,426	(64,082,812)	218,521,865
Total liabilities	52,920,172	30,266,156	79,413,717	125,075	34,331,314	(52,171,189)	144,885,245
Other segment information:							
Capital expenditure	963,743	698,062	1,650,739	24,118	37,418	-	3,374,080
Depreciation and amortization	829,530	762,338	285,264	29,034	277,616	-	2,183,782
Other non-cash expenses	1,774,674	141,065	269,442	14,069	-	-	2,199,250

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

FOR THE YEAR ENDED 31 DECEMBER 2019

5. SEGMENT INFORMATION (CONTINUED)

Geographical information

(a) Revenue from external customers

	2019 RMB'000	2018 RMB'000
Mainland China	110,280,866	89,912,344
Other countries/jurisdictions	17,228,098	11,245,181
	127,508,964	101,157,525

The above revenue information is based on the locations of the customers.

(b) Non-current assets

	2019 RMB'000	2018 RMB'000
Mainland China	51,818,826	44,245,370
Other countries/jurisdictions	10,996,895	6,264,023
	62,815,721	50,509,393

The above non-current asset information is based on the locations of the assets and excludes financial instruments and deferred tax assets.

In 2019 and 2018, no single customer of the Group has generated more than 10% of the Group's revenue.

6. REVENUE

Revenue includes turnover and other revenue that arise from the ordinary course of business of the Group. The Group's turnover, which arises from the principal activities of the Group, represents the net invoiced value of goods sold, after allowances for returns and trade discounts, an appropriate proportion of contract revenue of construction services and the value of services rendered.

An analysis of revenue is as follows:

	2019 RMB'000	2018 RMB'000
Revenue		
Turnover		
Sale of goods	86,405,618	78,954,865
Construction services	29,717,699	11,791,236
Rendering of services	8,003,760	6,913,306
	124,127,077	97,659,407
Other revenue		
Rental income under operating leases	462,309	707,750
Sales of raw materials	964,848	701,012
Finance lease income	726,338	590,506
Attributable to Finance Company:		
Interest income on loan receivables and discounted notes receivable	335,719	287,075
Interest income from banks and other financial institutions	523,323	710,247
Others	369,350	501,528
	3,381,887	3,498,118
	127,508,964	101,157,525

(i) The Group's transaction price allocated to the unsatisfied performance obligations as of 31 December 2019 is RMB175,008,687,000, of which management expects that RMB80,164,981,000 will be recognised as revenue during the next reporting period and RMB94,843,706,000 will be recognised in the 2021 and beyond financial years.

(ii) The Group was not rewarded for early completion of rendering services in 2019.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

FOR THE YEAR ENDED 31 DECEMBER 2019

6. REVENUE (CONTINUED)

(a) Disaggregation of revenue from contracts with customers

The Group derives revenue from the transfer of goods and services over time and at a point in time in the following major revenue streams and geographical regions:

	2019								
	Sales of goods			Construction services			Rendering of services	Others	Total
	Mainland China	Other countries and regions within Asia	Other countries and regions outside Asia	Mainland China	Other countries and regions within Asia	Other countries and regions outside Asia			Total
Revenue	77,778,019	1,727,533	6,900,066	21,152,686	6,302,615	2,262,398	8,003,760	-	124,127,077
Timing of revenue recognition									
At a point in time	77,778,019	1,727,533	6,900,066	-	-	-	419,343	-	86,824,961
Over time	-	-	-	21,152,686	6,302,615	2,262,398	7,584,417	-	37,302,116
Other revenue	964,114	662	72	-	-	-	157,125	2,259,914	3,381,887
	78,742,133	1,728,195	6,900,138	21,152,686	6,302,615	2,262,398	8,160,885	2,259,914	127,508,964

	2018								
	Sales of goods			Construction services			Rendering of services	Others	Total
	Mainland China	Other countries and regions within Asia	Other countries and regions outside Asia	Mainland China	Other countries and regions within Asia	Other countries and regions outside Asia			
Revenue	70,524,281	1,811,667	6,618,917	9,185,716	1,683,731	921,789	6,913,306	-	97,659,407
Timing of revenue recognition									
At a point in time	70,524,281	1,811,667	6,618,917	-	-	-	1,128,195	-	80,083,060
Over time	-	-	-	9,185,716	1,683,731	921,789	5,785,111	-	17,576,347
Other revenue	658,238	5,165	37,609	-	-	-	128,830	2,668,276	3,498,118
	71,182,519	1,816,832	6,656,526	9,185,716	1,683,731	921,789	7,042,136	2,668,276	101,157,525

6. REVENUE (CONTINUED)

(b) Assets and liabilities related to contracts with customers

The Group has recognised the following assets and liabilities related to contracts with customers:

	Note	2019 RMB'000	2018 RMB'000
Contract assets relating to sale of goods and rendering of services	(i)	17,099,780	13,664,092
Contract assets relating to construction services	(ii)	17,349,244	7,759,679
Less: Provision for impairment		(1,047,052)	(1,060,009)
Non-current contract assets		(8,417,270)	(8,133,980)
Current contract assets		24,984,702	12,229,782
Contract liabilities:	(iii)		
Contract liabilities relating to sale of goods and rendering of services		35,632,135	34,581,064
Contract liabilities relating to construction services	(iv)	2,952,765	1,985,007
Total current contract liabilities		38,584,900	36,566,071

(i) Contract assets relating to sale of goods and rendering of services are mainly related to the undue warranty receivables.

(ii) Contract assets relating to construction services

	2019 RMB'000	2018 RMB'000
Contract costs incurred plus recognised profits less losses	74,211,231	53,494,258
Less: Progress billings	(56,861,987)	(45,734,579)
Provision for impairment	(347,202)	(417,315)
Gross amount due from contract customers	17,002,042	7,342,364

(iii) Revenue recognised in relation to contract liabilities

Revenue recognised that was included in the contract liability balance at the beginning of the period:

	2019 RMB'000	2018 RMB'000
Sale of goods	26,536,796	25,141,760
Construction services	1,542,491	1,671,649
Rendering of services	2,500,853	2,573,159
Other revenue	2,749	26,620
	30,582,889	29,413,188

Management expects that majority of the transaction price allocated to the unsatisfied construction services as of 31 December 2019 will be recognised as revenue during the next reporting period. The amount disclosed above does not include variable consideration which is constrained.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

FOR THE YEAR ENDED 31 DECEMBER 2019

6. REVENUE (CONTINUED)

(b) Assets and liabilities related to contracts with customers (continued)

(iv) The amounts due from related parties included in contract assets and contract liabilities are analysed as follows:

	2019 RMB'000	2018 RMB'000
Contract assets:		
Associates	77	3,617
Contract liabilities :		
The ultimate holding company	185	185
SEC group companies	37,927	28,226
Associates	-	1,621
Other related companies	26,267	414,805
	64,379	444,837

7. OTHER INCOME AND OTHER GAINS, NET

	2019 RMB'000	2018 RMB'000
Other income		
Subsidy income	1,478,539	1,085,081
Income on debt investments	184,572	273,396
Dividend income from equity investments and investment funds	183,645	16,546
	1,846,756	1,375,023
Other gains, net		
Gains on disposal of subsidiaries	122,647	104,663
Gains on disposal of property, plant and equipment and other non-current assets (a)	1,851,759	46,986
Gains on disposal of associates	9,325	7,668
Losses on disposal of goodwill	-	(12,483)
Investments at fair value through profit or loss:		
Unrealised fair value gains - net	28,640	92,122
Realised fair value gains/(losses)	55,975	(72,955)
Derivative financial instruments - transactions not qualifying as hedges:		
Unrealised fair value (losses)/gains	(4,022)	141
Realised losses on derecognition of financial assets at amortized cost	(175,428)	-
Realised losses on derecognition of account receivables financing	(694,199)	-
Exchange gains - net	68,469	105,347
Others	147,826	118,962
	1,410,992	390,451
Total other income and other gains, net	3,257,748	1,765,474

(a) In 2019, gains on disposal of property, plant and equipment and other non-current assets were mainly derived from the Company's earnings from the land use rights resumptions.

The Company entered into State-owned Land Use Rights Resumption Contracts with relevant government agencies or subordinate service institution of land reserve, for four lands and properties located in Shanghai. The resumption prices of the lands and properties were RMB2,585 million in aggregate and gains from disposal of prepaid land lease payments and property, plant and equipment were RMB1,694 million and RMB122 million respectively.

As of 31 December 2019, the Company has completed the handover of the above four lands and properties and majority of the considerations have been collected before 31 December 2019.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

FOR THE YEAR ENDED 31 DECEMBER 2019

8. EXPENSE BY NATURE

	2019 RMB'000	2018 RMB'000
Raw materials and consumables used	54,316,634	45,846,204
Cost of purchased product components and services	44,738,063	30,253,375
Employee benefit expenses (Note 9)	10,076,991	8,699,955
Depreciation and amortisation	2,187,204	2,183,782
Net impairment losses on financial and contract assets (including provisions for financial guarantee contracts) (Note 3.1)	1,726,849	355,736
Transportation cost and packaging fees	1,367,471	661,039
Asset impairment charges	1,176,456	1,459,456
Office expenses	840,128	776,938
Utility expenses	683,771	772,934
Depreciation charge of right-of-use assets	595,149	—
Commissions and brokerage fees	584,433	749,400
Taxes levies and surcharges	520,673	519,993
Technique commission expenses	411,665	184,960
Operating lease expenses	296,108	695,283
Cost of properties	255,162	280,246
Remuneration of auditors – audit services	39,607	35,226
– non-audit services	1,614	574
Advisory service fee	13,477	11,417
Other expenses	3,118,915	3,154,948
Total cost of sales, distribution costs, administrative expenses and net impairment losses on financial and contract assets	122,950,370	96,641,466

9. EMPLOYEE BENEFIT EXPENSE

	2019 RMB'000	2018 RMB'000
Staff costs (including directors' and supervisors' remuneration)		
Wages and salaries	7,836,418	6,676,617
Defined contribution pension scheme (i)	1,041,134	961,583
Supplementary pension	131,748	121,253
Early retirement benefits and staff severance costs (ii)	78,445	83,734
Medical benefits costs (iii)	438,093	422,121
Housing fund	483,013	434,616
Restricted share incentive scheme (Note 56)	66,656	-
Cash housing subsidy costs	1,484	31
	10,076,991	8,699,955

(i) Defined contribution pension schemes

All of the Group's full-time employees in Mainland China are covered by a government-regulated pension scheme and are entitled to an annual pension determined by their basic salaries upon their retirement. The PRC government is responsible for the pension liabilities to these retired employees. The Group is required to make annual contributions to the government regulated pension scheme mainly at 16.0% (2018: 21.0%) of the employees' basic salaries. This defined contribution pension scheme continued to be available to the Group's employees for the year. The related pension costs are expensed as incurred.

(ii) Early retirement benefits and staff severance

The Group implements an early retirement plan for certain employees in addition to the benefits under the government regulated defined contribution pension scheme and the Supplementary Pension Benefits described above. The benefits of the early retirement plan are calculated based on factors including the remaining number of years from the date of early retirement to the normal retirement date and the salary amount on the date of early retirement of the employee.

The Group recognises staff severance costs upon terminating the employment of employees before the expiry date of employment contracts or making an offer in order to encourage voluntary redundancy.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

FOR THE YEAR ENDED 31 DECEMBER 2019

9. EMPLOYEE BENEFIT EXPENSE (CONTINUED)

(ii) Early retirement benefits and staff severance (continued)

Based on the directors' estimation, the Group's obligations to the early retirement benefits and staff severance until the qualified employees are eligible for the government-regulated pension scheme amounted to approximately RMB131,515,000 as at 31 December 2019 (2018: RMB146,142,000). The costs of the early retirement benefits were recognised in the period when employees were requested for early retirement. The provision for early retirement benefits was not assessed by any independent actuary. Where the effect of discounting is material, the amount recognised for the early retirement benefits is the present value of reporting period date of the future cash flows expected to be required to settle the obligation. The staff severance costs are recognised when the Group has a formal plan for the termination or an offer to voluntary redundancy and is without realistic possibility of withdrawal.

(iii) Medical benefits

The Group contributes on a monthly basis to defined contribution medical benefit plans organised by the PRC government. The PRC government undertakes to assume the medical benefit obligations for all existing and retired employees under these plans. Contributions to these plans by the Group are expensed as incurred. The Group has no further obligations for medical benefits and supplemental medical benefits for their qualified employees under these plans.

(iv) Five highest paid employees

No director (2018: Nil) was included in the five highest paid employees during the year. Details of the remuneration for the year of the five (2018: five) highest paid employees who are neither directors nor supervisors of the Company are as follows:

	2019 RMB'000	2018 RMB'000
Salaries, bonuses and allowances received from the Group	15,165	15,167
Pension scheme from the ultimate holding company	370	202
Other social benefit schemes contributed by the Group	7,389	7,318
	22,924	22,687

The number of non-director/non-supervisor, highest paid employees whose remuneration fell within the following bands are as follows:

	Number of employees	
	2019	2018
HK$2,000,001 - HK$2,500,000	1	1
HK$2,500,001 - HK$3,000,000	1	1
HK$3,500,001 - HK$4,000,000	1	1
HK$4,000,001 - HK$4,500,000	1	-
HK$6,000,001 - HK$6,500,000	-	1
HK$9,500,001 - HK$10,000,000	1	-
HK$11,000,001 - HK$11,500,000	-	1
	5	5

10. FINANCE COSTS - NET

	2019 RMB'000	2018 RMB'000
Interest income:	392,022	213,893
Interest expense:		
- Bank and other borrowings	(1,330,304)	(821,298)
- Bonds	(408,708)	(350,035)
- Interest and finance charges paid/payable for lease liabilities and financial liabilities not at fair value through profit or loss	(48,897)	—
- Amount capitalised	83,250	17,877
	(1,312,637)	(939,563)

11. INCOME TAX EXPENSE

With the PRC Corporate Income Tax Law (the "Corporate Income Tax Law") effective on 1 January 2008, the Company and all of its subsidiaries that operate in Mainland China were subject to the statutory corporate income tax rate of 25% for the year ended 31 December 2019 (2018: 25%) under the income tax rules and regulations of the PRC, except that:

Certain PRC subsidiaries were subject to a corporate income tax rate of 15% as they have been assessed as "High-New Technology Enterprises" under the Corporate Income Tax Law as at 31 December 2019. Those subsidiaries provided income tax and recognised the deferred tax assets and liabilities at tax rate of 15%.

Taxes on profits assessable elsewhere have been calculated at the rates of tax prevailing in the countries/jurisdictions in which the Group operates, based on existing legislation, interpretations and practices in respect thereof.

	2019 RMB'000	2018 RMB'000
Current tax		
Charge for the year	2,058,547	1,349,488
Overprovision in prior years	(114,475)	(97,507)
Deferred tax	(664,911)	(575,116)
Total tax charge for the year	1,279,161	676,865

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

FOR THE YEAR ENDED 31 DECEMBER 2019

11. INCOME TAX EXPENSE (CONTINUED)

A reconciliation of the tax expense applicable to profit before tax at the statutory rates for the countries/jurisdictions in which the Company and its subsidiaries are domiciled to the tax expense at the effective tax rates is as follows:

	2019 RMB'000	% 	2018 RMB'000	%
Profit before tax	7,263,034		6,008,116	
Tax at the statutory tax rate	1,815,759	25.0	1,502,029	25.0
Lower tax rates for specific districts or concessions	(282,186)	(3.9)	(335,027)	(5.6)
Overprovision in prior years	(114,475)	(1.6)	(97,507)	(1.6)
Profits and losses attributable to joint ventures and associates	(189,832)	(2.6)	(168,823)	(2.8)
Income not subject to tax	(81,740)	(1.1)	(55,427)	(0.9)
Expenses not deductible for tax	120,232	1.7	52,213	0.9
Tax incentives on eligible expenditures	(184,330)	(2.5)	(108,032)	(1.8)
Utilization of previously unrecognised tax losses and deductible temporary differences	(70,854)	(1.0)	(167,655)	(2.8)
Tax losses and deductible temporary differences for which no deferred tax assets was recognised	266,587	3.7	58,233	1.0
Reversal of deferred tax assets recognised in prior year	-	-	506	-
Others	-	-	(3,645)	(0.1)
	1,279,161	17.6	676,865	11.3

The Group expects that in the foreseeable future, the amount of deferred income tax related to its due dividends or disposal of long-term equity investments in overseas joint ventures, associates and subsidiaries is not material.

12. EARNINGS PER SHARE ATTRIBUTABLE TO OWNERS OF THE COMPANY

(a) Basic earnings per share

Basic earnings per share is calculated by dividing the profit attributable to owners of the Company by the weighted average number of ordinary shares of 14,908,820,503 (2018: 14,725,182,167) in issue during the financial year.

The calculation of basic earnings per share is based on:

	2019	2018
Earnings		
Profit attributable to owners of the Company used in the basic earnings per share calculation(i)	3,719,804	2,980,460
Number of shares		
Weighted average number of ordinary shares in issue during the year used in the basic earnings per share calculation(i)	14,908,820,503	14,725,182,167

(i) As described in Note 56, the Company implementsed an equity-based restricted share incentive scheme. When calculating the basic earnings per share, the profit attributable to owners of the Company used in the basic earnings per share calculation shall be the profit attributable to owners of the Company less the expected unlocking stock's revocable cash dividend distributed in the current period; The weighted average number of ordinary shares in issue during the year used in the basic earnings per share calculation excludes the number of restricted shares.

(b) Diluted earnings per share

Diluted earnings per share adjusts the figures used in the determination of basic earnings per share to take into account:

- the after income tax effect of interest and other financing costs associated with convertible bond, and
- the weighted average number of additional ordinary shares that would have been outstanding assuming the conversion of convertible bonds using the conversion price at year end, and
- the weighted average number of ordinary shares in issue during the year used in the basic earnings per share calculation excludes the number of restricted shares, and
- Although the share-based payment schemes implemented by the Company and its subsidiary Shanghai Prime Machinery Co., Ltd. have potential dilution effect, the dilution effect is minimal.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

FOR THE YEAR ENDED 31 DECEMBER 2019

12. EARNINGS PER SHARE ATTRIBUTABLE TO OWNERS OF THE COMPANY (CONTINUED)

(b) Diluted earnings per share (continued)

	2019 RMB'000	2018 RMB'000
Profit from continuing operations attributable to the ordinary equity holders of the company		
Used in calculating basic earnings per share	3,719,804	2,980,460
Add: interest savings on convertible bonds	181,274	207,233
Used in calculating diluted earnings per share	3,901,078	3,187,693
Profit attributable to the ordinary equity holders of the company used in calculating diluted earnings per share	3,901,078	3,187,693

	2019	2018
Weighted average number of ordinary shares used as the denominator in calculating basic earnings per share	14,908,820,503	14,725,182,167
Adjustments for calculation of diluted earnings per share:		
Convertible bonds	870,987,330	1,155,358,706
Weighted average number of ordinary shares and potential ordinary shares used as the denominator in calculating diluted earnings per share	15,779,807,833	15,880,540,873

13. DIVIDENDS

	2019 RMB'000	2018 RMB'000
Proposed final dividends for the year ended 31 December 2019 of RMB0 cents per ordinary share (2018: RMB6.146 cents)	-	905,010

On 15 April 2020, the board of directors of the Company resolved to recommend to the shareholders of the Company that no dividend be distributed for the year ended 31 December 2019.

Pursuant to the Corporate Income Tax Law and relevant regulations, a Chinese resident enterprise shall withhold income tax at 10% when dividends are distributed to overseas non-resident enterprise H-share shareholders for year 2008 and the years thereafter.

The Company did not declare any dividend other than the final dividend during the year of 2019 and 2018.

14. PROPERTY, PLANT AND EQUIPMENT

	Land and buildings RMB'000	Plant and machinery RMB'000	Motor vehicles RMB'000	Office equipment RMB'000	Construction in progress RMB'000	Total RMB'000
Cost:						
At 1 January 2019	11,031,130	16,800,155	506,201	1,595,894	1,846,805	31,780,185
Additions	114,813	614,386	34,278	129,665	6,192,924	7,086,066
Additions due to acquisition of subsidiaries	1,745,109	440,180	14,875	14,340	1,193,346	3,407,850
Disposals	(198,421)	(555,423)	(51,191)	(109,822)	(20,036)	(934,893)
Deduction due to disposal of subsidiaries	(137,024)	(574,028)	(3,379)	(1,770)	-	(716,201)
Transfers from construction in progress	783,230	833,984	10,515	146,433	(1,774,162)	-
Transferred to other intangible assets (Note 19)	-	-	-	-	(53,488)	(53,488)
Transfer to right-of-use assets (Note 15)	-	-	-	-	(30,347)	(30,347)
Transfer to investment assets (Note 16)	(211,093)	-	-	-	-	(211,093)
Translation reserve	18,961	2,501	929	897	91	23,379
At 31 December 2019	13,146,705	17,561,755	512,228	1,775,637	7,355,133	40,351,458
Accumulated depreciation and impairment:						
At 1 January 2019	3,920,135	10,208,314	381,245	1,090,502	915	15,601,111
Depreciation for the year (Note 8)	438,056	1,002,975	32,756	200,479	-	1,674,266
Impairment for the year	-	27,987	-	-	30,444	58,431
Transfer to investment properties (Note 16)	(33,973)	-	-	-	-	(33,973)
Deduction of depreciation due to the disposals	(110,534)	(288,160)	(44,897)	(89,077)	-	(532,668)
Deduction in depreciation due to disposal of subsidiaries	(36,852)	(326,079)	(2,923)	(1,612)	-	(367,466)
Deduction in impairment due to disposal of subsidiaries	-	(88,984)	(37)	-	-	(89,021)
Translation reserve	135	152	349	731	74	1,441
At 31 December 2019	4,176,967	10,536,205	366,493	1,201,023	31,433	16,312,121
Net carrying amount:						
At 31 December 2019	8,969,738	7,025,550	145,735	574,614	7,323,700	24,039,337

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

FOR THE YEAR ENDED 31 DECEMBER 2019

14. PROPERTY, PLANT AND EQUIPMENT (CONTINUED)

	Land and buildings RMB'000	Plant and machinery RMB'000	Motor vehicles RMB'000	Office equipment RMB'000	Construction in progress RMB'000	Total RMB'000
Cost:						
At 1 January 2018	10,218,472	16,145,888	513,270	1,442,103	2,557,178	30,876,911
Additions	35,821	240,403	20,419	99,041	2,692,778	3,088,462
Additions due to acquisition of subsidiaries	57,450	52,842	1,854	2,444	173,301	287,891
Disposals	(43,975)	(429,376)	(31,473)	(60,566)	(21,253)	(586,643)
Deduction due to disposal of subsidiaries	(84,122)	(66,483)	(7,744)	(21,845)	-	(180,194)
Transfers from construction in progress	864,506	842,509	9,553	132,256	(1,848,824)	-
Transfer to prepaid land lease payments (Note 17)	-	-	-	-	(92,684)	(92,684)
Transfer to other intangible assets (Note 19)	-	-	-	-	(1,559,532)	(1,559,532)
Transfer to investment properties (Note 16)	(29,880)	-	-	-	-	(29,880)
Transfer to other non-current assets	-	-	-	-	(54,547)	(54,547)
Translation reserve	12,858	14,372	322	2,461	388	30,401
At 31 December 2018	11,031,130	16,800,155	506,201	1,595,894	1,846,805	31,780,185
Accumulated depreciation and impairment:						
At 1 January 2018	3,563,700	9,466,537	381,630	995,090	1,042	14,407,999
Depreciation for the year (Note 8)	395,595	1,050,157	33,268	161,604	-	1,640,624
Impairment for the year	-	27,547	-	25	346	27,918
Transfer to investment properties (Note 16)	(17,140)	-	-	-	-	(17,140)
Deduction of impairment due to the disposals	(177)	(1,894)	-	-	(514)	(2,585)
Deduction of depreciation due to the disposals	(3,349)	(305,741)	(28,950)	(53,398)	-	(391,438)
Deduction in depreciation due to disposal of subsidiaries	(22,498)	(40,465)	(4,736)	(13,624)	-	(81,323)
Translation reserve	4,004	12,173	33	805	41	17,056
At 31 December 2018	3,920,135	10,208,314	381,245	1,090,502	915	15,601,111
Net carrying amount:						
At 31 December 2018	7,110,995	6,591,841	124,956	505,392	1,845,890	16,179,074

14. PROPERTY, PLANT AND EQUIPMENT (CONTINUED)

As at 31 December 2019, the net carrying amount of buildings and machinery mortgaged by the Group for bank loans was RMB571,758,000 (31 December 2018: RMB554,128,000)(Note 41).

As at 31 December 2019, the net carrying amount of houses without property ownership certificates of the Group was RMB149,645,000 (31 December 2018: RMB4,936,000).

Rental expense related to equipment and property recognised in the statement of profit or loss was RMB296,108,000 (2018: RMB695,283,000) (Note 8).

In the current year, the capitalized interest was RMB83,250,000 (2018:RMB17,877,000). The capitalisation rates used to determine the amount of borrowing costs to be capitalised is the weighted average interest rate applicable to the Group's general borrowings during the year, which were 4.65%-8.3%.

In the current year, the impairment of property, plant and equipment was provided for energy equipment, industrial equipment and integrated services segments at amount of RMB40,988,000 (2018: Nil), RMB4,043,000 (2018: RMB27,663,000) and RMB13,399,000 (2018: RMB255,000), respectively, due to their damaged or obsolescence. The whole amount was recognised as administrative expense in profit or loss.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

FOR THE YEAR ENDED 31 DECEMBER 2019

15. LEASES

This note provides information for leases where the Group is a lessee.

(i) Amounts recognised in the balance sheet

The balance sheet shows the following amounts relating to leases:

	2019 RMB'000	1 January 2019 RMB'000
Right-of-use assets	5,510,515	5,887,828
Leasehold land/Land-use rights**	806,193	332,180
Buildings	97,458	124,025
Equipment	18,172	11,371
Vehicles	12,998	10,072
Others	6,445,336	6,365,476
Lease liabilities		
Current	238,016	171,734
Non-current	734,513	324,143
	972,529	495,877

* In the previous year, the Group only recognised lease assets and lease liabilities in relation to leases that were classified as 'finance leases' under HKAS 17 Leases. The assets were presented in property, plant and equipment and the liabilities as part of the Group's borrowings. For adjustments recognised on adoption of HKFRS 16 on 1 January 2019, please refer to note 2.1.3.

** The Group has land lease arrangement with mainland China government

Additions to the right-of-use assets during the 2019 financial year were RMB1,432,331,000.

As at 31 December 2019, RMB61,000,000 (31 December 2018: none) of the Group's current bank loans are secured by pledges over certain of the Group's right-of-use assets with a net carrying amount of approximately of RMB12,289,000. RMB766,800,000 (31 December 2018: RMB570,000,000) of the Group's bank loans are secured by pledges over certain of the Group's right-of-use assets with a net carrying amount of approximately RMB72,451,000 (Note 41).

15. LEASES (CONTINUED)

(ii) Amounts recognised in the statement of profit or loss

	2019 RMB'000	1 January 2019 RMB'000
Depreciation charge of right-of-use assets	282,865	—
Leasehold land/Land-use rights	241,516	—
Buildings	52,310	—
Equipment	9,304	—
Vehicles	9,154	—
Others	595,149	—
Interest expense (included in finance cost)	(48,897)	—
Expense relating to short-term leases (included in cost of goods sold and administrative expenses) (Note 8)	(291,979)	—
Expense relating to leases of low-value assets that are not shown above as short-term leases (included in administrative expenses) (Note 8)	(4,129)	—

The total cash outflow for leases in 2019 was RMB644,372,000.

(iii) The Group's leasing activities and how these are accounted for

The Group leases various offices, equipment and vehicles. Rental contracts are typically made for fixed periods of 6 months to 8 years, but may have extension options as described in (iv) below.

Lease terms are negotiated on an individual basis and contain a wide range of different terms and conditions. The lease agreements do not impose any covenants other than the security interests in the leased assets that are held by the lessor. Leased assets may not be used as security for borrowing purposes.

(iv) Extension and termination options

Extension and termination options are included in a number of property and equipment leases across the Group. These are used to maximise operational flexibility in terms of managing the assets used in the Group's operations. The majority of extension and termination options held are exercisable only by the Group and not by the respective lessor.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

FOR THE YEAR ENDED 31 DECEMBER 2019

16. INVESTMENT PROPERTIES

	2019 RMB'000	2018 RMB'000
Cost:		
At 1 January	1,587,232	1,496,302
Increase due to acquisition of subsidiaries	133,838	-
Addition	129,478	34,916
Transfer from prepaid land lease payments (Note 17)	-	28,609
Transfer from fixed assets (Note 14)	211,093	29,880
Disposals	(66,309)	(2,475)
At 31 December	1,995,332	1,587,232
Accumulated depreciation and impairment:		
At 1 January	773,163	663,794
Depreciation for the year (Note 8)	88,108	84,566
Transfer from prepaid land lease payments (Note 17)	-	8,778
Transfer from fixed assets (Note 14)	33,973	17,140
Disposals	(34,303)	(1,115)
At 31 December	860,941	773,163
Net carrying amount:		
At 31 December	1,134,391	814,069

As at 31 December 2019, the Group had no unprovided contractual obligations for future repairs and maintenance (2018: Nil). The Group's investment properties are situated in mainland China and are held under the following lease terms:

	2019 RMB'000	2018 RMB'000
Medium term leases (less than 50 years but not less than 10 years)	261,058	369,447
Short term leases (less than 10 years)	873,333	444,622
	1,134,391	814,069

As at 31 December 2019, the fair value of Investment properties was approximately RMB 3,860,531,000. The estimate is made by the directors with reference to market transacted prices for similar properties in the vicinity of the relevant properties. No investment property was pledged as security by the Group. The Group has elected to use the cost model to measure its investment properties. Invsestment properties are generally depreciated over the period of their useful life on a straight-line basis.

17. PREPAID LAND LEASE PAYMENTS

	2019 RMB'000	2018 RMB'000
Cost:		
At 1 January	-	6,567,757
Additions	-	41,243
Additions due to acquisition of subsidiaries	-	235,643
Transfer from construction in progress (Note 14)	-	92,684
Disposals	-	(54,874)
Transfer to investment properties (Note 16)	-	(28,609)
At 31 December	-	6,853,844
Accumulated amortisation and impairment:		
At 1 January	-	739,176
Amortisation for the year (Note 8)	-	252,875
Disposals	-	(150)
Transfer to investment properties (Note 16)	-	(8,778)
At 31 December	-	983,123
Net carrying amount:		
At 31 December	-	5,870,721

The Group's leasehold land is held under the following lease terms:

	2019 RMB'000	2018 RMB'000
At cost, held in Mainland China		
Leases of over 50 years	-	24,026
Leases of between 10 to 50 years	-	6,829,818
	-	6,853,844

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

FOR THE YEAR ENDED 31 DECEMBER 2019

18. GOODWILL

	2019 RMB'000	2018 RMB'000
Cost:		
At 1 January	3,707,569	2,805,793
Increase during the year	336,790	904,065
Disposal during the year	-	(12,483)
Translation reserve	(6,064)	10,194
At 31 December	4,038,295	3,707,569
Impairment:		
At 1 January	308,627	156,896
Increase during the year	88,566	151,731
At 31 December	397,193	308,627
Net carrying amount:		
At 31 December	3,641,102	3,398,942

Impairment tests of goodwill

Goodwill apportioned to the Group's asset group and portfolio of asset group is summarised according to the business segments as follows:

Cash-generating unit	Business segment	2019 RMB'000		
		Cost	Impairment	Net carrying amount
Industrial basic equipment	Industrial equipment	1,557,822	(28,233)	1,529,589
Environmental project and service	Integrated Services	874,837	(20,252)	854,585
Intelligent manufacturing	Industrial equipment	1,057,237	(240,297)	816,940
Energy project and service	Integrated Services	323,080	-	323,080
Stored energy	Energy equipment	49,480	-	49,480
Power Grid	Energy equipment	155,036	(108,411)	46,625
Large and medium-sized motor	Industrial equipment	10,060	-	10,060
Wind power	Energy equipment	7,093	-	7,093
Others	Others	3,650	-	3,650
		4,038,295	(397,193)	3,641,102

18. GOODWILL (CONTINUED)

The following table sets out the key assumptions for those cash-generating units that have significant goodwill allocated to them when calculation of value-in-use:

2019	Industrial basic equipment	Intelligent manufacturing	Environmental project and service	Energy project and service
Annual sales growth rate	1%~30.4%	5.57%-33.07%	1.0%~211.58%	9.44%
Long term sales growth rate	1.5%~2.0%	1.73%	0%	0%
Gross margin rate	22.0%~53.0%	19.9%~23.7%	49.74%~65.35%	16.7%~17.5%
Pre-tax discount rate	12.3%~14.0%	10.6%	11.8%-14.5%	12.97%

2018	Industrial basic equipment	Environmental project and service	Intelligent manufacturing
Annual sales growth rate	2.5%~30.4%	1.0%~119.7%	5.6%
Long term sales growth rate	1.0%~2.0%	0%~4%	1.7%
Gross margin rate	22.0%~53.0%	7.4%~69%	22.1%
Pre-tax discount rate	14.0%~14.4%	11.8%~12.0%	10.6%

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

FOR THE YEAR ENDED 31 DECEMBER 2019

18. GOODWILL (CONTINUED)

Management has determined the values assigned to each of the above key assumptions as follows:

Assumption	**Approach used to determining values**
Annual sales growth rate	Average annual growth rate over the three to five years forecast period; based on past performance and management's expectations of market development.
Long-term growth rate	This is the weighted average growth rate used to extrapolate cash flows beyond the budget period. The rates are consistent with forecasts included in industry reports.
Gross margin rate	Based on past performance and management's expectations for the future.
Pre-tax discount rates	Reflect specific risks relating to the relevant segments and the countries in which they operate.

TEC4AERO GmbH belongs to the cash-generating unit of intelligent manufacturing, which is in the segment of industrial equipment. The recoverable amount of TEC4AERO GmbH asset group at 31 December 2019 amounted to RMB1,500 million is determined based on value-in-use calculations, which is higher than that arrived at using fair value less cost of disposal approach. The key assumptions for the value-in-use calculations include discount rates and sales growth rates during the forecast period. Those calculations use cash flow projections based on financial budgets approved by management covering a three-year period and a pre-tax discount rate of 10.6% (2018: 10.6%) per annum. The cash flows beyond the three-year period are extrapolated using a 1.7% (2018: 1.7%) sales growth rate per annum. As a result of the impairment assessment, an impairment charge for this goodwill of RMB88,566,000 was recorded. Its fair value less cost of disposal was estimated using adjusted price/book value ratio. The impairment provision of RMB88,566,000 provided in the intelligent manufacturing CGU was a result of a reduction of the future sales forecasted considering the real market situation. In this regard, the Group reassessed the depreciation policies of its property, plant and equipment and concluded that their useful lives will not be affected. No class of asset other than goodwill was impaired.

Nedfast Investment B.V. ("Nedfast") belongs to the cash-generating unit of industrial basic equipment, which is in the business segment of industrial equipment. The recoverable amount of Nedfast is determined based on value-in-use calculations. The key assumptions for the value-in-use calculations include discount rates and sales growth rates during the forecast period. Those calculations use cash flow projections based on financial budgets approved by management covering a five-year period and a pre-tax discount rate of 12.3% (2018: 14.4%) per annum. The cash flows beyond the five-year period are extrapolated using a 1.5% (2018: 1.0%) sales growth rate per annum. The increase of the sales growth rate is based on industry growth forecast and does not exceed the average long-term sales growth rate for the industry.

19. INTANGIBLE ASSETS

	Patents and licences RMB'000	Technology know-how RMB'000	Concession RMB'000	Others RMB'000	Total RMB'000
Cost:					
At 1 January 2019	1,217,108	526,337	2,047,237	601,716	4,392,398
Additions	33,800	122,376	29,274	445,940	631,390
Additions due to acquisition of subsidiaries	271,573	-	-	164,930	436,503
Transferred from construction in progress (Note 14)	-	-	38,938	14,550	53,488
Transferred from capital expenditure	13,897	-	-	(13,897)	-
Disposals	(1,928)	-	(35,583)	(297,582)	(335,093)
Other deductions (Note 20)	-	-	(868,391)	-	(868,391)
At 31 December 2019	1,534,450	648,713	1,211,475	915,657	4,310,295
Accumulated amortisation and impairment:					
At 1 January 2019	527,400	486,592	182,672	261,772	1,458,436
Amortisation for the year (Note 8)	104,021	16,988	54,094	145,583	320,686
Disposals	(1,269)	-	(6,149)	(3,039)	(10,457)
At 31 December 2019	630,152	503,580	230,617	404,316	1,768,665
Net carrying amount:					
At 31 December 2019	904,298	145,133	980,858	511,341	2,541,630

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

FOR THE YEAR ENDED 31 DECEMBER 2019

19. INTANGIBLE ASSETS (CONTINUED)

	Patents and licences RMB'000	Technology know-how RMB'000	Concession RMB'000	Others RMB'000	Total RMB'000
Cost:					
At 1 January 2018	1,132,861	536,385	492,461	564,642	2,726,349
Additions	86,347	185	4,756	110,867	202,155
Additions due to acquisition of subsidiaries	-	-	1,020	6,133	7,153
Transferred from construction in progress (Note 14)	-	-	1,557,365	2,167	1,559,532
Disposals	(2,100)	(10,233)	(8,365)	(82,093)	(102,791)
At 31 December 2018	1,217,108	526,337	2,047,237	601,716	4,392,398
Accumulated amortisation and impairment:					
At 1 January 2018	492,941	467,293	148,854	224,253	1,333,341
Amortisation for the year (Note 8)	38,989	19,299	33,818	39,402	131,508
Disposals	(4,530)	-	-	(1,883)	(6,413)
At 31 December 2018	527,400	486,592	182,672	261,772	1,458,436
Net carrying amount:					
At 31 December 2018	689,708	39,745	1,864,565	339,944	2,933,962

Amortisation of RMB81,129,000 (2018: RMB74,759,000) and RMB239,557,000 (2018: RMB56,750,000) is included in the 'Administrative expenses' and 'Distribution costs', respectively, in the consolidated statement of profit or loss.

20. OTHER FINANCIAL ASSETS AT AMORTISED COST

	2019			2018		
	Current	Non-current	Total	Current	Non-current	Total
	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000
Loans to related parties	8,142,500	-	8,142,500	6,731,500	-	6,731,500
Loans to third parties (a)	-	-	-	29,000	-	29,000
	8,142,500	-	8,142,500	6,760,500	-	6,760,500
Lease receivables (b)	5,120,117	6,842,841	11,962,958	5,591,865	5,884,918	11,476,783
Less: unrealised finance income	(789,781)	(937,599)	(1,727,380)	(653,372)	(542,805)	(1,196,177)
Net lease receivables	4,330,336	5,905,242	10,235,578	4,938,493	5,342,113	10,280,606
Less: loss allowance for loan receivables	(443,215)	-	(443,215)	(381,630)	-	(381,630)
Less: loss allowance for lease receivables	(838,224)	(229,873)	(1,068,097)	(758,481)	(151,654)	(910,135)
Carrying amounts of loan and lease receivables	11,191,397	5,675,369	16,866,766	10,558,882	5,190,459	15,749,341
Reverse repurchase agreements (c)	30,800	-	30,800	2,308,712	-	2,308,712
Other financial assets (d)	-	729,435	729,435	-	-	-
Receivables from a joint venture	-	1,094,849	1,094,849	-	8,424	8,424
Less: loss allowance for other financial assets	-	(257,951)	(257,951)	-	(2,742)	(2,742)
Net other receivables	-	1,566,333	1,566,333	-	5,682	5,682
	11,222,197	7,241,702	18,463,899	12,867,594	5,196,141	18,063,735

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

FOR THE YEAR ENDED 31 DECEMBER 2019

20. OTHER FINANCIAL ASSETS AT AMORTISED COST (CONTINUED)

(a) Details of loans to subcontractors are listed as follows:

	2019		2018	
	Effective interest rate (%)	**RMB'000**	**Effective interest rate (%)**	**RMB'000**
Beijing Shangzhuang Gas Thermoelectric Co., Ltd.	-	-	4.28%	29,000
		-		29,000

As at 31 December 2019, no loan to a third party represented.

The detailed analysis on loan receivables by category is as follows:

	2019 RMB'000	2018 RMB'000
Credit loan receivables	7,088,000	4,094,000
Secured loans	1,000,000	54,500
Guaranteed loan receivables	54,500	2,612,000
	8,142,500	6,760,500

As at 31 December 2019, none of the Group's loan receivables (2018: Nil) was past due. The annual interest rates of loans provided to related parties range from 3.92% to 5.85% (2018: 1.95% to 5.58%).

20. OTHER FINANCIAL ASSETS AT AMORTISED COST (CONTINUED)

(b) The table below illustrates the gross and net amounts of lease receivables the Group expects to receive in the following five consecutive accounting years:

	2019		2018	
	Lease receivables	Net lease receivables	Lease receivables	Net lease receivables
	RMB'000	RMB'000	RMB'000	RMB'000
Within 1 year	5,120,117	4,330,336	5,591,864	4,180,012
Over 1 year but within 5 years	5,873,278	5,078,297	4,731,455	4,162,374
Over 5 years	969,563	826,945	1,153,464	1,028,085
	11,962,958	10,235,578	11,476,783	9,370,471

There were no unguaranteed residual values in connection with finance lease arrangements or contingent lease arrangements of the Group that needed to be recorded as at the end of the reporting period.

(c) Reverse repurchase agreements

The table below illustrates the net amounts of lease receivables the Group expects to receive in the following five consecutive accounting years:

	2019	2018
Reverse repurchase agreements classified by collateral		
- Corporate bonds	30,800	2,308,712

The period for reverse repurchase agreements is from 3 days to 14 days.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

FOR THE YEAR ENDED 31 DECEMBER 2019

20. OTHER FINANCIAL ASSETS AT AMORTISED COST (CONTINUED)

(c) Reverse repurchase agreements(continued)

The movement in the provision for impairment of loans and lease receivables are as follows：

	2019		2018	
	Impairment of loan receivables RMB'000	Impairment of lease receivables RMB'000	Impairment of loan receivables RMB'000	Impairment of lease receivables RMB'000
At 1 January	381,630	910,135	515,323	696,816
Impairment losses recognised (Note 8)	61,585	157,962	7,257	213,319
Other decrease	-	-	(140,950)	-
At 31 December	443,215	1,068,097	381,630	910,135

20. OTHER FINANCIAL ASSETS AT AMORTISED COST (CONTINUED)

Changes of the expected loss of loan receivables are as follows：

	Stage 1		Stage 2		Stage 3	
	Expected credit loss within 12 months		Expected credit loss for the entire period		Expected credit loss for the entire period	
	Book Value	Expected Loss	Book Value	Expected Loss	Book Value	Expected Loss
31 December 2018	4,198,000	85,578	2,562,500	296,052	-	-
Increase/(decrease)	3,759,000	339,330	(2,377,000)	(277,745)	-	-
31 December 2019	7,957,000	424,908	185,500	18,307	-	-

(i) As at 31 December 2019, the Group did not have a loan receivable in stage 3, and there's no transfer among three stages.

(ii) As at balance sheet date, the analysis of expected credit loss of loan receivables in stage 1 is ：

	2019		
	Book Value	Expected credit loss within 12 months	Expected Loss
Individual provision:	7,957,000	1%-7%	424,908

	2018		
	Book Value	Expected credit loss within 12 months	Expected Loss
Individual provision:	4,198,000	1%-2%	83,817

(iii) As at balance sheet date, the analysis of expected credit loss of loan receivables in stage 2 is ：

	2019		
	Book Value	Expected credit loss within 12 months	Expected Loss
Individual provision:	185,500	8%-15%	18,307

	2018		
	Book Value	Expected credit loss within 12 months	Expected Loss
Individual provision:	2,562,500	3%-14%	297,813

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

FOR THE YEAR ENDED 31 DECEMBER 2019

20. OTHER FINANCIAL ASSETS AT AMORTISED COST (CONTINUED)

Changes of the expected loss of lease receivables are as follows：

	Stage 1 Expected credit loss within 12 months		Stage 2 Expected credit loss for the entire period		Stage 3 Expected credit loss for the entire period	
	Book Value	Expected Loss	Book Value	Expected Loss	Book Value	Expected Loss
01 January 2019	7,492,632	112,606	760,434	173,852	2,027,540	623,677
Increase/(decrease)	476,485	7,649	(303,158)	(54,781)	(218,355)	(77,528)
Provision (increase) / decrease(Note 1)	-	12,840	-	39,018	-	230,764
Transferred this year	(879,632)	(12,042)	726,464	(913)	153,168	12,955
Transfer from Stage 1 to Stage 2	(802,838)	(12,887)	802,838	12,887	-	-
Transfer from Stage 1 to Stage 3	(89,414)	(1,435)	-	-	89,414	1,435
Transfer from Stage 2 to Stage 3	-	-	(63,754)	(11,520)	63,754	11,520
Transfer from Stage 2 to Stage 1	12,620	2,280	(12,620)	(2,280)	-	-
31 December 2019	7,089,485	121,053	1,183,740	157,176	1,962,353	789,868

Note 1: The project mainly includes the probability of default caused by the regular update of the model parameters: the default exposure, the change of the default loss rate and the impact of the phase change on the measurement of expected credit losses.

(i) As at 31 December 2019, the analysis of expected loss of lease receivables in stage 1 is:

	Book Value	Expected credit loss within 12 months	Expected Loss
Combination of provision：			
Lease reveivable 1	7,089,485	0.03-2%	121,053

(ii) As at 31 December 2019, the analysis of expected loss of lease receivables in stage 2 is:

	Book Value	Expected credit loss for the entire period	Expected Loss
Combination of provision:			
Lease reveivable 2	1,183,740	3-23%	157,176

20. OTHER FINANCIAL ASSETS AT AMORTISED COST (CONTINUED)

(iii) As at 31 December 2019, the analysis of expected credit loss of lease receivables in Stage 3 is:

	Book Value	Expected credit loss for the entire period	Expected Loss	Reason
Lease receivable 1	189,077	79%	150,000	Expected to losses due to financial difficulties
Lease receivable 2	181,154	43%	77,465	Expected to losses due to financial difficulties
Lease receivable 3	105,975	37%	38,750	Expected to losses due to financial difficulties
Others	1,486,147	35%	523,653	Expected to losses due to financial difficulties
	1,962,353		789,868	

(d) A subsidiary of the Company and the relevant government department have entered into an agreement on investment, construction, operation and transfer of a municipal water distribution project in 2015. After completion of construction, due to uncertainty of the amount from unconditional rights of collection, the asset capitalised for operation in future was recognised as an intangible asset. In October 2019, the relevant government department confirmed that they would pay at least RMB1,119,152,000 to the subsidiary over the next decade. Thus, the Group has reclassified a present value amounted to RMB868,391,000 of the guaranteed amount partially from the intangible assets into long-term receivables accordingly (Note 19). As of 31 December 2019, the Group has received RMB72,181,000.

21. FINANCIAL ASSETS AT FAIR VALUE THROUGH OTHER COMPREHENSIVE INCOME

(i) Classification of financial assets at fair value through other comprehensive income

Financial assets at fair value through other comprehensive income (FVOCI) comprise:

Debt securities where the contractual cash flows are solely principal and interest and the objective of the Group's business model is achieved both by collecting contractual cash flows and selling financial assets, and

Trade receivables and notes receivable at fair value through other comprehensive income where the contractual cash flows are solely principal and interest and the objective of the Group's business model is achieved both by collecting contractual cash flows and selling financial assets.

	2019 RMB'000	2018 RMB'000
Current assets		
Other debt investment (Current)	7,972,990	5,787,735
Trade receivables at fair value through other comprehensive income	4,721,291	2,724,919
Notes receivable at fair value through other comprehensive income	719,663	604,834
	13,413,944	9,117,488

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

FOR THE YEAR ENDED 31 DECEMBER 2019

21. FINANCIAL ASSETS AT FAIR VALUE THROUGH OTHER COMPREHENSIVE INCOME (CONTINUED)

(i) Classification of financial assets at fair value through other comprehensive income (continued)

Trade Receivables at fair value through other comprehensive income

	2019 RMB'000	2018 RMB'000
Trade receivables	4,721,291	2,724,919

In 2019, the Group factored net carrying amount RMB8,691,164,000 of trade receivables at fair value through other comprehensive income (31 December 2018: nil) and relieved late payment and credit risk. The Group therefore derecognised the transferred assets in their entirety in its balance sheet.

The ageing analysis, based on the due date, of the trade receivables, net of the provision for impairment, as at balance sheet dates is as follows:

	2019 RMB'000	2018 RMB'000
Not due	2,462,520	1,766,667
Within 1 year past due	1,732,762	935,272
Over 1 year but within 2 years past due	526,009	22,980
	4,721,291	2,724,919

(ii) Debt investments at fair value through other comprehensive income

Debt investments at FVOCI comprise the following investments in listed and unlisted bonds:

	2019 RMB'000	2018 RMB'000
Non-current assets		
Unlisted bonds	61,729	261,372

(iii) Amounts recognised in profit or loss and other comprehensive income

During the year, the following gains were recognised in profit or loss and other comprehensive income.

	2019 RMB'000	2018 RMB'000
Fair value changes recognised in other comprehensive income (note 46)	182,727	211,640
Income on debt investments	158,498	254,430

22. DERIVATIVE FINANCIAL INSTRUMENTS

	2019		2018	
	Assets	Liabilities	Assets	Liabilities
	RMB'000	RMB'000	RMB'000	RMB'000
Forward exchange contracts - hedges	-	(6,096)	-	(5,168)
Forward exchange contracts - non-hedging	2,381	-	788	-
	2,381	(6,096)	788	(5,168)
Portion classified as non-current	-	-	-	-
Current portion	2,381	(6,096)	788	(5,168)

Forward exchange contracts - cash flow hedges

Forward exchange contracts are designated as hedging instruments in respect of forecast future sales to overseas customers of which the Group and the Company has firm commitments. The forward exchange contract balances vary with the levels of expected foreign currency sales and changes in foreign exchange forward rates.

The terms of the forward exchange contracts have been negotiated to match the expected future sales. The cash flow hedges relating to expected future monthly sales in 2018 and 2019 were assessed to be highly effective and a net gain of RMB1,436,000 (net of tax effect) was included in the hedging reserve as follows:

	2019	2018
	RMB'000	RMB'000
Total fair value gains /(losses) included in the hedging reserve	1,995	(12,663)
Deferred tax impact on fair value change	(559)	3,546
Reclassified from other comprehensive income and recognised in the consolidated statement of profit or loss	-	(1,297)
Net gains /(losses) on cash flow hedges	1,436	(10,414)

Forward exchange contracts – non – hedging

In addition, the Group has entered into several forward exchange contracts to manage its exchange rate exposures. These forward exchange contracts are not designated for hedging purposes and are measured at fair value through profit or loss. Increases in the fair value of non-hedging financial derivatives amounted to RMB4,022,000 (2018: increase in the fair value of RMB141,000).

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

FOR THE YEAR ENDED 31 DECEMBER 2019

23. SUBSIDIARIES

Particulars of the principal subsidiaries at 31 December 2019 are as follows:

Company name	Place of incorporation/ registration and operation	Registered capital (in'000)	Percentage of equity attributable to the Company Direct	Percentage of equity attributable to the Company Indirect	Principal activities
Shanghai Electric Group Shanghai Electric Machinery Co., Ltd. 上海電氣集團上海電機廠有限公司	PRC	RMB 399,146	60.58%	-	Production and sale of turbine generators and spare parts
Shanghai Boiler Works, Ltd. 上海鍋爐廠有限公司	PRC	RMB 207,483	100%	-	Sale of power station boilers, industry boilers and power station equipment
Shanghai Electric Power Generation Equipment Co., Ltd. # * 上海電氣電站設備有限公司# *	PRC	USD 264,792	-	60%	Design, manufacture and sale of power generation equipment and auxiliary products
Shanghai Electric Wind Power Group Co., Ltd. 上海電氣風電集團有限公司	PRC	RMB 800,000	99%	1%	Production and sale of wind power equipment, spare parts and provision of after-sales service
SEC Power Generation Environment Protection Engineering Co., Ltd. 上海電氣電站環保工程有限公司	PRC	RMB 102,632	95%	-	Design, manufacture and sale of desulphurisation equipment
Shanghai Electric Nuclear Power Equipment Co., Ltd. 上海電氣核電設備有限公司	PRC	RMB 3,619,134	57.80%	-	Production and sale of nuclear power equipment spare parts and provision of after-sales service
Shanghai No.1 Machine Tool Works Co., Ltd. 上海第一機床廠有限公司	PRC	RMB 620,000	100%	-	Design, manufacture of civil nuclear bearing equipment and electrical and mechanical equipment
Shanghai Electric Group Finance Co., Ltd. 上海電氣集團財務有限責任公司	PRC	RMB 2,200,000	74.63%	15.63%	Provision of financial services

23. SUBSIDIARIES (CONTINUED)

Particulars of the principal subsidiaries at 31 December 2019 are as follows (continued):

Company name	Place of incorporation/ registration and operation	Registered capital (in'000)	Percentage of equity attributable to the Company Direct	Indirect	Principal activities
Shanghai Electric International Economic and Trade Ltd. 上海電氣國際經濟貿易有限公司	PRC	RMB 434,301	80.59%	-	Import and export of products
Shanghai Mechanical & Electrical Industry Co., Ltd. ("SMEI")^ 上海機電股份有限公司^	PRC	RMB 1,022,740	48.81%	-	Production and sale of elevators, printing and packing machinery, artificial boards, air-conditioners, welding materials and engineering machinery
Shanghai Nanhua-Lanling Electric Co., Ltd.* 上海南華蘭陵電氣有限公司*	PRC	RMB 100,000	-	50%	Design and production of electrical switchgear and providing relevant service
Shanghai Turbine Works Co., Ltd. 上海汽輪機廠有限公司	PRC	RMB 246,675	100%	-	Production and sale of turbines and auxiliary engines
Shanghai Mitsubishi Elevator Co., Ltd. # * 上海三菱電梯有限公司# *	PRC	USD 155,269	-	52%	Production and sale of elevators, escalators, electronic ramps, building automation, management and safety systems and provision of relevant service
Shanghai Electronics Import & Export Co., Ltd. 上海電器進出口有限公司	PRC	RMB 10,000	100%	-	Acting as agent of imports and exports of goods and technology
Shanghai Electric Gas Turbine Co., Ltd.# 上海電氣燃氣輪機有限公司#	PRC	RMB 600,000	60%	-	Research, design and production of heavy-duty gas turbines and provision of technical consulting service
Shanghai Machine Tool Works Ltd. 上海機床廠有限公司	PRC	RMB 950,476	100%	-	Production and sale of machinery and spare parts

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

FOR THE YEAR ENDED 31 DECEMBER 2019

23. SUBSIDIARIES (CONTINUED)

Particulars of the principal subsidiaries at 31 December 2019 are as follows (continued):

Company name	Place of incorporation/ registration and operation	Registered capital (in'000)	Percentage of equity attributable to the Company		Principal activities
			Direct	Indirect	
Shanghai Electric Transmission and Distribution Group Co., Ltd. ("SETD") (Note 4.2(a)) 上海電氣輸配電集團有限公司	PRC	RMB 2,000,000	50%	-	Production and sale of power transmission, distribution and controlling equipment
Shanghai Electric Leasing Co., Ltd. 上海電氣租賃有限公司	PRC	RMB 3,000,000	100%	-	Provision of finance leases
Shanghai Electric Milling Equipment Co., Ltd. 上海電氣上重碾磨特裝設備有限公司	PRC	RMB 150,000	100%	-	Design, production and sale of power station equipment
Shanghai Electric Hong Kong Co., Ltd. 上海電氣香港有限公司	HK	RMB 547,674	100%	-	Sales of machinery and electronic products and related services business, import and export trade business, trade business, investment business
TEC4AERO GmbH*	GER	EUR 1,798	-	100%	Manufacturing of equipment for aircraft assembly lines
Shanghai Electric Wind Power Yunnan Co., Ltd 上海電氣風電雲南有限公司	PRC	RMB 20,000	100%	-	Production,installation and sale of wind generating set
Shanghai electric industry Co., Ltd. ("SEI") 上海電氣實業有限公司	PRC	RMB 209,701	51.81%	-	Investment and asset management
Shanghai Institute of Mechanical & Electrical Engineering Co., Ltd. 上海市機電設計研究院有限公司	PRC	RMB 1,956,123	51.12%	-	Engineering design,technology services
Shanghai Najie Electrical Complete Sets Co., Ltd.* 上海納傑電氣成套有限公司*	PRC	RMB 50,000	-	85%	Electrical equipment full set
Shanghai Renmin Electrical Apparatus Works* 上海電器股份有限公司人民電器廠*	PRC	RMB 90,000	-	100%	Production and sale of main parts of transformers

23. SUBSIDIARIES (CONTINUED)

Particulars of the principal subsidiaries at 31 December 2019 are as follows (continued):

Company name	Place of incorporation/ registration and operation	Registered capital (in'000)	Percentage of equity attributable to the Company Direct	Percentage of equity attributable to the Company Indirect	Principal activities
Shanghai Electric Power Transmission and Distribution Engineering Co., Ltd.* 上海電氣輸配電工程成套有限公司*	PRC	RMB 50,000	-	100%	Design and consulting services for power station, transfomers and other projects
Shanghai Boiler Works Ltd. 上海鼓風機廠有限公司	PRC	RMB 239,760	100%	-	Production, sale and export blowers and import related materials
Shanghai Denso Fuel Injection Co., Ltd.# 上海電裝燃油噴射有限公司#	PRC	USD 29,400	61%	-	Design and production of diesel engine fuel pump and components
Shanghai Feihang Electric Wire and Cable Co., Ltd.* 上海飛航電線電纜有限公司*	PRC	RMB 210,000	-	60%	Production and sale of wire and cable electrical equipment
Shanghai Huapu Cable Co., Ltd.* 上海華普電纜有限公司*	PRC	RMB 200,000	-	80%	Production and sale of wire and cable
Shanghai Prime Machinery Co., Ltd. 上海集優機械股份有限公司	PRC	RMB 1,725,943	47.18%	7.88%	Production and sale of industrial blades, precision bearings and high quality fasteners
Thales SEC Transportation System Limited Company 上海電氣泰雷茲交通自動化系統有限公司	PRC	RMB 200,000	50.1%	-	Production of traffic signal system and equipment
Shanghai Electric Group Asset Management Co., Ltd. 上海電氣集團置業有限公司	PRC	RMB 1,318,000	100%	-	Real estate development and property management
Shanghai Electric Investment Co., Ltd. 上海電氣投資有限公司	PRC	RMB 570,000	100%	-	Industrial investment
Suzhou Thvow Technology Co., Ltd. (Note 4.2(a)) 蘇州天沃科技股份有限公司	PRC	RMB 869,375	15%	-	Provide one-stop EPC project package services

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

FOR THE YEAR ENDED 31 DECEMBER 2019

23. SUBSIDIARIES (CONTINUED)

Sino-foreign equity joint ventures

^ SMEI is 48.81% owned by the Company and is accounted for as a subsidiary by virtue of the Company's control over it. Details of the disclosure are included in Note 4.

* The Company consolidated the results of these entities because the Company's subsidiaries control these entities.

The above table lists the subsidiaries of the Group which, in the opinion of the directors, principally affected the results for the year or formed a substantial portion of the net assets of the Group. To give details of other subsidiaries would, in the opinion of the directors, result in particulars of excessive length.

Details of the Group's subsidiaries that have material non-controlling interests are set out below:

	2019	2018
Percentage of equity interest held by non-controlling interests:		
SMEI	51.19%	51.19%
SETD	50%	50%
SEI	48.19%	-

	2019 RMB'000	2018 RMB'000
Profit for the year allocated to non-controlling interests:		
SMEI	1,201,126	1,519,811
SETD	144,423	132,220
SEI	162,623	-
Dividends paid to non-controlling interests of:		
SMEI	857,442	1,106,104
SETD	154,879	77,084
SEI	48,677	-

23. SUBSIDIARIES (CONTINUED)

	2019 RMB'000	2018 RMB'000
Accumulated balances of non-controlling interests at the reporting dates:		
SMEI	8,117,978	7,859,374
SETD	2,009,938	2,013,385
SEI	2,895,465	-

The following tables illustrate the summarised financial information of the above subsidiaries. The amounts disclosed are before any inter-company elimination:

	2019 RMB'000	2018 RMB'000
SMEI		
Revenue	22,116,248	21,233,742
Total expenses	(20,388,204)	(19,098,025)
Profit for the year	1,728,044	2,135,717
Total comprehensive income	1,728,155	2,136,173
Current assets	28,706,703	28,450,359
Non-current assets	5,480,868	5,211,230
Current liabilities	20,121,974	20,156,016
Non-current liabilities	395,349	375,946
Net cash flows from operating activities	172,959	188,450
Net cash flows from investing activities	873,186	1,246,152
Net cash flows used in financing activities	(1,105,321)	(1,415,756)
Effect of changes in exchange rate on cash	4,316	15,316
Net (decrease)/increase in cash and cash equivalents	(54,860)	34,162

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

FOR THE YEAR ENDED 31 DECEMBER 2019

23. SUBSIDIARIES (CONTINUED)

	2019 RMB'000	2018 RMB'000
SETD		
Revenue	11,847,757	9,614,067
Total expenses	(11,645,258)	(9,436,818)
Profit for the year	202,499	177,249
Total comprehensive income for the year	202,499	177,249
Current assets	9,492,217	7,173,557
Non-current assets	1,513,261	1,430,868
Current liabilities	7,571,404	5,138,672
Non-current liabilities	106,299	77,709
Net cash flows from operating activities	212,035	411,561
Net cash flows used in investing activities	(130,530)	(153,766)
Net cash flows from/(used in) financing activities	845,891	(78,356)
Effect of changes in exchange rate on cash	424	(3,141)
Net increase in cash and cash equivalents	927,820	176,298

	2019 RMB'000	2018 RMB'000
SEI		
Revenue	241,994	157,947
Total expenses	78,867	(59,363)
Profit for the year	320,862	98,584
Total comprehensive income for the year	320,862	98,584
Current assets	916,943	720,429
Non-current assets	5,589,929	2,520,780
Current liabilities	190,555	152,079
Non-current liabilities	384,995	479,443
Net cash flows used in operating activities	(24,196)	28,389
Net cash flows used in investing activities	(2,908,544)	133,225
Net cash flows from financing activities	3,001,237	(90,319)
Effect of changes in exchange rate on cash	36	59
Net increase in cash and cash equivalents	68,533	71,354

24. INVESTMENTS IN JOINT VENTURES

	2019 RMB'000	2018 RMB'000
Investments, cost:	2,218,703	5,401,471
Impairment	-	(444,098)
At 31 December	2,218,703	4,957,373
Share of joint ventures' results in the consolidated statement of profit or loss	(83,082)	(167,798)

Set out below is the joint venture of the Group as at 31 December 2019, which, in the opinion of the directors, is material to the Group. The joint venture listed below has share capital consisting of solely of ordinary shares, which is held directly by the Group.

Company name	Place of incorporation/ registration and operation	Registered capital (in'000)	Percentage of equity attributable to the Company Direct	Percentage of equity attributable to the Company Indirect	Principal activities
Shanghai FANUC robotics Co., Ltd.#	PRC	USD12,000	-	50%	Manufacture of industrial robot

\# Sino-foreign equity joint ventures

Starting from 5 December 2019, the investment of Ansaldo Energia S.p.A ("AEN") was stated as an associate in the consolidated financial statements please refer to Note 25.

There are no contingent liabilities relating to the Group's interest in the joint ventures.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

FOR THE YEAR ENDED 31 DECEMBER 2019

24. INVESTMENTS IN JOINT VENTURES (CONTINUED)

Summarised financial information

Set out below are the summarised financial information for Shanghai FANUC robotics Co., Ltd. which are accounted for using the equity method.

	31 December 2019 RMB'000
Current	
Assets	2,683,010
Liabilities	(923,619)
Non-current	
Assets	799,409
Liabilities	(510)
Net assets	2,558,290

Summarised financial information

	2019 RMB'000
Revenue	3,324,065
Profit before income tax	296,906
Income tax expense	(28,737)
Profit for the year	268,169
Other comprehensive income	-
Total comprehensive income	268,169
Dividends received from joint venture	162,028

Reconciliation of summarised financial information

Reconciliation of the summarised financial information presented to the carrying amount of its interest in the joint venture.

Summarised financial information

	2019 RMB'000
Opening net assets	2,614,178
Profit for the period	268,168
Dividends paid to shareholders	(324,056)
Closing net assets	2,558,290
Interest in Joint Venture at 50%	1,279,145
Goodwill	-
Carrying value	1,279,145

24. INVESTMENTS IN JOINT VENTURES (CONTINUED)

The following table illustrates the aggregate financial information of the Group's joint ventures that are not individually material:

	2019 RMB'000	2018 RMB'000
Share of the joint ventures' profit for the year	(217,166)	50,490
Share of the joint ventures' other comprehensive income	(45,890)	-
Share of the joint ventures' total comprehensive income	(263,056)	50,490
Aggregate carrying amount of the Group's investments in the joint ventures (excluding impairment)	939,558	959,383

25. INVESTMENTS IN ASSOCIATES

	2019 RMB'000	2018 RMB'000
Investments, at cost:		
Share of net assets	13,351,174	8,613,070
Impairment	(451,106)	(7,008)
	12,900,068	8,606,062
Share of associates' results in the consolidated statement of profit or loss	842,411	833,944

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

FOR THE YEAR ENDED 31 DECEMBER 2019

25. INVESTMENTS IN ASSOCIATES (CONTINUED)

The following table illustrates the aggregate financial information of the Group's associates that are not individually material. The associates as listed below have share capital consisting solely of ordinary shares, which are held directly by the Group; the country of incorporation or registration is also their principal place of business.

Company name	Place of incorporation/ registration and operation	Registered capital (in'000)	Percentage of equity attributable to the Company		Principal activities
			Direct	Indirect	
Ansaldo Energia S.p.A ^	Italy	EUR 180,000	-	40%	Provide service in respect of power plants equipment and related parts and manufacturing business of gas turbines
Shanghai Rail Traffic Equipment Development Co., Ltd. 上海軌道交通設備發展有限公司	PRC	RMB 676,041	49%	-	Production, sale, maintenance and technology development of city rail-traffic equipment and provision of consultancy services
Shanghai Schneider Power Distribution Electrical Apparatus Co., Ltd. # 上海施耐德配電電器有限公司#	PRC	USD 11,000	20%	-	Production and sale of low voltage air breakers and low voltage containers
Shanghai Schneider Industrial Control Co., Ltd. # 上海施耐德工業控制有限公司#	PRC	USD 14,560	20%	-	Production and sale of circuit breakers, thermal overload relays, contactors and industrial control components
Siemens Shanghai Switchgear Ltd. # 上海西門子開關有限公司#	PRC	EUR 15,300	45%	-	Design, manufacture and sale of switchgears and related products
MWB (Shanghai) Co., Ltd. # 上海MWB互感器有限公司#	PRC	USD 18,344	-	35%	Production and sale of mutual inductors
Trench High Voltage Products Co., Ltd. , Shenyang # 傳奇電氣(瀋陽)有限公司#	PRC	RMB 112,634	35%	-	Production and sale of bushings and instrument transformers
Siemens Shanghai High Voltage Switchgear Co., Ltd. # 上海西門子高壓開關有限公司#	PRC	USD 13,100	49%	-	Production and sale of gas insulated switchgears
SEC Alstom (Shanghai Baoshan) Transformers Co., Ltd. # 上海電氣阿爾斯通寶山變壓器有限公司#	PRC	USD 50,180	50%	-	Production and sale of oil-immersed power transformers
Yileng Carrier Air Conditioning Equipment Co., Ltd. # * 上海一冷開利空調設備有限公司#*	PRC	RMB 372,343	-	30%	Production and sale of centralised air-conditioning systems
Shanghai Marathon-Gexin Electric Co., Ltd. # * 上海馬拉松革新電氣有限公司#*	PRC	USD 8,000	-	21.31%	Production, repair and sale of electric machines and machine sets

25. INVESTMENTS IN ASSOCIATES (CONTINUED)

Company name	Place of incorporation/ registration and operation	Registered capital (in'000)	Percentage of equity attributable to the Company Direct	Indirect	Principal activities
China Energy Engineering Group Co., Ltd. 中國能源工程集團有限公司	PRC	RMB 3,333,340	20%	-	Production and sale of energy equipments
Shenzhen Yinghe Technology Co.,Ltd., ~ 深圳市贏合科技股份有限公司	PRC	RMB 376,003	9.73%	-	Production and sale of automatic production equipment of lithium ion battery
Mitsubishi Electric Shanghai Mechanical &Electrical Elevator Co., Ltd. # * 三菱電機上海機電電梯有限公司#*	PRC	USD 53,000	-	18.94%	Research and development, manufacture and sale of major components of elevators, escalators and automatic sidewalks
Shanghai Arnaiz Special Yantian Coating Machinery Co., Ltd.# * 上海阿耐斯特岩田塗裝機械有限公司#*	PRC	JPY 329,412	-	18.94%	Design, manufacture and sale of, compression mechanical, spraying mechanical, spraying equipment, hydraulic equipment
Chengdu Ri Yong-JEA Gate Electric Co., Ltd. ("Chengdu Ri Yong") *& 成都日用友捷汽車電氣有限公司*&	PRC	RMB 20,000	-	9.47%	Design, manufacture and sale of auto radiator fans, blowers and micromotors
Shanghai Nabtesco Hydraulic Co., Ltd. # * 上海納博特斯克液壓有限公司#*	PRC	USD 14,500	-	14.20%	Production and sale of hydraulic travelling motors and swing motors
Shanghai Ri Yong-JEA Gate Electric Co., Ltd. # * 上海日用-友捷汽車電氣有限公司#*	PRC	USD 17,000	-	18.94%	Design,manufacture and sale of auto radiator fans, blowers and micromotors
Shanghai Danfoss Hydrostatic Transmission Co., Ltd. # * 上海丹佛斯液壓傳動有限公司#*	PRC	USD 18,000	-	18.94%	Production and sale of hydraulic piston pumps and motors
Shanghai Jintai Engineering Machinery Co., Ltd. * ("Shanghai Jintai") 上海金泰工程機械有限公司*	PRC	RMB 532,239	-	23.20%	Manufacturing and operation of engineering machinery
Shanghai Mitsubishi Electric Shanglin Air Conditioner Electric Co., Ltd. #* 上海三菱電機上菱空調機電有限公司#*	PRC	USD 58,000	-	47.6%	Production of air-conditioners and oil-filled heaters and providing after-sale service
Chongqing Shenhua Thin Film Solar Power Co., Ltd. 重慶神華薄膜太陽能科技有限公司	PRC	RMB 1,250,000	-	20%	Production, sale and installation of solar power equipments

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

FOR THE YEAR ENDED 31 DECEMBER 2019

25. INVESTMENTS IN ASSOCIATES (CONTINUED)

Sino-foreign equity associates

The above table lists the associates of the Group which, in the opinion of the directors, principally affected the results for the year or formed a substantial portion of the net assets of the Group. To give details of other associates would, in the opinion of the directors, result in particulars of excessive length.

^ On 8 May 2014, Shanghai Electric Hong Kong Co., Ltd. ("Shanghai Electric Hong Kong"), a wholly-owned subsidiary of the Company, entered into a share purchase agreement with CDP Equity S.p.A (Used Name: Fondo Strategico Italiano S.p.A. ("FSI")) to acquire 40% equity interest of AEN with a cash consideration of EUR 400,000,000 (the "Transaction"). The Transaction was completed on 4 December 2014. Upon the completion of the Transaction, FSI became a 44.55% equity interest shareholder of AEN. In 2018, Shanghai Electric Hong Kong increased its capital to AEN by EUR 32,000,000.

According to the article of association, the Group jointly controlled the operation of AEN with CDP Equity S.p.A and the investment of AEN was stated as a joint venture in the consolidated financial statements before 4 December 2019. After 4 December 2019, the Group was no longer have the veto power over significant financial and operational decisions. Therefore, starting from 5 December 2019, the investment of AEN was stated as an associate in the consolidated balance sheet.

AEN is a private company and there is no quoted market price available for its shares.

In addition, the functional currency of AEN is Euro while the presentation currency of the Group is RMB. The investment in AEN is exposed to the foreign exchange risk. In order to mitigate the foreign exchange risk, the Group denominated some Euro bonds as hedging instrument in 2019. Formal document had been made to demonstrate the above hedging relationship as well as risk management objectives and hedging strategies. In 2019, the exchange difference reserve relating to the investment in AEN is RMB14,982,000. The effective portion of net investment hedge is RMB14,982,000. The net impact to other comprehensive income of above mentioned foreign exchange difference and the effective portion of net investment hedge is nil.

* The investments in these entities are indirectly held by the Group through its subsidiary SMEI. The Group exercises significant influence on these entities.

& The Group is entitled to appoint a board member of Chengdu Ri Yong. The Group exercises significant influence on Chengdu Ri Yong.

~ Shenzhen Yinghe Technology Co.,Ltd., is listed on the Growth Enterprise Market of Shenzhen Stock Exchange.

25. INVESTMENTS IN ASSOCIATES (CONTINUED)

Summarised financial information for associates

Set out below are the summarised financial information for two significant associates including AEN, Shanghai Schnetider Power Distribution Electric Apparatus Co., Ltd. ("Schneider Electric"), and Shanghai Schneider Industrial Control Co., Ltd. ("Schneider Control") which are accounted for using the equity method.

Summarised balance sheet and statement of comprehensive income

	AEN 2019 RMB'000	Schneider Electric 2019 RMB'000	Schneider Control 2019 RMB'000
Current			
Assets	14,039,342	802,625	498,413
Liabilities	(18,924,170)	(474,364)	(280,058)
Non-current			
Assets	15,782,163	118,019	107,565
Liabilities	(7,568,538)	(65,120)	-
Net assets	3,328,797	381,160	325,920
Revenue	7,909,454	2,438,126	1,208,465
Profit before tax from continuing operations	(954,369)	765,627	353,583
Profit for the year from continuing operations	(688,100)	573,681	265,188
Other comprehensive income	(26,580)	-	-
Total comprehensive income	(714,680)	573,681	265,188
Dividends received from associates	-	109,489	68,565

The information above reflects the amounts presented in the financial statements of the associates (and not SEG's share of those amounts) adjusted for differences in accounting policies between the Group and the associates.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

FOR THE YEAR ENDED 31 DECEMBER 2019

25. INVESTMENTS IN ASSOCIATES (CONTINUED)

Reconciliation of summarised financial information

Reconciliation of the summarised financial information presented to the carrying amount of its interest in associates

	AEN 2019 RMB'000	Schneider Electric 2019 RMB'000	Schneider Control 2019 RMB'000
Opening net asset attributable to the parent company	4,043,476	371,295	252,570
Profit for the period attributable to the parent company	(688,100)	573,475	416,175
Dividend distribution to shareholders for the year	-	(547,445)	(342,825)
Other comprehensive income attributable to the parent company	(26,580)	-	-
Closing net assets attributable to the parent company	3,328,796	397,325	325,920
Share of associates			
Interest in associates	1,331,519	76,232	65,184
Goodwill	1,069,160	-	-
Carrying value	2,400,679	76,232	65,184

26. DEFERRED TAX

The analysis of deferred tax assets and deferred tax liabilities without considering offsetting is as follows:

	As of 31 December	
	2019 RMB'000	2018 RMB'000
Deferred tax assets:		
– Deferred tax asset to be recovered after more than 12 months	2,654,911	3,144,933
– Deferred tax asset to be recovered within 12 months	3,559,197	2,070,572
	6,214,108	5,215,505
Deferred tax liabilities:		
– Deferred tax liability to be recovered after more than 12 months	(569,081)	(191,489)
– Deferred tax liability to be recovered within 12 months	(774,727)	(851,688)
	(1,343,808)	(1,043,177)

26. DEFERRED TAX (CONTINUED)

The gross movements in deferred tax assets and liabilities during the year are as follows:

Deferred tax assets

	31 December 2019					
	Losses available for offsetting against future taxable profits RMB'000	Impairment of assets and provisions RMB'000	Accrued expenses RMB'000	Unrealised profit RMB'000	Others RMB'000	Total RMB'000
As at 31 December 2018	435,350	2,991,674	1,616,343	12,353	159,785	5,215,505
Changes in accounting policy	-	-	-	-	6,059	6,059
As at 1 January 2019	435,350	2,991,674	1,616,343	12,353	165,844	5,221,564
Deferred tax credited /(charged) to the consolidated statement of profit or loss during the year (Note 11)	279,565	352,180	275,173	45,195	6,812	958,925
Deferred tax charged to equity during the year	-	28,688	-	-	4,931	33,619
Gross deferred tax assets at 31 December 2019	714,915	3,372,542	1,891,516	57,548	177,587	6,214,108
Offset against deferred tax liabilities*						(442,918)
Net deferred tax assets at 31 December 2019						5,771,190

Deferred tax liabilities

	31 December 2019					
	Revaluation of properties RMB'000	Fair value adjustment arising from acquisition of subsidiaries RMB'000	Unrealised gain on investments RMB'000	Unrealised profit RMB'000	Others RMB'000	Total RMB'000
As at 1 January 2019	(191,488)	(156,980)	(524,185)	(2,627)	(167,897)	(1,043,177)
Deferred tax credited/(charged) to the consolidated statement of profit or loss during the year (Note 11)	2,939	(259,287)	(46,621)	2,627	6,327	(294,015)
Deferred tax charged to equity during the year	-	-	(6,616)	-	-	(6,616)
Gross deferred tax liabilities at 31 December 2019	(188,549)	(416,267)	(577,422)	-	(161,570)	(1,343,808)
Offset against deferred tax assets *						442,918
Net deferred tax liabilities at 31 December 2019						(900,890)

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

FOR THE YEAR ENDED 31 DECEMBER 2019

26. DEFERRED TAX (CONTINUED)

	31 December 2018						
	Losses available for offsetting against future taxable profits RMB'000	Impairment of assets and provisions RMB'000	Unrealised loss on investments RMB'000	Accrued expenses RMB'000	Unrealised profit RMB'000	Others RMB'000	Total RMB'000
As at 1 January 2018	185,914	2,724,683	-	1,220,005	37,872	122,937	4,291,411
Deferred tax credited /(charged) to the consolidated statement of profit or loss during the year (Note 11)	249,436	266,991	-	396,338	(25,519)	84,781	972,027
Deferred tax charged to equity during the year	-	-	-	-	-	(47,933)	(47,933)
Gross deferred tax assets at 31 December 2018	435,350	2,991,674	-	1,616,343	12,353	159,785	5,215,505
Offset against deferred tax liabilities*							(414,282)
Net deferred tax assets at 31 December 2018							4,801,223

Deferred tax liabilities

	31 December 2018					
	Revaluation of properties RMB'000	Fair value adjustment arising from acquisition of subsidiaries RMB'000	Unrealised gain on investments RMB'000	Unrealised profit RMB'000	Others RMB'000	Total RMB'000
As at 1 January 2018	(192,679)	(158,685)	(70,972)	(453)	(223,478)	(646,267)
Deferred tax credited/(charged) to the consolidated statement of profit or loss during the year (Note 11)	1,191	1,705	(453,213)	(2,174)	55,581	(396,910)
Gross deferred tax liabilities at 31 December 2018	(191,488)	(156,980)	(524,185)	(2,627)	(167,897)	(1,043,177)
Offset against deferred tax assets*						414,282
Net deferred tax liabilities at 31 December 2018						(628,895)

* As the purpose of disclosure of financial statements, some deferred tax assets have been offset with deferred tax liabilities.

26. DEFERRED TAX (CONTINUED)

Deferred tax assets have not been recognised in respect of the following items:

	2019 RMB'000	2018 RMB'000
Tax losses	3,983,474	3,671,005
Deductible temporary differences	3,635,868	3,333,271
	7,619,342	7,004,276

Deferred tax assets for the tax losses and deductible temporary differences arising from these subsidiaries with operating losses have not been recognised in respect of the above items as it is not considered probable that taxable profits will be available against which the above items can be utilised.

Unrecognised deferred tax assets due from the annual deductible loss:

	2019 RMB'000	2018 RMB'000
2019	-	371,446
2020	489,557	669,399
2021	200,464	267,918
2022	266,394	231,945
2023	345,581	341,474
2024 and after	2,681,478	1,788,823
	3,983,474	3,671,005

27. OTHER NON-CURRENT ASSETS

	2019 RMB'000	2018 RMB'000
Prepaid for investments	1,023,832	-
Others	454,052	280,153
	1,477,884	280,153

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

FOR THE YEAR ENDED 31 DECEMBER 2019

28. INVENTORIES

	2019 RMB'000			2018 RMB'000		
	Book Value	Provision	Net carrying amount	Book Value	Provision	Net carrying amount
Raw materials	7,074,428	683,293	6,391,135	5,955,926	609,177	5,346,749
Work In progress	10,539,107	842,696	9,696,411	12,429,180	828,245	11,600,935
Finished goods	11,434,163	517,210	10,916,953	11,454,082	472,469	10,981,613
	29,047,698	2,043,199	27,004,499	29,839,188	1,909,891	27,929,297

The cost of inventories recognised as expense and included in 'cost of sales' amounted to RMB54,316,634,000 (2018: RMB45,846,204,000), which included inventory net write-down of RMB1,029,459,000 (2018: RMB1,279,807,000).

As at 31 December 2019, certain of the Group's bank loans are secured by mortgages over certain of the Group's inventory with a net carrying amount of approximately RMB400,000,000 (31 December 2018: none).

29. FINANCIAL ASSETS AT FAIR VALUE THROUGH PROFIT OR LOSS

Classification of financial assets at fair value through profit or loss

(i) The Group classifies the following financial assets at fair value through profit or loss (FVPL):

(a) debt investments that do not qualify for measurement at either amortised cost (see note 20 above) or FVOCI (note 21);

(b) equity investments that are held for trading, and

(c) equity investments for which the entity has not elected to recognise fair value gains and losses through OCI.

	2019 RMB'000	2018 RMB'000
Non-current assets		
Unlisted equity investment	5,041,934	4,263,832
Listed equity investment	390,368	1,097,014
	5,432,302	5,360,846
Current assets		
Funds	4,620,801	3,541,849
Wealth management products	660,490	466,255
Equity Investment	913,109	57,653
Bonds	429,003	19,805
Others	341,349	333,888
	6,964,752	4,419,450

29. FINANCIAL ASSETS AT FAIR VALUE THROUGH PROFIT OR LOSS (CONTINUED)

(ii) Amounts recognised in profit or loss

During the year, the following gains were recognised in profit or loss:

	2019 RMB'000	2018 RMB'000
Fair value (losses)/gains on equity investments at FVPL recognised in other gains (see note 7)	(4,022)	141
Fair value gains on debt instruments at FVPL recognised in other gains (see note 7)	84,615	19,167

(iii) Risk exposure and fair value measurements

Information about the Group's exposure to price risk is provided in Note 3.1. For information about the methods and assumptions used in determining fair value please refer to Note 3.3.

30. TRADE RECEIVABLES

	2019 RMB'000	2018 RMB'000
Trade receivables	36,718,075	25,394,530
Less: provision for impairment	(7,381,026)	(6,553,937)
	29,337,049	18,840,593

The Group's trading terms with its customers are mainly on credit except for new customers, where payment in advance or cash on delivery is normally required. The credit period is generally three months and may be extended to six months for key customers. The Group seeks to maintain strict control over its outstanding receivables and has a credit control policy to minimise credit risk. Overdue balances are regularly reviewed by senior management. In view of the aforementioned and the fact that the Group's trade receivables relate to a large number of diversified customers, there is no significant concentration of credit risk. Trade receivables are non interest-bearing.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

FOR THE YEAR ENDED 31 DECEMBER 2019

30. TRADE RECEIVABLES (CONTINUED)

The ageing analysis, based on the due date of the trade receivables net of the provision for impairment, as at balance sheet dates is as follows:

	2019 RMB'000	2018 RMB'000
Not due	12,137,279	7,187,262
Within 3 months past due	4,376,604	2,300,654
Over 3 months but within 6 months past due	2,892,577	2,130,297
Over 6 months but within 1 year past due	4,537,853	2,329,926
Over 1 year but within 2 years past due	3,423,316	3,838,576
Over 2 years but within 3 years past due	1,389,019	697,799
Over 3 years past due	580,401	356,079
	29,337,049	18,840,593

The aging analysis, based on the invoice date of the trade receivables net of the provision for impairment, as at balance sheet dates is as follows:

	2019 RMB'000	2018 RMB'000
Within 3 months	15,115,160	8,427,635
Over 3 months but within 6 months	3,281,899	1,867,618
Over 6 months but within 1 year	5,013,007	2,508,711
Over 1 year but within 2 years	3,522,371	4,027,095
Over 2 years but within 3 years	1,557,624	1,297,652
Over 3 years	846,988	711,882
	29,337,049	18,840,593

30. TRADE RECEIVABLES (CONTINUED)

(i) Fair values of trade receivables

Due to the short-term nature of the current receivables, their carrying amount is considered to be the same as their fair value.

(ii) Impairment and risk exposure

Trade receivables

The loss allowance increased by a further RMB827,089,000 to RMB7,381,026,000 for trade receivables during the current year.

The movements of the provision for impairment of trade receivables are as follows:

	2019 RMB'000	2018 RMB'000
At 31 December	6,553,937	6,966,530
Impact of first time adoption of HKFRS 9	—	171,228
At 1 January	6,553,937	7,137,758
Impairment losses charged	1,575,046	1,243,341
Impairment losses reversed	(562,941)	(1,521,078)
Amount written off as uncollectible	(16,333)	(47,808)
Transfer to provision for impairment of trade receivables at FVOCI	-	(258,276)
Realised losses on derecognition of account receivables	(168,683)	-
At 31 December	7,381,026	6,553,937

The creation and release of provision for impaired receivables have been included in 'net impairment losses on financial and contract assets' in the consolidated statement of profit or loss.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

FOR THE YEAR ENDED 31 DECEMBER 2019

30. TRADE RECEIVABLES (CONTINUED)

The amounts due from related parties included in trade receivables are analysed as follows:

	2019 RMB'000	2018 RMB'000
The ultimate holding company	13,676	16,299
Associates	22,222	81,557
SEC group companies *	350,698	372,707
Joint ventures	-	1,544
Other related companies	866,512	991,704
	1,253,108	1,463,811

* SEC group companies are defined as the Group's related companies over which SEC is able to exert control.

The amounts due from related parties are on credit terms similar to those offered to the major customers of the Group.

In 2019, the Group factored trade receivables with a total net carrying amount of RMB3,624,451,000 of trade receivables (31 December 2018: RMB6,278,759,000) to reduce late payment and credit risk. The Group therefore derecognised the transferred assets in their entirety from its balance sheet.

The carrying amounts of the Group's trade receivables are denominated in the following currencies:

	2019 RMB'000	2018 RMB'000
GBP	19,173	-
EUR	190,921	540,868
USD	4,377,974	4,273,546

As of 31 December 2019, the carrying original value, loss allowance and net carrying value of the Group's trade receivables included a receivable from a country with sovereign financial risk of RMB2,870,973,000, RMB1,174,559,000 and RMB1,696,414,000 respectively (31 December 2018: RMB3,370,518,000, RMB1,000,424,000 and RMB2,370,094,000 respectively).

31. DISCOUNTED NOTES RECEIVABLE

A maturity profile of the discounted notes receivable of the Group as at the reporting date is as follows:

	2019 RMB'000	2018 RMB'000
Within 3 months	244,891	274,796
Over 3 months but within 6 months	117,085	53,587
Between 6 months and 1 year	7,500	-
	369,476	328,383
Less: Provision for discounted notes receivable	(18,961)	(10,466)
	350,515	317,917

The movements in the provision for impairment of discounted notes receivable are as follows:

	2019 RMB'000	2018 RMB'000
At 1 January	10,466	6,183
Provision	8,495	4,283
At 31 December	18,961	10,466

Provision for and reversal of impairment of discounted notes receivable were included in the consolidated statement of profit or loss as administrative expenses (Note 8).

Discounted notes receivable due from related parties are analysed as follows:

	2019 RMB'000	2018 RMB'000
SEC group companies	319,582	240,780
Associates	14,766	30,505
Joint ventures	-	949
	334,348	272,234

The annual interest rates of discounting services provided to related parties ranged from 3.12% to 4.08% for the year ended 31 December 2019 (2018: 4.14% to 5.46%)

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

FOR THE YEAR ENDED 31 DECEMBER 2019

32. NOTES RECEIVABLE

A maturity profile of the notes receivable, band on the due dates, as at the end of the reporting period is as follows:

	2019 RMB'000	2018 RMB'000
Within 3 months	2,332,697	1,862,605
Over 3 months but within 6 months	2,482,577	2,328,499
Over 6 months but within 1 year	1,406,515	1,293,940
	6,221,789	5,485,044

Notes receivable due from related parties included above are analysed as follows:

	2019 RMB'000	2018 RMB'000
SEC group companies	24,484	100,202
Associates	-	12,320
Joint ventures	-	428
	24,484	112,950

As at 31 December 2019, no notes receivable (2018: Nil) have been pledged to banks as security for issuance of notes payable. Besides, the balances are non-interest-bearing and repayable as and when the notes fall due.

As at 31 December 2019, RMB1,056,710,000 of notes receivable discounted by the Group companies on a with recourse basis with Finance Company (2018: RMB1,619,788,000) are included in the consolidated balance of notes receivable.

33. PREPAYMENTS, DEPOSITS AND OTHER RECEIVABLES

	2019 RMB'000	2018 RMB'000
Prepayments		
- to third parties	17,730,053	11,235,207
- to the ultimate holding company	2	783
- to joint ventures	372,508	74,092
- to associates	365,581	312,626
- to SEC group companies	10,528	163,702
- to other related companies	285,744	80,543
Deposits and other receivables		
- due from third parties	4,317,853	2,322,160
- due from the ultimate holding company	4,082	5,370
- due from joint ventures	29,359	1,103
- due from associates	2,003	2,001,342
- due from SEC group companies	3,156	2,887
- due from other related companies	19	438,868
Dividend receivables	82,189	270,287
Other current assets	894,528	416,027
VAT deductible	975,366	878,431
	25,072,971	18,203,428
Less: Provision for impairment	(184,407)	(159,239)
	24,888,564	18,044,189

The balances due from related parties are mainly related party borrowings.

The movements in the provision for impairment of deposits and other receivables are as follows:

	2019 RMB'000	2018 RMB'000
At 1 January	159,239	134,106
Net impairment losses recognised	25,168	25,133
At 31 December	184,407	159,239

Provision for and reversal of impairment of prepayments, deposits and other receivables were included in the net impairment losses on financial and contract assets on the consolidated statement of profit or loss.

The Group has made a provision for impairment for dividends receivable, interest receivables and accounts receivable from related parties. On 31 December 2019, the above receivables were in the first stage, and no major provision for impairment was made.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

FOR THE YEAR ENDED 31 DECEMBER 2019

33. PREPAYMENTS, DEPOSITS AND OTHER RECEIVABLES (CONTINUED)

The analysis of the bad debt provision of other receivables combined with bad debt provision on December 31, 2019 is as follows:

	2019			2018		
	Book Value	Bad debt provision		Book Value	Bad debt provision	
	Amount	Amount	Ratio	Amount	Amount	Ratio
Stage 1 - expected credit loss in the next 12 months						
Amounts due from third-party suppliers within one year	3,432,558	22,292	0%-2%	1,774,488	18,522	0%-2%
Stage 3 - the expected credit loss for the entire duration						
One to two years	408,639	4,419	1%-5%	112,261	5,827	2%-10%
Two to three years	109,840	13,235	8%-15%	171,007	20,973	8%-15%
More than three years	266,420	144,461	18%-100%	170,430	113,917	18%-100%
	784,899	162,115		453,698	140,717	

As of December 31, 2019, the Group had no other receivables in the second stage.

Changes in bad debt provision for other receivables are as follows:

	Stage 1	Stage 3	Total
	Expected credit loss within 12 months	Expected credit loss for the entire period	
01 January 2019	18,522	140,717	159,239
Increase	3,770	21,398	25,168
31 December 2019	22,292	162,115	184,407

34. FINANCIAL LIABILITIES AT FAIR VALUE THROUGH PROFIT OR LOSS

	2019 RMB'000	2018 RMB'000
Financial liabilities at fair value through profit or loss	33,097	104,540

As at 31 December 2019, financial liabilities at fair value through profit or loss are the fair value of the shares held by other investors of the structured entity incorporated by the Group.

35. DUE FROM CENTRAL BANK, RESTRICTED DEPOSITS, TIME DEPOSITS WITH ORIGINAL MATURITY OVER THREE MONTHS AND CASH AND CASH EQUIVALENTS

	2019 RMB'000	2018 RMB'000
Cash and bank balances	37,347,528	24,096,781
Time deposits	14,993,981	15,801,296
	52,341,509	39,898,077
Less: Restricted deposits	(1,583,225)	(702,980)
Cash and bank	50,758,284	39,195,097
Less: Non-restricted time deposits with original maturity over three months	(8,326,808)	(7,352,953)
Cash and cash equivalents	42,431,476	31,842,144
Due from central bank	2,459,256	2,577,728

As at 31 December 2019, restricted deposits amounted to RMB1,583,225,000 (2018: RMB702,980,000) were held at bank as reserve for issuance letters of credit deposit, bank acceptance deposit and letters of guarantee deposit.

The transactions related to those non-restricted time deposits with original maturity over three months when acquired are stated as investing activities in the consolidated statement of cash flows.

The amount due from the Central Bank as at 31 December 2019 comprised deposit of RMB2,425,031,000 (2018: RMB2,496,715,000) and USD4,906,000 equivalent to RMB34,225,000 (2018: USD11,804,000 equivalent to RMB81,013,000) with the Central Bank, including a statutory reserve of 6% and 5% (2018: 7% and 5%) for RMB and foreign currency, respectively, on customer deposit held by Finance Company.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

FOR THE YEAR ENDED 31 DECEMBER 2019

35. DUE FROM CENTRAL BANK, RESTRICTED DEPOSITS, TIME DEPOSITS WITH ORIGINAL MATURITY OVER THREE MONTHS AND CASH AND CASH EQUIVALENTS (CONTINUED)

The Group's and the Company's cash and bank balances and time deposits are denominated in RMB at the end of each reporting date, except for the following:

	2019		2018	
	Original currency in '000	RMB'000	Original currency in '000	RMB'000
Cash and bank balances:				
United States dollars ("USD")	437,093	3,049,248	333,294	2,287,463
Pakistan rupee ("PKR")	11,003,255	496,907	-	-
Euro ("EUR")	56,008	437,731	74,051	581,097
Japan yen ("JPY")	61,529	3,943	141,616	8,766
Hong Kong dollars ("HKD")	272,154	243,790	613,715	537,737
Indian rupee ("INR")	58,840	5,760	44,878	4,398
Vietnam dong ("VND")	17,795,605	5,358	131,153,333	39,346
Malaysian ringgit ("MYR")	36,220	61,523	24,924	41,072
Indonesian rupiah ("IDR")	22,295,352	11,198	-	-
GBP	10,121	92,608	7,663	66,482
Other	3,058,954	269,868	1,201,158	79,877
Time deposits:				
USD	27,286	190,353	13,100	89,222
Indian rupee ("INR")	530,000	51,887	530,000	52,025
Vietnam dong ("VND")	4,000,000	1,204	-	-
Central bank reserve:				
USD	4,906	34,225	11,804	81,013
Restricted deposits:				
USD	209	1,458	-	-
EURO	34	268	-	-

RMB is not freely convertible into other currencies. However, according to Foreign Exchange Control Regulations and Administration of Settlement, Sale and Payment of Foreign Exchange Regulations in China, the Group is permitted to exchange RMB for other currencies through banks authorised to conduct foreign exchange business.

Cash at banks earns interest at floating rates based on daily bank deposit rates. Time deposits are made for varying periods depending on the immediate cash requirements of the Group, and earn interest at the respective time deposit rates. The bank balances and pledged deposits are deposited with creditworthy banks with no recent history of default.

36. ASSETS CLASSIFIED AS HELD FOR SALE

	2019		
	Book value before presented in assets held for sale	Impairment after presented in assets held for sale	Book value
	RMB'000	RMB'000	RMB'000
Intangible assets	9,788	-	9,788

37. TRADE PAYABLES AND NOTES PAYABLE

(a) Trade payables

The aging analysis, based on the invoice date, of the trade payables as at balance sheet dates is as follows:

	2019	2018
	RMB'000	RMB'000
Within 3 months	35,975,627	22,081,283
Over 3 months but within 6 months	5,513,777	4,383,890
Over 6 months but within 1 year	4,925,481	5,201,144
Over 1 year but within 2 years	6,466,453	2,983,805
Over 2 years but within 3 years	1,676,034	1,699,875
Over 3 years	3,365,283	2,530,817
	57,922,655	38,880,814

The amounts due to related parties included in trade payables are analysed as follows:

	2019	2018
	RMB'000	RMB'000
The ultimate holding company	142	1,290
Associates	299,467	265,451
Joint ventures	151,347	52,302
SEC group companies	279,514	573,529
Other related companies	153,883	234,387
	884,353	1,126,959

The trade payables are non-interest-bearing and are normally settled on 90-day terms. The amounts due to related parties are negotiated on credit terms similar to those offered by the major suppliers of the Group.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

FOR THE YEAR ENDED 31 DECEMBER 2019

37. TRADE PAYABLES AND NOTES PAYABLE (CONTINUED)

(a) Trade payables (continued)

The carrying amounts of the Group's trade payables are denominated in the following currencies:

	2019 RMB'000	2018 RMB'000
USD	302,896	73,073
JPY	6,472	8,458
EUR	1,484	994,090
GBP	-	1,023
CHF	-	19,128
MYR	12,283	37,157
PKR	-	41,115
KWD	-	64,086
RSD	25,983	-

(b) Notes payable

The aging analysis of the Group's notes payable as at the end of the reporting period is as follows:

	2019 RMB'000	2018 RMB'000
Within 3 months	3,717,634	2,963,409
Over 3 months but within 6 months	2,712,716	2,641,550
Over 6 months but within 1 year	2,076,643	782,539
	8,506,993	6,387,498

The amounts due to related parties included in notes payable are analysed as follows:

	2019 RMB'000	2018 RMB'000
Associates	126,041	80,620
Joint ventures	-	59
SEC group companies	26,897	25,983
	152,938	106,662

Notes payable are non-interest-bearing.

38. DEFERRED GOVERNMENT GRANTS

	2019 RMB'000	2018 RMB'000
Deferred government grants	1,631,710	1,419,053
Less: Non-current government grants	(1,631,710)	(1,004,508)
Current deferred government grants	-	414,545

39. OTHER PAYABLES AND ACCRUALS

	2019 RMB'000	2018 RMB'000
Advances from customers	524,494	346,506
Other payables	10,607,700	9,398,702
Dividends payable to non-controlling shareholders	120,025	304,393
Accruals	5,565,634	3,862,911
Payrolls payable	3,616,430	3,052,431
Due to the ultimate holding company	585,456	25,457
Due to associates	379,334	36,938
Due to Joint ventures	30,857	10,042
Due to SEC group companies	32,519	18,286
Due to other related companies	128,749	110,004
	21,591,198	17,165,670

The Group's balances with related parties are unsecured, non-interest-bearing and repayable on demand or within one year.

40. CUSTOMER DEPOSITS

	2019 RMB'000	2018 RMB'000
Deposits from the ultimate holding company	2,304,341	1,505,901
Deposits from associates	68,785	44,622
Deposits from SEC group companies	2,511,685	2,566,194
Deposits from other related companies	2,192,245	97,290
Deposits from non-related parties	131,899	217,754
	7,208,955	4,431,761
Repayable:		
On demand	6,503,455	3,821,261
Within 3 months	215,000	215,000
Over 3 months but within 1 year	490,500	395,500
	7,208,955	4,431,761

The annual interest rates of customer deposits provided to related parties range from 0.35% to 2.31% (2018: 0.35% to 2.31%).

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

FOR THE YEAR ENDED 31 DECEMBER 2019

41. BORROWINGS

	2019			2018		
	Effective interest rate (%)	Maturity	RMB'000	Effective interest rate (%)	Maturity	RMB'000
Current bank loans						
- Trust loan	1.75-5.44	2020	7,150,667	1.8-5.5	2019	6,768,648
- Trust loan	8%-15% below the base rate	2020	5,024,000	10% above the base rate	2019	1,195,000
- Trust loan	3 months Euribor + 1.35%	2020	220,293	-	-	-
- Mortgage loan	4.75-5.00	2020	234,000	4.57-5.44	2019	169,991
- Guaranteed loan	4.25-5.22	2020	3,699,244	-	-	-
- Guaranteed loan	25% above the base rate	2020	1,739	-	-	-
- Discount Loan	4.35	2020	81,833	-	-	-
-Pledge loan	-	-	-	3 months Euribor + 1.35%	2019	126,733
-Factoring of trade receivables	8.15	2020	272,168	5.00	2019	282,590
Current portion of long-term bank loan						
-Trust loan	4.99-5.46	2020	409,220	3.3-5.46	2019	1,563,155
-Trust loan	Libor+365bp	2020	31,407	Libor+365bp	2019	30,898
-Trust loan	3 months Euribor + 1.2%	2020	68,202	-	-	-
-Trust loan	10% below the base rate	2020	2,000	-	-	-
-Trust loan	5% below the two-year base rate	2020	494,800	5% below the two-year base rate	2019	200
-Trust loan	10% below the five-year base rate	2020	17,500	-	-	-
-Trust loan	Export Seller's Credit Interest Rate - Level 2	2020	140,000	Export Seller's Credit Interest Rate - Level 2	2019	69,800
-Trust loan	5%-10% below the three-year base rate	2020	29,000	5%-10% below the three-year base rate	2019	10,200
-Guaranteed loan	4.41-6.54	2020	908,522	4.66	2019	500
-Guaranteed loan	-	-	-	0.05% below the base rate	2019	20,000
- Pledge loan	4.75-5.27	2020	1,417,171	3 months Euribor + 1.75%	2019	55,751
- Mortgage loan	2.70-5.50	2020	135,751	4.28	2019	57,650
- Factoring of trade receivables	4.75	2020	65,050	-	-	-
			20,402,567			10,351,116
Non-current bank loans						
-Trust loan	-	-	-	Base rate	2020	730,000
-Trust loan	-	-	-	PSL rate + 130BP	2020	750,000
-Trust loan	-	-	-	5% below the two-year base rate	2020	494,800
-Trust loan	-	-	-	Higher than or equal to general Export Seller's Credit Interest Rate	2020	750,000
-Trust loan	4.75-5.27	2021	184,260	5.23-5.46	2020	288,400

41. BORROWINGS (CONTINUED)

	2019			2018		
	Effective interest rate (%)	Maturity	RMB'000	Effective interest rate (%)	Maturity	RMB'000
- Trust loan	5%-10% below the three-year base rate	2021	983,000	5%-10% below the three-year base rate	2021	3,029,000
- Trust loan	3.31-5.23	2022	569,028	4.99	2021	30,396
- Trust loan	8% below the three-year base rate	2022	65,000	-	-	-
- Trust loan	15% below the three-year base rate	2022	490,000	-	-	-
- Trust loan	Export Seller's Credit Interest Rate - Level 2	2023	240,000	Export Seller's Credit Interest Rate - Level 2	2023	380,000
- Trust loan	10% below the five-year base rate	2024	332,000	-	-	-
- Trust loan	10% below the base rate	2024	178,000	-	-	-
- Trust loan	3 months Euribor + 1.2%	2024	655,852	-	-	-
- Mortgage loan	4.91	2021	27,218	-	-	-
- Mortgage loan	-	-	-	6.37	2025	59,000
- Mortgage loan	2.70	2031	46,689	2.72	2031	50,473
- Guaranteed loan	4.75-4.99	2021	1,102,809	-	-	-
- Guaranteed loan	3 months Euribor + 1.5%	2022	774,464	-	-	-
- Guaranteed loan	4.57	2022	2,500,000	-	-	-
- Guaranteed loan	4.66	2025	174,859	4.66	2025	179,358
- Guaranteed loan	4.66	2026	9,534	4.90	2026	36,205
- Guaranteed loan	3.15-5.11	2027	1,355,878	3.15-4.79	2027	504,549
- Guaranteed loan	4.41	2029	100,000	-	-	-
- Guaranteed loan	5.64	2031	200,000	-	-	-
- Pledge loan	-	-	-	3 months Euribor + 2.00%	2020	555,655
- Pledge loan	4.99	2021	15,574	-	-	-
- Pledge loan	4.65-5.37	2022	198,715	-	-	-
- Pledge loan	4.9-5.39	2028	566,800	4.9-5.39	2028	585,000
- Pledge loan	4.90	2029	178,000	-	-	-
- Pledge loan	-	-	-	4.75	2030	1,166,000
- Pledge loan	4.90	2034	200,000	-	-	-
- Factoring of trade receivables	4.75	2022	120,738	-	-	-
			11,268,418			9,588,836

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

FOR THE YEAR ENDED 31 DECEMBER 2019

41. BORROWINGS (CONTINUED)

	2019 RMB'000	2018 RMB'000
Analysed into:		
Bank loans repayable		
within one year or demand	20,402,567	10,351,116
in the second year	2,312,861	3,568,855
in the third to fifth year inclusive	6,123,797	3,439,396
beyond five years	2,831,760	2,580,585
	31,670,985	19,939,952

All borrowings are denominated in RMB, except for the following bank loans:

	2019		2018	
	Original currency in '000	RMB equivalent RMB'000	Original currency in '000	RMB equivalent RMB'000
Foreign currency borrowing balances				
USD	430,833	3,005,579	267,733	1,821,611
EUR	233,729	1,826,707	146,339	1,121,675
CHF	534	3,847	-	-
HKD	828,000	741,706	450,000	394,290

As at 31 December 2019, certain of the Group's bank loans are secured by mortgages over certain of the Group's non-current assets with a net carrying amount of approximately RMB571,758,000 (31 December 2018: non-current assets with net carrying amount RMB554,128,000) (Note 14).

As at 31 December 2019, certain of the Group's bank loans are secured by mortgages over certain of the Group's inventory with a net carrying amount of approximately RMB400,000,000 (31 December 2018: none) (Note 28).

As at 31 December 2019, RMB996,162,000 (31 December 2018: RMB570,000,000) of the Group's bank loans are secured by pledges over certain of the Group's prepaid land lease payments with a net carrying amount of approximately RMB84,741,000 (31 December 2018: RMB40,825,000) and pledges over the charge right of project after completion (Note 17).

41. BORROWINGS (CONTINUED)

As at 31 December 2019, none (31 December 2018: RMB738,139,000)of the Group's bank loans are secured by mortgages over certain of the Group's subsidiary shares.

As at 31 December 2019, the trade receivables were factored with recourse to obtain certain bank facilities RMB457,957,000 (31 December 2018: RMB282,590,000) (Note 30).

	Carrying amount		Fair values	
	2019	**2018**	**2019**	**2018**
	RMB'000	**RMB'000**	**RMB'000**	**RMB'000**
Floating rate bank loans	3,893,175	6,689,454	3,893,175	6,689,454
Fixed rate bank loans	7,375,244	2,899,382	7,340,593	2,880,177
	11,268,419	9,588,836	11,233,768	9,569,631

The fair value of current borrowings equals their carrying amount, as the impact of discounting is not significant. The fair values are based on cash flows discounted using a rate based on the borrowing rate of 4.75% (2018: 4.75%) and are within level 2 of the fair value hierarchy.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

FOR THE YEAR ENDED 31 DECEMBER 2019

42. PROVISIONS

	Product warranty RMB'000	Onerous contracts provision RMB'000	Early retirement benefits and staff severance costs RMB'000	Others RMB'000	Total RMB'000
At 1 January 2019	2,296,405	1,731,336	146,143	239,442	4,413,326
Additional provisions	1,079,180	1,192,858	61,881	89,722	2,423,641
Reversal during the year	(328,362)	(596,753)	-	(63,282)	(988,397)
Amounts utilised during the year	(366,819)	(678,829)	(76,509)	(32,783)	(1,154,940)
At 31 December 2019	2,680,404	1,648,612	131,515	233,099	4,693,630
Less: current portion - repayable within 12 months	1,244,373	1,648,612	23,830	233,099	3,149,914
Non-current portion	1,436,031	-	107,685	-	1,543,716

	Product warranty RMB'000	Onerous contracts provision RMB'000	Early retirement benefits and staff severance costs RMB'000	Others RMB'000	Total RMB'000
At 1 January 2018	2,074,504	1,898,443	155,175	125,035	4,253,157
Additional provisions	903,350	1,128,950	85,526	166,950	2,284,776
Reversal during the year	(210,575)	(284,120)	-	(10,000)	(504,695)
Amounts utilised during the year	(470,874)	(1,011,937)	(94,558)	(42,543)	(1,619,912)
At 31 December 2018	2,296,405	1,731,336	146,143	239,442	4,413,326
Less: current portion - repayable within 12 months	2,140,077	1,731,336	21,304	239,442	4,132,159
Non-current portion	156,328	-	124,839	-	281,167

Product warranty provision

The Group provides warranties to its customers on certain products and undertakes to repair or replace items that fail to perform satisfactorily. The amount of the provision for warranties is estimated based on the sales volume and past experience on the level of repairs and returns. The estimation basis is reviewed on an ongoing basis and revised where appropriate.

42. PROVISIONS (CONTINUED)

Onerous contracts provision

The Group has entered into several contracts in respect of the sales of goods and construction services. Under these contracts, the unavoidable costs of meeting the obligations have exceeded the economic benefits expected to be received as at 31 December 2019. Provision has been made for these onerous contracts based on the estimated minimum net cost of exiting from the contracts.

Early retirement benefits and staff severance costs

The Group implemented plans for early retirement, termination of employment or offer to encourage voluntary redundancy for certain employees.

43. BONDS

	2019			2018		
	Effective interest rate (%)	Due date	RMB'000	Effective interest rate (%)	Due date	RMB'000
Bonds payable due within one year						
- Electric euro bond (b)	1.19	2020	4,688,134	-	-	-
Bonds payable due after one year						
- Electric convertible bond (a)	5.03	2021	4,437,675	5.03	2021	5,572,501
- Electric euro bond (b)	-	-	-	1.19	2020	4,704,244
- 18 Electric MTN001(c)	4.39	2023	2,480,052	4.39	2023	2,472,500
			6,917,727			12,749,245
			11,605,861			12,749,245

	2019	2018
	RMB'000	RMB'000
Analysed as：		
Within one year or on demand	4,688,134	-
Within two years	4,437,675	4,704,244
Within three to five years, including head and tail	2,480,052	8,045,001
	11,605,861	12,749,245

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

FOR THE YEAR ENDED 31 DECEMBER 2019

43. BONDS (CONTINUED)

	2019		2018	
	Original currency in '000	RMB equivalent RMB'000	Original currency in '000	RMB equivalent RMB'000
Balance of bonds payable denominated in foreign currency				
EUR	599,851	4,688,135	599,473	4,704,244

(a) On 2 February 2015, the Group issued a convertible bond due in 2021 with the principal amounting to RMB6 billion. Such convertible bond could be converted into the Company's A share at RMB10.72 per share since 3 August 2015, at RMB10.66 per share due to the distribution of cash dividends for the year ended at 31 December 2014 on July 2015, at RMB10.65 per share since 28 November 2016 due to the issue of new shares to acquire the business under the common control on 29 August 2016, at RMB10.46 per share since 24 October 2017 due to the issue of news to acquire the business under the common control on 19 October 2017, at RMB10.37 per share since 9 November 2017 due to the issue of new shares, and at RMB10.28 per share since 28 August 2018, at RMB5.19 per share since 12 December 2018. Interest is accrued and paid on a yearly basis and the principal and the interest will be repaid upon maturity. The nominal interest rates are: 0.2% for the first year, 0.5% for the second year, 1.0% for the third year, 1.5% for the fourth year, 1.5% for the fifth year and 1.6% for the sixth year.

The principal of the convertible bond, deducted by issuance costs, was divided into two parts on the issuance of the bond. Liability portion of RMB4,745,903,000 was recorded into bonds payable and equity of RMB1,214,919,000 was credited into capital surplus.

(b) On 22 May 2015, the Group's wholly-owned subsidiary, SEC Newage Co., Ltd., issued a bond of EUR600 million, Eurobonds, secured by the Group, at Ireland Stock Exchange, with a term of five years and annual interest rate of 1.125%.

The Group will pay the principal and interest of the bond of EUR600 million on 22 May 2020.

(c) On 13 December 2018, the Group issued a middle-term note of RMB2.5 billion, abbreviated as 18 Electric MTN001, with a term of five years and annual interest rate of 4.15%.

44. OTHER NON-CURRENT LIABILITIES

	2019 RMB'000	2018 RMB'000
Finance leases deposits	672,640	594,743
Defined benefit obligations	150,760	120,835
Shareholder loan	918,600	-
Relocation compensation	13,853	61,529
Deferred research and development subsidies	37,203	41,890
Due to SEC group companies	1,320	1,320
Others	81,925	189,009
	1,876,301	1,009,326

45. SHARE CAPITAL

Shares

	2019 RMB'000	2018 RMB'000
Registered, issued and fully paid:		
A shares of RMB1.00 each	12,179,551	11,752,276
H shares of RMB1.00 each	2,972,912	2,972,912
Total	15,152,463	14,725,188

A summary of the transactions during the year with reference to the movements in the Company's issued capital and share premium account is as follows:

	Number of shares in issue RMB'000	Issued capital RMB'000	Share premium RMB'000	Total RMB'000
At 31 December 2017, 1 January 2018	14,725,180,717	14,725,181	12,697,389	27,422,570
Additions	6,742	7	24	31
At 31 December 2018, 1 January 2019	14,725,187,459	14,725,188	12,697,413	27,422,601
Additions	427,274,959	427,275	3,093,491	3,520,766
31 December 2019	15,152,462,418	15,152,463	15,790,904	30,943,367

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

FOR THE YEAR ENDED 31 DECEMBER 2019

46. RESERVES

The amounts of the Group's reserves and the movements therein for the current and prior years are presented in the consolidated statement of changes in equity.

Capital reserve

The capital reserve of the Group includes the share premium and the non-distributable reserves of the Company and its subsidiaries recognised in accordance with the accounting and financial regulations of the PRC.

Contributed surplus

The Group's contributed surplus represents the excess of (i) the Company's cost of investments in the net assets of subsidiaries and an associate acquired from SEC as part of the Group reorganisation over (ii) the aggregate amount of the paid-up capital of these subsidiaries attributable to the Group and the carrying value of the Group's investment in the associate upon the establishment of the Company.

Surplus reserves

In accordance with the PRC Company Law and the Group companies' articles of association, the Company and its subsidiaries are required to transfer a certain percentage of their net profits after tax to the surplus reserves, comprising the statutory surplus reserve and discretionary surplus reserve. Subject to certain restrictions set out in the relevant PRC regulations and in the Group companies' articles of association, the statutory surplus reserve may be used either to offset losses, or to be converted to share capital, and the discretionary surplus reserve is set aside to cover losses. These reserves cannot be used for purposes other than those for which they are created and are not distributable as cash dividends.

Distributable reserves

As at 31 December 2019, the Company's reserves available for distribution, calculated in accordance with the relevant regulations, amounted to RMB11,281,249,000 (2018: RMB10,804,654,000).

The amount for which the Company can legally distribute by way of a dividend is determined based on the lower of the retained profits determined in accordance with generally accepted accounting principles in the PRC and those under HKFRSs.

46. RESERVES (CONTINUED)

Movement of other comprehensive income

	Other Comprehensive Income in balance sheet			Other Comprehensive Income in income statement				
	31 December 2018	After-tax belonging to the parent company	31 December 2019	Amount before income tax	Less: other comprehensive income carried out this year	Less: income tax expense	After-tax belonging to the parent company	After tax belonging to minority shareholders
Items that will not be reclassified to profit or loss								
Remeasurements of defined benefit obligations	4,157	(6,267)	(2,110)	(16,314)	-	(4,931)	(6,267)	(5,116)
Items that may be reclassified to profit or loss								
Changes in the fair value of debt instruments at fair value through other comprehensive income	32,930	16,400	49,330	182,727	158,498	6,057	16,400	1,772
Changes in the fair value of trade receivables at fair value through other comprehensive income	(40,764)	(29,043)	(69,807)	(795,495)	(694,199)	(28,688)	(29,043)	(43,565)
Gains/(losses) on cash flow hedges	17,686	1,436	19,122	1,995	-	559	1,436	-
Exchange differences on translation of foreign operations	(273,196)	130,381	(142,815)	136,403	-	-	130,381	6,022
Gains on net investment hedging	116,222	14,982	131,204	14,982	-	-	14,982	-
Share of other comprehensive income of associates and joint ventures accounted for using the equity method	-	(30,908)	(30,908)	(30,908)	-	-	(30,908)	-
Others	10,397	-	10,397	-	-	-	-	-
	(132,568)	96,981	(35,587)	(506,610)	(535,701)	(27,003)	96,981	(40,887)

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

FOR THE YEAR ENDED 31 DECEMBER 2019

46. RESERVES (CONTINUED)

Movement of other comprehensive income (continued)

	Other Comprehensive Income in balance sheet					Other Comprehensive Income in income statement				
	31 December 2017	Changes in accounting policies	1 January 2018	After-tax belonging to the parent company	31 December 2018	Amount before income tax in current year	Less: other comprehensive income carried out this year	Less: income tax expense	After-tax belonging to the parent company	After tax belonging to minority shareholders
Items that will not be reclassified to profit or loss										
Remeasurements of defined benefit obligations	3,816	-	3,816	341	4,157	900	-	280	341	279
Items that may be reclassified to profit or loss										
Changes in the fair value of debt instruments at fair value through other comprehensive income	—	61,172	61,172	(28,242)	32,930	211,640	254,430	(10,697)	(28,242)	(3,851)
Changes in the fair value of trade receivables at fair value through other comprehensive income	—	—	—	(40,764)	(40,764)	(135,879)	-	(33,970)	(40,764)	(61,145)
Change in the fair value of available-for-sale financial assets	65,599	(65,599)	—	—	—	—	—	—	—	—
Gains/(losses) on cash flow hedges	27,517	-	27,517	(9,831)	17,686	(12,663)	1,297	(3,546)	(9,831)	(583)
Exchange differences on translation of foreign operations	(250,684)	-	(250,684)	(22,512)	(273,196)	(22,382)	-	-	(22,512)	130
Gains on net investment hedging	95,960	-	95,960	20,262	116,222	20,262	-	-	20,262	-
Others	10,397	-	10,397	-	10,397	-	-	-	-	-
	(47,395)	(4,427)	(51,822)	(80,746)	(132,568)	61,878	255,727	(47,933)	(80,746)	(65,170)

47. CASH FLOW INFORMATION

(a) Cash flows from operating activities

	Year ended 31 December	
	2019 RMB'000	2018 RMB'000
Cash flows from operating activities		
Profit before tax	7,263,034	6,008,116
Adjustments for:		
Interest income on debt investments	(26,074)	(18,966)
Dividend income from equity investments and investment funds	(183,645)	(16,546)
(Gains)/losses on disposal of items of property, plant and quipment, net	(157,735)	1,996
Losses on disposal of goodwill	-	12,483
Gains on disposal of land use rights	(1,694,024)	(48,982)
Gains on disposal of subsidiaries	(122,647)	(104,663)
Gains on disposal of associates	(9,325)	(7,668)
Investments at fair value through profit or loss:		
Unrealised fair value gains, net	(28,640)	(92,122)
Realised fair value (gains)/losses, net	(55,975)	72,955
Derivative financial instruments - transactions not qualifying as hedges:		
Unrealised fair value losses/(gains), net	4,022	(141)
Income on debt investments	(158,498)	(254,430)
Realised gains on available-for-sale investments (transferred from equity)	-	-
Other losses/(gains)	16,086	(8,477)
Depreciation of property, plant and equipment	1,674,266	1,640,624
Depreciation of investment properties	88,108	84,566
Depreciation of right-of-use asset	595,149	—
Amortisation of prepaid land lease payments	—	252,875
Amortisation of intangible assets	320,686	131,508
Depreciation of other non-current assets	104,144	74,208
Early retirement benefits and staff severance costs	79,752	81,872
Write-down of inventories to net realisable value	1,029,459	1,279,807
	1,475,109	3,080,899

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

FOR THE YEAR ENDED 31 DECEMBER 2019

47. CASH FLOW INFORMATION (CONTINUED)

(a) Cash flows from operating activities (continued)

	Year ended 31 December	
	2019 RMB'000	2018 RMB'000
Cash flows from operating activities (continued)		
Share of losses of joint ventures	83,082	167,798
Share of profits of associates	(842,411)	(833,944)
Impairment/(Reversal) of trade receivables and other receivables	1,037,273	(244,299)
Impairment of contract assets	6,684	372,434
Impairment of discounted notes receivable	8,495	4,283
Impairment of items of property, plant and equipment	58,431	27,918
Impairment of notes receivable	44,990	-
Impairment of goodwill	88,566	151,731
Provision for product warranties	750,818	692,775
Provision for onerous contracts	596,105	844,830
Other provisions	45,916	156,950
Finance costs	1,704,660	939,563
Exchange losses/(gains), net	(68,469)	(225,260)
Others	696,064	248,046
	4,210,204	2,302,825
Decrease/(Increase) in inventories	2,007,069	(110,706)
Increase in contract assets	(6,205,295)	(21,423,771)
(Decrease)/Increase in contract liabilities	(1,788,702)	36,566,071
Decrease in construction contracts	-	5,900,697
(Increase)/Decrease in trade receivables and other receivables	(11,882,418)	8,658,335
Increase/(Decrease) in trade payables, notes payable, other payables and accruals	13,823,361	(35,553,722)
Utilisation of product warranty provision and other provisions	(1,154,940)	(1,619,912)
Increase in financial products sold under repurchase agreements	4,050	-
Increase in customer deposits and due from banks	2,777,194	1,107,193
(Increase)/Decrease in loans and payments	(973,685)	581,216
Decrease in deposits with central banks	105,619	689,769
Decrease/(Increase) in repurchased assets	2,277,912	(811,582)
Decrease in lease receivables	45,028	1,735,528
Decrease in deposit funds	-	(32,671)
Cash inflow from operations	11,983,540	7,078,285

47. CASH FLOW INFORMATION (CONTINUED)

(b) Net debt reconciliation

	Year ended 31 December	
	2019	2018
Net Debt	RMB'000	RMB'000
Cash and cash equivalents	42,431,476	31,842,144
Liquid investments (i)	5,907,771	3,619,307
Borrowings - repayable within one year	(20,402,567)	(10,351,116)
Borrowings - repayable after one year	(11,268,418)	(9,588,836)
Bonds - repayable within one year	(4,688,134)	-
Bonds - repayable after one year	(6,917,727)	(12,749,245)
Lease liability	(972,529)	—
Net Debt	4,089,872	2,772,254
Cash and Liquid investments	48,339,247	35,461,451
Gross Debt-fixed interest rates	(34,327,259)	(25,999,743)
Gross Debt-variable interest rates	(9,922,116)	(6,689,454)
Net Debt	4,089,872	2,772,254

(i) Liquid investments comprise current investments that are traded in an active market, being the group's financial assets held at fair value through profit or loss.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

FOR THE YEAR ENDED 31 DECEMBER 2019

47. CASH FLOW INFORMATION (CONTINUED)

(b) Net debt reconciliation(continued)

	Other assets		Liabilities from financing activities					
	Cash and cash equivalents	Liquid invest-ments	Borrowings due within 1 year	Borrowings due after 1 year	Bonds due within 1 year	Bonds due after 1 year	Lease Liability	Total
	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000
Net debt as at 1 January 2018	22,469,071	75,995	(3,224,101)	(4,144,184)	(1,599,506)	(10,058,027)	—	3,519,248
Cash flows	9,289,185	3,543,312	(5,863,039)	(6,714,221)	1,600,000	(2,472,500)	—	(617,263)
Foreign exchange adjustments	83,888	-	(3,716)	(6,191)	-	(26,959)	—	47,022
Other non-cash movements	-	-	-	-	(494)	(191,759)	—	(192,253)
Liabilities due after 1 year transferred to due within 1 year	-	-	(1,334,760)	1,334,760	-	-	—	-
Disposal of subsidiary	-	-	74,500	-	-	-	—	74,500
Acquisition of subsidiary	-	-	-	(59,000)	-	-	—	(59,000)
Net debt as at 31 December 2018	31,842,144	3,619,307	(10,351,116)	(9,588,836)	-	(12,749,245)	—	2,772,254
Recognised on adoption of HKFRS 16 (see note 2.1.3)	—	—	—	—	—	—	(495,877)	(495,877)
Net debt as at 1 January 2019	31,842,144	3,619,307	(10,351,116)	(9,588,836)	-	(12,749,245)	(495,877)	2,276,377
Cash flows	10,512,283	2,288,464	628,462	(5,122,653)	-	-	348,264	8,654,820
Foreign exchange adjustments	77,049	-		21,693	-	19,064	-	117,806
Other non-cash movements	-	-	2,032,000	-	-	1,124,320	(48,897)	3,107,423
Liabilities due after 1 year transferred to due within 1 year	-	-	(3,931,062)	3,931,062	(4,688,134)	4,688,134	-	-
Disposal of subsidiary	-	-	73,655	114,300	-	-	-	187,955
Acquisition of subsidiary	-	-	(8,854,506)	(623,984)	-	-	(31,314)	(9,509,804)
Acquisition - leases	-	-	-	-	-	-	(744,705)	(744,705)
Net debt as at 31 December 2019	42,431,476	5,907,771	(20,402,567)	(11,268,418)	(4,688,134)	(6,917,727)	(972,529)	4,089,872

48. CONTINGENT LIABILITIES AND FINANCIAL GUARANTEES

(a) As of 31 December 2019, non-financial guarantees issued by financial institutions for contracts awarded to the Group amounted to RMB29,573,434,000 (31 December 2018: RMB27,126,815,000).

(b) As of 31 December 2019, contingent liabilities amounted to RMB260,440,000 relating to pending lawsuits and arbitration (31 December 2018: RMB174,693,000).

(c) As of 31 December 2019, there are no significant contingent liabilities related to the equity of joint ventures and associated enterprises.

(d) On 31 December 2019, the Group provided loan guarantees amounting to RMB351,000,000 to the related parties (31 December 2018: RMB4,351,000,000) and counter guarantee to SEC group of the amount which did not exceed USD167 million, equivalent to RMB1,140 million.

As of 31 December 2019, SEG Finance Company issued non-financial guarantees amounting to RMB581,000(31 December 2018: RMB6,805,000) and bank acceptances bills amounting to RMB1,293,733,000 (31 December 2018: RMB1,193,969,000) for the related parties.

The Group has recognised the provision of RMB121,474,000 for above-mentioned related party transactions.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

FOR THE YEAR ENDED 31 DECEMBER 2019

49. LEASING

As lessor

The Group leases certain of its properties and plant and machinery, under operating lease arrangements. Leases for properties are negotiated for terms ranging from 1 to 20 years and those for plant and machinery are negotiated for terms ranging from 1 to 10 years. The terms of the leases generally also require tenants to pay security deposits and provide for periodic rent adjustments according to the then prevailing market conditions.

As at 31 December 2019, the Group had total future minimum lease receivables under non-cancellable operating leases with its tenants falling due as follows:

	2019 RMB'000	2018 RMB'000
Within one year	157,957	98,643
In the second to fifth years, inclusive	287,240	165,161
After five years	269,982	73,070
	715,179	336,874

50. COMMITMENTS

As at 31 December 2019, the Group had the following capital commitments:

	2019 RMB'000	2018 RMB'000
Contracted, but not provided for:		
In respect of the acquisition of		
- Land and buildings	133,997	195,134
- Plant and machinery	2,624,072	1,313,667
	2,758,069	1,508,801
Authorised, but not contracted for:		
In respect of the acquisition of		
- Plant and machinery	86,604	122,920
	2,844,673	1,631,721

51. BUSINESS COMBINATIONS

(a) Main subsidiaries involved in business combinations involving enterprises not under common control in the current year

Acquiree	Time of acquisition	Acquisition cost RMB'000	Equity acquired (%)	Way of acquisition	Acquisition date	Determination basis for acquisition date	Acquiree's revenue from the acquisition date to end of year RMB'000	Acquiree's net profit from the acquisition date to end of year RMB'000	Acquiree's net cash flows from the acquisition date to end of year RMB'000
Suzhou Thvow Technology Co., Ltd.	1 February 2019	664,943	15%	By controlling the authority of the acquired party	1 February 2019	Control transfer	10,468,586	191,907	643,559
Shanghai Electric Concrete Construction Technology Group Co., Ltd.	1 August 2019	166,892	20.45%	By controlling the authority of the acquired party	1 August 2019	Control transfer	330,042	51,759	70,913
Nantong Weimingquan Construction Engineering Co., Ltd.	2 January 2019	30,000	51.12%	Cash	2 January 2019	Control transfer	151,380	37,372	10
Shanghai Electric Qingyuan (Tianjin) Water Co., Ltd.	1 January 2019	143,838	23%	By controlling the authority of the acquired party	1 January 2019	Control transfer	11,899	321	12,488
Shanghai Electric Fuji Electric Motor Technology Co., Ltd.	1 June 2019	25,254	51%	By controlling the authority of the acquired party	1 June 2019	Control transfer	128,626	3,844	29,085

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

FOR THE YEAR ENDED 31 DECEMBER 2019

51. BUSINESS COMBINATIONS

(b) Details of the costs of combination and goodwill recognised are as follows:

	Suzhou Thvow Technology Co., Ltd	Shanghai Electric Concrete Construction Technology Group Co., Ltd.	Nantong Weimingquan Construction Engineering Co., Ltd.
Costs of combination -			
Cash	-	-	30,000
Long-term equity investments	664,943	161,470	-
Total cost of combination	664,943	161,470	30,000
Less: Share of fair value of the identifiable net assets acquired	341,863	161,470	26,350
Goodwill	323,080	-	3,650

	Shanghai Electric Qingyuan (Tianjin) Water Co., Ltd.	Shanghai Electric Fuji Electric Motor Technology Co., Ltd.
Costs of combination -		
Cash	-	-
Long-term equity investments	143,838	25,254
Total cost of combination	143,838	25,254
Less: Share of fair value of the identifiable net assets acquired	143,838	15,194
Goodwill	-	10,060

51. BUSINESS COMBINATIONS (CONTINUED)

(c) Purchase consideration – cash inflow

	Suzhou Thvow Technology Co., Ltd.	Shanghai Electric Concrete Construction Technology Group Co., Ltd.
Cash	-	-
Less: Balances acquired – Cash and cash equivalents	(1,266,327)	(47,330)
Net inflow of cash – investing activities	1,266,327	47,330

	Shanghai Electric Qingyuan (Tianjin) Water Co., Ltd.	Shanghai Electric Fuji Electric Motor Technology Co., Ltd.
Cash	-	-
Less: Balances acquired – Cash and cash equivalents	(829)	(14,334)
Net inflow of cash – investing activities	829	14,334

Purchase consideration – cash outflow

	Nantong Weimingquan Construction Engineering Co., Ltd.
Cash	(30,000)
Less: Balances acquired – Cash and cash equivalents	-
Net outflow of cash – investing activities	(30,000)

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

FOR THE YEAR ENDED 31 DECEMBER 2019

51. BUSINESS COMBINATIONS (CONTINUED)

(d) Acquiree's assets and liabilities at the acquisition date are analysed below:

Suzhou Thvow Technology Co., Ltd.

	Fair value at the acquisition date RMB'000	Carrying amount at the acquisition date RMB'000	Carrying amount at 31 December 2018 RMB'000
Cash and bank	1,865,757	1,865,757	2,279,995
Prepayments, deposits and other receivables	3,595,864	3,595,864	2,116,000
Trade receivables	8,238,989	8,238,989	8,345,179
Inventories and contract assets	8,791,397	8,791,397	7,113,582
Other current assets	57,462	57,462	56,128
Goodwill	-	2,139,716	2,139,716
Other non-current assets	4,805,942	3,863,732	3,814,152
Less: Loan	9,364,440	9,364,440	9,501,406
Trade payables	9,321,574	9,321,574	7,849,105
Contract liabilities	3,807,531	3,807,531	—
Other liabilities	2,085,626	1,850,073	4,156,955
Net assets	2,776,240	4,209,299	4,357,286
Less: Minority interests	2,434,377	3,658,659	
Net assets obtained	341,863	550,640	

Shanghai Electric Concrete Construction Technology Group Co., Ltd.

	Fair value at the acquisition date RMB'000	Carrying amount at the acquisition date RMB'000	Carrying amount at 31 December 2018 RMB'000
Cash and bank	47,330	47,330	79,797
Prepayments, deposits and other receivables	21,576	21,576	19,257
Trade receivables	113,170	113,170	171,753
Inventories	181,983	165,681	85,973
Other current assets	4,124	4,124	5,125
Property, plant and equipment	239,067	217,044	112,034
Intangible assets	130,979	84,070	64,546
Other non-current assets	39,949	39,949	16,725
Less: Loan	116,516	116,516	21,000
Trade payables	198,842	198,842	163,816
Employee benefits payable	4,645	4,645	3,037
Contract liabilities	40,048	40,048	—
Deferred tax liabilities	12,785	-	-
Other liabilities	1,666	1,666	44,032
Net assets	403,676	331,227	323,325
Less: Minority interests	242,206	198,736	
Net assets obtained	161,470	132,491	

51. BUSINESS COMBINATIONS (CONTINUED)

(d) Acquiree's assets and liabilities at the acquisition date are analysed below (continued):

Nantong Weimingquan Construction Engineering Co., Ltd.

	Fair value at the acquisition date RMB'000	Carrying amount at the acquisition date RMB'000	Carrying amount at 31 December 2018 RMB'000
Intangible assets	31,000	-	—
Less: Deferred tax liabilities	4,650	-	—
Net assets	26,350	-	—
Less: Minority interests	-	-	
Net assets obtained	26,350	-	

Shanghai Electric Qingyuan (Tianjin) Water Co., Ltd.

	Fair value at the acquisition date RMB'000	Carrying amount at the acquisition date RMB'000	Carrying amount at 31 December 2018 RMB'000
Cash and bank	829	829	829
Prepayments, deposits and other receivables	142,694	142,694	142,694
Trade receivables	12,351	12,351	12,351
Property, plant and equipment	358,622	358,622	358,622
Intangible assets	12,867	12,867	12,867
Other non-current assets	44	44	44
Less: Trade payables	114,431	114,431	114,431
Other liabilities	93,336	93,336	93,336
Net assets	319,640	319,640	319,640
Less: Minority interests	175,802	175,802	
Net assets obtained	143,838	143,838	

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

FOR THE YEAR ENDED 31 DECEMBER 2019

51. BUSINESS COMBINATIONS (CONTINUED)

(d) Acquiree's assets and liabilities at the acquisition date are analysed below (continued):

Shanghai Electric Fuji Electric Motor Technology Co., Ltd.

	Fair value at the acquisition date RMB'000	Carrying amount at the acquisition date RMB'000	Carrying amount at 31 December 2018 RMB'000
Cash and bank	14,334	14,334	11,498
Prepayments, deposits and other receivables	10,950	10,950	4,485
Trade receivables	125,055	125,055	139,294
Inventories	2,849	2,849	-
Other non-current assets	1,471	1,471	1,472
Less: Loan	30,000	30,000	30,000
Trade payables	60,749	60,749	61,855
Employee benefits payable	4,527	4,527	7,764
Contract liabilities	16,546	16,546	—
Other liabilities	13,044	13,044	28,688
Net assets	29,793	29,793	28,442
Less: Minority interests	14,599	14,599	
Net assets obtained	15,194	15,194	

52. Disposal of subsidiaries

(a) On 27 February 2019, the Company disposed of its non-wholly-owned subsidiary, Wuxi Power Station Boiler Equipment Co., Ltd. Therefore, the Group excluded Wuxi Power Station Boiler Equipment Co., Ltd. from the consolidation scope since the date of losing control.

Information related to the disposal of subsidiaries in the period are summarised below:

	Amount RMB'000
Consideration obtained from disposal of subsidiaries	7,930
Less: Share of net assets disposed	(13,326)
Losses recognised in consolidated statement of profit or loss	(5,396)

(b) On 10 December 2019, the Company disposed of its non-wholly-owned subsidiary, Shanghai Marine Crankshaft Co., Ltd. Therefore, the Group excluded Shanghai Marine Crankshaft Co., Ltd. from the consolidation scope since the date of losing control.

Information related to the disposal of subsidiaries in the period are summarised below:

	Amount RMB'000
Consideration obtained from disposal of subsidiaries	170,227
Less: Share of net assets disposed	(42,184)
Gains recognised in consolidated statement of profit or loss	128,043

53. RELATED PARTY TRANSACTIONS

The Company is a subsidiary of SEC, which is a state-owned enterprise subject to the control of the State Council of the PRC Government. The State Council of the PRC Government directly and indirectly controls a significant number of entities through its government authorities and other state-owned entities.

(1) In addition to the transactions detailed elsewhere in these financial statements, the Group had the following material transactions with related parties during the year:

	2019 RMB'000	2018 RMB'000
Purchase of materials from:		
Associates	2,885,596	2,989,960
SEC group companies	50,491	54,281
Other related companies	1,279,344	1,968,701
Joint ventures	140,053	554,133
	4,355,484	5,567,075
Sales of materials to:		
The ultimate holding company	-	5,667
Associates	215,496	133,781
SEC group companies	67,909	273,053
Other related companies	4,142,984	4,574,185
Joint ventures	-	20,623
	4,426,389	5,007,309
Construction services from:		
Other related companies	2,978,116	1,880,066
Sale of scrap and spare parts to:		
Associates	7,714	3,931
Purchases of services from:		
Associates	-	115,891
SEC group companies	1,149	28,292
Other related companies	30,554	489
	31,703	144,672
Disposal of subsidiaries:		
The ultimate holding company	170,227	238,153
Provision of services to:		
The ultimate holding company	5,873	9,049
Associates	895	6,428
SEC group companies	96,590	79,869
Other related companies	215,687	182,635
	319,045	277,981

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

FOR THE YEAR ENDED 31 DECEMBER 2019

53. RELATED PARTY TRANSACTIONS (CONTINUED)

(1) In addition to the transactions detailed elsewhere in these financial statements, the Group had the following material transactions with related parties during the year (continued):

As the financial performance of certain subsidiaries of the Group collectively is expected to be significant to the consolidated financial performance of the Group, Shanghai Electric Power Co., Ltd. ("Shanghai Electric Power"), a minority shareholder that have significant influence over those subsidiaries, is regarded as a related party of the Group since 1 January 2015. The transactions and balances with this related party for the year ended 31 December 2019 have been included above.

		2019 RMB'000	2018 RMB'000
Rental income from:			
The ultimate holding company		6,589	-
Associates		15,378	5,652
SEC group companies		27,784	23,849
Other related companies		2,668	-
		52,419	29,501
Rental fee to:			
The ultimate holding company		-	6,297
SEC group companies		3,272	4,698
		3,272	10,995
Right-of-use assets leased by the Group as lessee:			
	Leased assets		
SEC group companies	Fixed assets	3,898	-
Interest expense of the lease liability assumed by the Group as the lessee:			
SEC group companies		238	-

Note: The rental income and rental fee were based on mutually agreed terms with reference to the market rates.

Loans from related parties to the Group

		2019 RMB'000	2018 RMB'000
The ultimate holding company		1,578,600	-

53. RELATED PARTY TRANSACTIONS (CONTINUED)

(1) In addition to the transactions detailed elsewhere in these financial statements, the Group had the following material transactions with related parties during the year (continued):

Loans from the Group to related parties

Other related companies	858,672	438,868

(2) Guarantees provided to/by related parties of the Group

As at 31 December 2019, the Group provided guarantees with amount no more than RMB300,000,000 to the associate, Chongqing Shenhua Thin Film Solar Power Technology Co., Ltd. and RMB51,150,000 to the associate, Nabtesco (China) Precision Equipment Co., Ltd., respectively. As at 31 December 2019, the actual guarantees to Chongqing Shenhua Thin Film Solar Power Technology Co., Ltd. and Nabtesco (China) Precision Equipment Co., Ltd. amounted to RMB238,268,079 and RMB48,223,000 respectively; and also Finance Company has issued non-financial guarantee letters on behalf of certain related parties totaling to RMB580,770 (31 December 2018: RMB6,805,000).

The Group provided the ultimate holding company with a counter-guarantee of no more than USD168,800,000 (equivalent to RMB1,140,000,000).

(3) Deposits and loan services provided to related parties by Finance Company

	2019 RMB'000	2018 RMB'000
Interest expenses for customer deposits:		
The ultimate holding company	6,950	7,844
SEC group companies	24,950	16,783
Associates	444	263
Other related companies	2,332	208
	34,676	25,098
Interest income for loans and notes discounted:		
The ultimate holding company	182,395	107,203
SEC group companies	85,575	147,804
Associates	53,808	6,820
Other related companies	-	764
	321,778	262,591

Interest rates for customer deposits, loans and notes discounting were determined with reference to the interest rates adopted by financial institutions as regulated by Central Bank.

(4) Balances due from/to related parties

The balances due from/to related parties mainly resulted from loans, trading transactions, customer deposits, discounted notes receivable and miscellaneous amounts reimbursable by/to the related parties. Further details are set out in Notes 20, 30, 31, 32, 33, 37, 39 and 40, respectively.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

FOR THE YEAR ENDED 31 DECEMBER 2019

53. RELATED PARTY TRANSACTIONS (CONTINUED)

(5) Transactions and balances with other state-owned entities

The Group enters into extensive transactions covering purchases of materials, property, plant and equipment, receiving of services, sale of goods, rendering of services and making deposits and borrowings with state-owned entities, other than the SEC group companies, in the normal course of business at terms comparable to those with other non-state-owned entities.

(6) Compensation of key management personnel of the Group:

	2019 RMB'000	2018 RMB'000
Fees	1,060	771
Salaries, bonuses and allowances received from the Group	19,097	13,005
Pension scheme contributed by the Group	386	179
Other social benefit schemes contributed by the Group	452	211
	20,995	14,166

Further details of directors' and supervisors' emoluments are included in Note 58 to the consolidated financial statements.

53. RELATED PARTY TRANSACTIONS (CONTINUED)

(7) Commitment

In 2016, Suzhou Thvow entered into an agreement with China Energy Engineering Group Co., Ltd. (hereinafter referred to as "SINOMEC") and other 16 counter-parties to purchase 80% of equity share of China Sinogy Electric Engineering Co., Ltd. (hereinafter referred to as "CSEEC"), with the consideration of Rmb2,896 million (hereinafter referred to as "purchase consideration").

At the same time, SINOMEC and other five sellers (hereinafter referred to as the "performance commitment parties") committed to Suzhou Thvow minimum net income (after deducting non-recurring gains and losses) for CSEEC of RMB155 million, RMB376 million, RMB415 million, RMB456 million respectively for the period from August to December 2016, the years ended at 31 December 2017, 2018 and 2019(hereinafter referred to as "the performance commitment period"), with the sum of performance commitment up to the net profit of RMB1,402 million. The profits compensation will be undertaken in accordance with the agreement if the performance commitments are not met.

In 2018, the Company acquired 20% of the equity share of SINOMEC and consequently SINOMEC became a joint venture of the group. As stated in Note 51, Suzhou Thvow was acquired by the Group in 2019 and after the acquisition, Suzhou Thvow became a subsidiary of the Group. Therefore, the performance commitment of SINOMEC to CSEEC, the subsidiary of Suzhou Thvow in 2019 constitutes a related party commitment.

As of 31 December 2019, the outstanding amount of the purchase consideration due from Suzhou Thvow to SINOMEC was RMB340 million (Note 51). According to "The special audit report on annual performance commitment of target Company for the major acquisition for the year ended at 31 December 2019" issued by Zhonghua Certified Public Accountants LLP for Suzhou Thvow, the net profits after deducting non-recurring gains and losses for CSEEC was RMB377 million. The sum of net profits after deducting non-recurring gains and losses during the performance commitment period was RMB1,419 million, which has exceeded the total of committed profits.

In addition, according to the agreement of the profit compensation arrangement, Suzhou Thvow has engaged Zhonghua Certified Public Accountants LLP to issue the impairment test report for CSEEC upon the expiration of annual performance evaluation the 2019. According to the report, there was no impairment for CSEEC as at year end of 2019.

(8) Other matters

On 27 December 2019, the Group issued the "Asset Backed Securities of certain trade receivables of the Group ("the ABS plan") on Shanghai Stock Exchange. SEC shall bear the liquidity obligations for the shortfalls in the payment of the taxes, relevant expenses and others of the ABS plan, the sum of the principal and expected yields of senior tranche of Asset Backed Securities from the funds in bank account specialised for the ABS plan.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

FOR THE YEAR ENDED 31 DECEMBER 2019

54. FINANCIAL INSTRUMENTS BY CATEGORY

The carrying amounts of each of the categories of financial instruments at the end of the reporting period are as follows:

Financial assets

	2019				
	Financial assets at fair value through profit or loss	Derivative financial instruments designated as hedging instruments	Financial assets at amotised cost	Financial assets at financial value through other comprehensive income	Total
	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000
Loan receivables	-	-	7,699,285	-	7,699,285
Lease receivables	-	-	9,167,481	-	9,167,481
Unlisted equity investment	5,041,934	-	-	-	5,041,934
Equity investments	1,303,477	-	-	-	1,303,477
Debt investments	429,003	-	-	8,034,719	8,463,722
Investment products	660,490	-	-	-	660,490
Reverse repurchase agreements	-	-	30,800	-	30,800
Trade receivables	-	-	29,337,049	4,721,291	34,058,340
Discounted notes receivable	-	-	350,515	-	350,515
Notes receivable	-	-	6,221,789	719,663	6,941,452
Financial assets included in prepayments, deposits and other receivables	-	-	24,540,012	-	24,540,012
Investment funds	4,620,801	-	-	-	4,620,801
Derivative financial instruments	341,349	2,381	-	-	343,730
Due from the Central Bank	-	-	2,459,256	-	2,459,256
Restricted deposits	-	-	1,583,225	-	1,583,225
Cash and cash equivalents	-	-	42,431,476	-	42,431,476
Time deposits with original maturity over three months	-	-	8,326,808	-	8,326,808
	12,397,054	2,381	132,147,696	13,475,673	158,022,804

54. FINANCIAL INSTRUMENTS BY CATEGORY (CONTINUED)

Financial liabilities

	2019			
	Financial liabilities at fair value through profit or loss RMB'000	Derivative financial instruments designated as hedging instruments RMB'000	Financial liabilities at amortised cost RMB'000	Total RMB'000
Trade payables	-	-	57,922,655	57,922,655
Notes payable	-	-	8,506,993	8,506,993
Financial liabilities included in other payables and accruals	-	-	23,385,543	23,385,543
Customer deposits	-	-	7,208,955	7,208,955
Bank and other borrowings	-	-	31,670,985	31,670,985
Financial liabilities included in other non-current liabilities	-	-	1,774,467	1,774,467
Bonds	-	-	11,605,861	11,605,861
Financial liabilities at fair value through profit or loss	33,097	-	-	33,097
Derivative financial instruments	-	6,096	-	6,096
	33,097	6,096	142,075,459	142,114,652

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

FOR THE YEAR ENDED 31 DECEMBER 2019

54. FINANCIAL INSTRUMENTS BY CATEGORY (CONTINUED)

Financial assets

	2018				
	Financial assets at fair value through profit or loss	Derivative financial instruments designated as hedging instruments	Financial assets at amotised cost	Financial assets at financial value through other comprehensive income	Total
	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000
Loan receivables	-	-	6,378,870	-	6,378,870
Lease receivables	-	-	9,370,471	-	9,370,471
Unlisted equity investment	4,263,832	-	-	-	4,263,832
Equity investments	6,515,513	-	-	-	6,515,513
Debt investments	19,805	-	-	6,049,107	6,068,912
Investment products	466,255	-	-	-	466,255
Reverse repurchase agreements	-	-	2,308,712	-	2,308,712
Trade receivables	-	-	18,840,593	2,724,919	21,565,512
Discounted notes receivable	-	-	317,917	-	317,917
Notes receivable	-	-	5,485,044	604,834	6,089,878
Financial assets included in prepayments, deposits and other receivables	-	-	18,032,675	-	18,032,675
Investment funds	3,541,849	-	-	-	3,541,849
Derivative financial instruments	333,888	788	-	-	334,676
Due from the Central Bank	-	-	2,577,728	-	2,577,728
Restricted deposits	-	-	702,980	-	702,980
Cash and cash equivalents	-	-	31,842,144	-	31,842,144
Time deposits with original maturity over three months	-	-	7,352,953	-	7,352,953
	15,141,142	788	103,210,087	9,378,860	127,730,877

54. FINANCIAL INSTRUMENTS BY CATEGORY (CONTINUED)

Financial liabilities

	2018			
	Financial liabilities at fair value through profit or loss	Derivative financial instruments designated as hedging instruments	Financial liabilities at amortised cost	Total
	RMB'000	RMB'000	RMB'000	RMB'000
Trade payables	-	-	38,880,814	38,880,814
Notes payable	-	-	6,387,498	6,387,498
Financial liabilities included in other payables and accruals	-	-	12,259,132	12,259,132
Customer deposits	-	-	4,431,761	4,431,761
Bank and other borrowings	-	-	19,939,952	19,939,952
Financial liabilities included in other non-current liabilities	-	-	785,072	785,072
Bonds	-	-	12,749,245	12,749,245
Financial liabilities at fair value through profit or loss	104,540	-	-	104,540
Derivative financial instruments	-	5,168	-	5,168
	104,540	5,168	95,433,474	95,543,182

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

FOR THE YEAR ENDED 31 DECEMBER 2019

55. SUBSEQUENT EVENTS

a) On 15 April 2020, the Company held the fifth session of the 33rd board of directors to review and adopt the profit distribution plan of 2019, and decided not to recommend any dividend distribution. The above plan will be submitted to the general meeting of shareholders of the Company for consideration.

b) On 15 April 2020, the Company held the 33rd meeting of the fifth session of the board of directors, the Board considered and approved the Relevant Resolution, pursuant to which Shanghai Electric Hong Kong, a wholly-owned subsidiary of the Company transferred the 40% equity interests it held in AEN to Shanghai Gas Hong Kong(temporary name), a wholly-owned subsidiary proposed to be established by Shanghai Electric (Group) Corporation, at a consideration of EUR318 million, which is subject to the final equity valuation results filed with state-owned assets authorities.

c) Since the novel coronavirus (COVID-19) broke out in January 2020, the Group has actively responded to and strictly implemented the regulations and requirements of the Communist Party of China and the national governments at all levels for the prevention and control of the virus epidemic. In order to achieve both epidemic prevention and production, the Company and its subsidiaries have resumed work since the beginning of February, and implemented strict internal management to implement anti-epidemic work.

   The Group expects that the prevention and control measures of COVID-19 will have a temporary impact on production and operation, including the slowdown of the progress of some business development and the receivables recovery, which may result in the estimates for goodwill, asset impairment reserves and deferred income tax asset recognition being revised, and the degree of impact depends on the progress and duration of epidemic prevention and control. These impacts belong to the non-adjusted subsequent events of the financial statements for the year of 2019. As of the approval and report date of the financial statements, as the overall impact of the epidemic on the macro economy, the operations of the Group, upstream and downstream companies are still unclear, the Group has not been able to accurately estimate its specific impact. The Group will continue to pay close attention to the COVID-19 situation and assess actively and respond to its impact on the Group's financial situation and operating results in 2020 and subsequent years.

d) CSEEC is a subsidiary of Suzhou Thvow (which itself is a newly-acquired subsidiary of the Company (see Note 51)) and acts as an EPC contractor for construction contracts that typically have a long project life cycle. Given that both Suzhou Thvow and SINOMEC (an associate of the Group, which is also one of the shareholders of CSEEC) are willing to provide support to enhance CSEEC's future development, and in order to protect the interests of the shareholders of CSEEC, a commitment was provided by SINOMEC to Suzhou Thvow and CSEEC subsequent to the balance sheet date. The commitment specifies that SINOMEC will deploy its resources and customer relationship in the industry to continue its obligation to assist CSEEC in collecting the relevant receivables arising from the agreed existing projects. SINOMEC also commits to assume the relevant responsibility if the collection within the committed period does not reach the prescribed percentage, and is willing to undertake additional measures including purchasing the related project assets if necessary to accomplish the task.

55. SUBSEQUENT EVENTS (CONTINUED)

e) In January 2020, the Company announced a proposed resolution in relation to the plan on spin-off and listing of Shanghai Electric Wind Power Group Co., Ltd. ("SEWP") on Science and Technology Innovation Board ("STIB"). The Company plans to spin off its holding subsidiary SEWP to be listed on the STIB of Shanghai Stock Exchange. The percentage of the number of shares to be issued shall not exceed 40% of the total share capital after issuance of SEWP.

On 15 April 2020, the Company held the 33rd meeting of the fifth session of the BOD meeting, the Board considered and approved the above proposed resolution in relation to the plan on spin-off and listing of SEWP on STIB.

f) On 16 February 2020, the Company entered into a Share Transfer Agreement with several shareholders of Shenzhen Yinghe Technology Co., Ltd. ("Yinghe Technology"), pursuant to which, the Company will acquire 27,442,449 shares held by these shareholders with a consideration of RMB1,148,466,000. Upon completion of such share transfer transaction, the Company will hold 64,032,381 shares of Yinghe Technology in total, representing 17.03% of the total share capital of Yinghe Technology.

On 19 February 2020, Yinghe Technology held a BOD meeting and made a resolution to approve an adjustment on its original Non-public Rights Issue Scheme (the "Rights Issue"). Such Rights Issue price will be set at RMB34.01 per share and the Company plans to subscribe no more than 58,806,233 shares (the actual shares to be subscribed eventually is subject to the approval of the China Securities Regulatory Commission). After the completion of the Rights Issue, the Company will hold 28.25% of total share capital of Yinghe Technology.

g) On 19 February 2020, the Company and Shanghai Blower Factory Co., Ltd., a wholly-owned subsidiary of the Company entered into State-owned Land Use Rights Resumption Contracts with Jing'an Land Reserve Center of Shanghai respectively on the acquisition and reserve of state-owned land use right with a total purchase and storage amount of RMB2,871,720,000.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

FOR THE YEAR ENDED 31 DECEMBER 2019

56. SHARE-BASED PAYMENTS

Restricted share incentive scheme

The Company implements an equity-based restricted share incentive scheme under which the Company obtains services provided by its selected current employees (including directors) ("Participants") as consideration for equity instruments (rewards). The fair value of services provided by selected current employees for the grant of restricted stock is recognised as an expense.

On 6 May 2019, the meeting of the Board of Directors and the Extraordinary General Meeting of Shareholders held by the Company in 2019, approved the Proposal on "Shanghai Electric Group Co., Ltd. A-Share Restricted Stock Incentive Plan (Draft)" (the" Plan "), which was approved by the Shanghai State-owned Assets Supervision and Administration Commission and confirmed by the China Securities Regulatory Commission without objections. Under the plan, a total of 133,578,000 A shares of the Company will be issued and granted to selected employees (including directors) of the Company ("Participants").

In 2019, the Company issued 133,578,000 restricted shares at a rate of RMB3.03 per A share, and recorded an amount of RMB404,741,000 received from participants, which was included in other payables and accrued expenses. On 6 May 2019, as a result of the issuance of new shares, the company's share capital (note 45) and capital reserve increased by RMB133,578,000 and RMB271,163,000, treasury shares increased by RMB404,741,000, and the equity incentive repurchase obligation was recognised at RMB404,741,000; Capital reserves increased by RMB66,656,000 due to the costs and expenses recognised during the waiting period of the current year.

The company stipulates the lock-up period and unlocking conditions for the above-mentioned non-public issuance of stocks of incentive objects. The company has confirmed other payables in accordance with the full amount of the subscription funds received for the repurchase obligation-restricted stock repurchase obligations and confirmed Treasury shares. If the unlocking conditions specified in the final equity incentive plan are not met, the company will repurchase shares at the grant price and offset treasury shares at the same time. Restricted stocks that meet the unlock conditions are written off treasury stocks.

For the year ended 31 December 2019, the Group confirmed expenses related to the plan of RMB66,656,000.

57. BALANCE SHEET AND RESERVE MOVEMENT OF THE COMPANY

Balance sheet of the Company

	As at 31 December	
	2019 RMB'000	2018 RMB'000
Assets		
Non-current assets		
Property, plant and equipment	1,829,231	1,869,868
Right-of-use assets	135,149	—
Investment properties	32,444	34,926
Prepaid land lease payments	3,146,744	4,038,662
Intangible assets	150,150	126,804
Investments in subsidiaries	39,132,848	31,963,368
Investments in associates	4,517,577	4,383,397
Financial asset at fair value through profit or loss	2,281,448	3,059,800
Loan receivables	490,000	369,000
Deferred tax assets	1,276,234	1,345,119
Other non-current assets	8,558,694	5,711,798
Total non-current assets	61,550,519	52,902,742
Current assets		
Inventories	84,064	187,670
Contract Assets	6,145,035	3,813,220
Trade receivables	7,591,110	7,839,927
Loans and lease receivables	5,252,560	3,897,560
Notes receivable	321,278	340,580
Prepayments, deposits and other receivables	17,888,647	21,106,276
Financial asset at fair value through profit or loss	831,935	607,898
Cash and cash equivalents	27,876,000	24,966,113
Total current assets	65,990,629	62,759,244
Total assets	127,541,148	115,661,986

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

FOR THE YEAR ENDED 31 DECEMBER 2019

57. BALANCE SHEET AND RESERVE MOVEMENT OF THE COMPANY (CONTINUED)

Balance sheet of the Company (continued)

	Note	As at 31 December	
		2019 RMB'000	2018 RMB'000
Equity and liabilities			
Liabilities			
Non-current liabilities			
Bonds		6,917,727	8,045,001
Bank and other borrowings		2,567,048	6,103,800
Lease liabilities		106,283	—
Government grants		52,255	46,852
Other non-current liabilities		8,445,867	15,713
Total non-current liabilities		18,089,180	14,211,366
Current liabilities			
Trade payables		29,947,538	27,758,412
Notes payable		2,650,829	2,433,587
Government grants		319	17,742
Other payables and accruals		13,157,543	17,350,664
Bank and other borrowings		15,187,869	8,349,537
Lease liabilities		26,019	—
Taxes payable		223,683	94,208
Provisions		334,500	381,559
Total current liabilities		61,528,300	56,385,709
Total liabilities		79,617,480	70,597,075
Equity			
Equity attributable to owners of the Company			
Share capital		15,152,463	14,725,187
Reserves	(a)	20,485,350	19,246,204
Retain earnings	(a)	12,285,855	11,093,520
Total equity		47,923,668	45,064,911
Total equity and liabilities		127,541,148	115,661,986

The Company's balance sheet was approved by the Board of Directors on 15 April 2020 and was signed on its behalf.

Mr. Zheng Jianhua	Mr. Huang Ou
Chairman and CEO	Executive Director and President

57. BALANCE SHEET AND RESERVE MOVEMENT OF THE COMPANY (CONTINUED)

(a) Reserve/Retained earnings movement of the Company

	Capital surplus RMB'000	Surplus reserve RMB'000	Retained earnings RMB'000	Total RMB'000
As at 31 December 2017	17,046,079	2,127,602	11,731,523	30,905,204
Change in accounting policy	(35,473)	(32,253)	(290,277)	(358,003)
As at 1 January 2018	17,010,606	2,095,349	11,441,246	30,547,201
Total comprehensive income for the year	-	-	1,422,760	1,422,760
Convertible bond - equity component	24	-	-	24
Appropriation of statutory surplus reserves	-	140,225	(140,225)	-
Dividend paid to shareholders	-	-	(1,353,980)	(1,353,980)
Others	-	-	(276,281)	(276,281)
As at 31 December 2018	17,010,630	2,235,574	11,093,520	30,339,724
As at 31 December 2018	17,010,630	2,235,574	11,093,520	30,339,724
Change in accounting policy	-	-	(4,514)	(4,514)
As at 1 January 2019	17,010,630	2,235,574	11,089,006	30,335,210
Total comprehensive income for the year	(1,508)	-	2,427,230	2,425,722
Convertible bond - equity component	1,008,465	-	-	1,008,465
Employee share schemes - value of employee services	271,163	-	-	271,163
- Staff service value	66,656	-	-	66,656
Treasury stock	(404,741)	-	-	(404,741)
Appropriation of statutory surplus reserves	-	299,111	(299,111)	-
Dividend paid to shareholders	-	-	(931,270)	(931,270)
As at 31 December 2019	17,950,665	2,534,685	12,285,855	32,771,205

As at 31 December 2019, balance of capital surplus included the Company's share premium of RMB17,207,177,000 (31 December 2018: RMB15,860,917,000) (Note 46).

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

FOR THE YEAR ENDED 31 DECEMBER 2019

58. DIRECTORS' AND CHIEF EXECUTIVE'S EMOLUMENTS

Directors' emoluments for the year ended 31 December 2019, disclosed pursuant to the Rules Governing the Listing of Securities on The Stock Exchange of Hong Kong Limited (the "Listing Rules") and Section 161 of the Hong Kong Companies Ordinance, are as follows:

Name of Director	Fees RMB'000	Salaries RMB'000	Discretionary bonus RMB'000	Social security costs RMB'000	Total RMB'000
Mr. Zheng Jianhua	-	987	139	50	1,176
Mr. Huang Ou	-	1,235	83	50	1,368
Mr. Zhu Zhaokai	-	668	-	50	718
Mr. Zhu Bin	-	887	111	50	1,048
Mr. Jian Xunming (a)	229	-	-	-	229
Mr. Chu Junhao	250	-	-	-	250
Mr. Xi Juntong	250	-	-	-	250
Mr. Xu Jianxin (b)	42	-	-	-	42

Directors' emoluments for the year ended 31 December 2018, disclosed pursuant to the Rules Governing the Listing of Securities on The Stock Exchange of Hong Kong Limited (the "Listing Rules") and Section 161 of the Hong Kong Companies Ordinance, are as follows:

Name of Director	Fees RMB'000	Salaries RMB'000	Discretionary bonus RMB'000	Social security costs RMB'000	Total RMB'000
Mr. Zheng Jianhua	-	781	416	44	1,241
Mr. Huang Ou	-	210	250	15	475
Mr. Zhu Zhaokai	-	183	-	15	198
Mr. Zhu Bin	-	362	333	15	710
Mr. Jian Xunming (a)	250	-	-	-	250
Mr. Chu Junhao	250	-	-	-	250
Mr. Lv Xinrong	188	-	-	-	188
Mr. Xi Juntong	83	-	-	-	83

(a) Mr. Jian Xunming resigned as Director with effect from 21 October 2019.

(b) Mr. Xu Jianxin was appointed as Director with effect from 21 October 2019.