Technovator

A LEADING SMART ENERGY SAVING SERVICES PROVIDER

ANNUAL REPORT 2022

Technovator International Limited

(incorporated in Singapore with limited liability)

Stock Code: 1206

Contents

Corporate Information

BOARD OF DIRECTORS

Executive Directors
Mr. Zhao Xiaobo (趙曉波)
Mr. Qin Xuzhong (秦緒忠) *(Chairman)*

Non-executive Directors
Mr. Liang Wuquan (梁武全)
Mr. Zeng Xuejie (曾學傑)
Mr. Zhang Jian (張健)

Independent Non-executive Directors
Ms. Chen Hua (陳華)
Mr. Chia Yew Boon (謝有文)
Mr. Fan Ren Da Anthony (范仁達)

BOARD COMMITTEES

Audit Committee
Ms. Chen Hua *(Chairman)*
Mr. Chia Yew Boon
Mr. Fan Ren Da Anthony

Nomination Committee
Mr. Chia Yew Boon *(Chairman)*
Mr. Fan Ren Da Anthony
Mr. Qin Xuzhong

Remuneration Committee
Mr. Chia Yew Boon
Mr. Fan Ren Da Anthony *(Chairman)*
Mr. Qin Xuzhong

Risk Management Committee
Mr. Zhao Xiaobo
Ms. Chen Hua
Mr. Chia Yew Boon
Mr. Fan Ren Da Anthony *(Chairman)*
Mr. Qin Xuzhong
Mr. Liang Wuquan
Mr. Zeng Xuejie
Mr. Zhang Jian

JOINT COMPANY SECRETARIES

Mr. Leung Lok Wai
Ms. Cheok Hui Yee

AUTHORISED REPRESENTATIVES

Mr. Zhao Xiaobo
Mr. Qin Xuzhong

REGISTERED OFFICE

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

HEADQUARTERS AND PRINCIPAL PLACE OF BUSINESS IN SINGAPORE

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

PRINCIPAL PLACE OF BUSINESS IN HONG KONG

Level 17
Silvercord Tower 2
30 Canton Road
Tsim Sha Tsui, Hong Kong

LEGAL ADVISER AS TO HONG KONG LAWS

Morgan, Lewis & Bockius

AUDITORS

KPMG
Public Interest Entity Auditor registered in accordance with the Accounting and Financial Reporting Council Ordinance
KPMG LLP

SINGAPORE PRINCIPAL SHARE REGISTRAR

Tricor Barbinder Share Registration Services
80 Robinson Road
#02-00
Singapore 068898

HONG KONG SHARE REGISTRAR

Tricor Investor Services Limited
17/F, Far East Finance Centre
16 Harcourt Road
Hong Kong

COMPANY WEBSITE

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PRINCIPAL BANKERS

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

INVESTOR RELATIONS CONTACT

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Chairman's Statement

Chairman's Statement

Dear Honorable Shareholders,

On behalf of the board of directors and the management, I am pleased to present to the shareholders the annual report on the development and operating results of Technovator International Limited ("Technovator") and its subsidiaries (the "Group") for the year ended 31 December 2022.

In 2022, Technovator continued to face the tremendous pressure from the impact of the COVID-19 pandemic, the domestic economic downturn and the deep adjustment of the real estate and construction industry. In the face of severe challenges, all staff tided over the challenges and strived to improve quality and enhance efficiency with comprehensive and refined management and innovative business models, while insisting on innovation by taking the lead, building new momentum and new advantages, opening up new areas and new tracks. We have made every effort to promote high-quality development of the Group's business in an ongoing and healthy manner.

Persisting in Self-development and Innovation, Strengthening Core Capabilities, and Building New Momentum and New Advantages

The Group always adheres to the concept of "technology-oriented" development, and has continued to increase its investment in innovation and research and development, strengthened the construction of core capabilities driven by the dual energy of "intelligence + energy saving", consistently improved the "Kunlun" platform, a new generation of industrial internet operating system, and continued to achieve breakthroughs in key equipment and major scenario application solutions in the industry, and won a number of important awards for its technological achievements.

A number of core components of the Kunlun digital platform have been successfully released, steadily enhancing the service capability of the IoT city from the end to the cloud, and successfully realising cross-industry and full-scene applications such as new energy digital intelligence production management, zero-carbon complex smart energy management, smart station integrated operation and lightweight intelligent heating. The self-owned and controllable Techcon Neosys IoT control system has won the Excellence Award in the Central Enterprise Innovation and Creativity Competition (央企熠星創新創意大賽), and the new generation of magnetic levitation air-conditioning units was included in the Catalogue of Key Promoted Products under the 14th Five Year Plan of the National Green Rail Transit Industry.

The Group has won a number of awards, including the First Prize for Design of Building Engineering Standards in the building design industry, the Second Prize for National Equipment Management and Technological Innovation. Tongfang Energy Saving Engineering Technology Co., Ltd., a subsidiary of the Group, was selected as one of the first batch of "innovative" SMEs in Beijing in 2022, and Tongfang Technovator Int (Beijing) Co., Ltd. successfully passed the CMMI Level 3 certification assessment.

Seizing Market Opportunities, Innovating Business Models and Opening up New Areas and New Tracks

The Group continues to set industry benchmarks and consolidate its leading position in traditional areas through solution innovation, and solidify its foundation for high quality development by consistently innovating business models, and has won the recognition of our customers and the market through constantly high-quality delivery.

For the field of smart buildings, we led the future development of smart buildings with low carbon and signed a contract for the Smart Complex of Dongsheng Science and Technology Park of Beijing. For the field of smart transportation, we signed contracts with Shenyang Metro Line Center, Suzhou Rail Line S1 and Chongqing Rail Line 10 smart stations to continuously expand the depth of the industry. For the field of smart energy, we opened up new tracks focusing on low-carbon parks and waste heat utilization. We also signed contracts for Xinhua Power Generation Kashgar Zero-carbon Complex, Hunan Lengshuijiang Integrated Smart Energy, etc., realizing the implementation of the exemplary demonstration projects of "new energy+", and signed contracts for Xinjiang Tianfu South Thermal Power Large Temperature Difference Unit and Integrated Energy Efficiency Improvement Project, creating a new model of waste heat recovery and utilization.

The asset-light energy operation services business, which is based on contracted energy management and escrow operation models, continues to grow, making the development of the Group more sustainable. The heating operation service team successfully completed the task of guaranteed operation for the 2021-2022 heating season, and the further expansion of energy escrow operation of buildings and industrial parks has been getting smoother, with Shenmu Smart Heat Network Project being awarded as an excellent demonstration project for contracted energy management.

The Group has delivered a number of national key projects with high quality, consistently improving its reputation in the industry. The successful completion of a series of intelligent venue construction and service guarantee works for the 2022 Beijing Winter Olympic Games brought us recognitions and appreciations from units such as the Organising Committee for Winter Olympic Games, the Winter Olympic Engineering Construction Command, the National Stadium and the National Aquatics Center.

In 2023, with the rapid recovery of China's economy, Technovator will seize the precious and burgeoning development opportunities arising from the national new infrastructure development strategy, the urban renewal initiative, the new energy security strategy and the green low-carbon industry under the double carbon goal. We will be more firmly committed to smart, green and healthy urban technology services, leading Technovator's industry towards higher quality development and creating a better urban life!

Qin Xuzhong
Chairman

23 March 2023

Five Year Financial Summary

	2018	2019	2020	2021	**2022**
(RMB'000)					
Consolidated income statement					
Continuing operations					
Revenue	2,036,588	1,752,778	1,736,664	1,619,065	**1,738,878**
Cost of sales	(1,560,590)	(1,401,723)	(1,374,010)	(1,301,576)	**(1,435,444)**
Gross profit	475,998	351,055	362,654	317,489	**303,434**
Other revenue	46,966	57,466	48,385	38,200	**33,404**
Other net gain/(loss)	(212)	(10,403)	(1,203)	(17,999)	**11,893**
Selling and distribution costs	(85,049)	(94,374)	(89,981)	(103,532)	**(81,452)**
Administrative and other operating expenses	(115,792)	(163,446)	(153,237)	(172,438)	**(195,176)**
Financial expenses	(10,828)	(11,819)	(12,178)	(7,361)	**(6,687)**
Profit before taxation	311,083	128,479	154,440	54,359	**65,416**
Income tax	(49,749)	(15,062)	(21,892)	(8,787)	**(9,698)**
Profit for the year	261,334	113,417	132,548	45,572	**55,718**
Equity shareholders of the Company	261,165	112,866	130,601	45,307	**55,127**
Non-controlling interests	169	551	1,947	265	**591**
Profit for the year	261,334	113,417	132,548	45,572	**55,718**
Basic earnings per share (RMB)	0.3338	0.1443	0.1670	0.0579	**0.0705**
Diluted earnings per share (RMB)	0.3338	0.1443	0.1670	0.0579	**0.0705**
Non-current assets	1,124,917	1,119,939	1,207,595	1,144,790	**1,141,180**
Current assets	3,486,046	3,807,569	3,672,330	3,655,135	**4,148,614**
Current liabilities	1,915,927	2,116,512	1,944,637	1,824,982	**2,258,368**
Net current assets	1,570,119	1,691,057	1,727,693	1,830,153	**1,890,246**
Total assets less current liabilities	2,695,036	2,810,996	2,935,288	2,974,943	**3,031,426**
Non-current liabilities	37,620	38,534	40,170	35,366	**33,775**
Total equity attributable to equity shareholders of the Company	2,638,052	2,752,516	2,877,491	2,921,727	**2,980,325**
Non-controlling interests	19,364	19,946	17,627	17,850	**17,326**
Total equity	2,657,416	2,772,462	2,895,118	2,939,577	**2,997,651**
Net assets per share (RMB)	3.40	3.54	3.70	3.76	**3.83**
Financial ratio					
Cost to income ratio	76.6%	80.0%	79.1%	80.4%	**82.6%**
Pre-tax profit margin	15.3%	7.3%	8.9%	3.4%	**3.8%**
Return on Equity	9.8%	4.1%	4.6%	1.6%	**1.9%**
Current ratio	1.8	1.8	1.9	2.0	**1.8**

Management Discussion and Analysis

GENERAL

In 2022, the influence of COVID-19 pandemic continued, and the recovery of domestic economy remained fragile. The pressures resulted from demand contraction, supply shock and expectation of downtrend must not be overlooked. In the face of multiple challenges, the Group continued to strengthen investments in research and development in key areas with the view of constantly forming new business growth points. The Group recorded a net revenue of approximately RMB1,738.9 million for the full year, representing a year-on-year increase of 7.4%. Meanwhile, by strengthening its refined management and improving its quality and efficiency, the Group recorded a net profit of approximately RMB55.7 million for the full year, representing a year-on-year increase of 22.2%.

BUSINESS REVIEW

Smart Transportation Business

In 2022, the revenue of the smart transportation business declined as a result of frequent outbreak of pandemic across the country. As benefited from the all-round improvement in management and driven by innovative technology and solutions, the number of bid-winning comprehensive monitoring projects ranked first in the industry.

We actively innovated based on the carbon peaking and carbon neutrality goals, and continued to lead the green development of rail transits. The self-developed metro energy management system has been successively applied to the Second Phase of Chongqing Metro Line 10 (重慶地鐵10號綫二期) and Xi'an Metro Line 10 (西安地鐵10號綫) projects. The self-developed metro energy-saving expert control system is applied to a typical station of Hangzhou Line 10 (杭州10號綫), providing 24-hour on-site "expert" service for the ventilation and air-conditioning system with the intelligent control based on machine learning algorithms to achieve energy-saving operation of the ventilation and air-conditioning system.

The self-developed smart station integrated operation and management platform has been improved, and it has once again won the bidding of all stations of the Xi'an Metro Line 16 (西安地鐵16號綫) after the successful application to Chongqing and Suzhou Rail Transits. The self-developed Yizhong Rail Transit Integrated Monitoring System (易眾軌道交通綜合監控系統) was applied to Suzhou Rail Transit Line 11 (S1 Line) (蘇州市軌道交通11號綫(S1綫)), a fully automatic operation line on GoA4 level. The self-developed platform door system, including door operator, door control system, operation and maintenance system, etc., has been applied to the Zhengzhou Metro Line 6 (鄭州地鐵6號綫) and Zhengzhou Airport-Xuchang Line (鄭州機場至許昌綫) projects.

During the period, the first section of Hangzhou Metro Line 10 (杭州地鐵10號綫首通段), Wuhan Rail Transit Qianchuan Line (武漢軌道交通前川綫), the Second Phase of Chongqing Rail Transit Line 10 (重慶軌道交通10號綫2期), Jinyi East Rail Transit Jinyi Line (金義東軌道交通金義綫) and the first section of Yidong Line (義東綫首通段) were successfully delivered and put into operation.

Smart Building and Complex Business

Leveraging on self-innovation and seizing the development opportunities of new infrastructure and urban renewal, the market contracted amount witnessed a notable increase, and the overall operation situation has improved significantly compared to the previous year.

We successfully completed the technical support for the smart building system of the National Stadium for the opening and closing ceremonies of the 2022 Winter Olympics as well as relevant scientific research projects. We created the first energy IoT technology based on 5G slicing edge cloud, which adopts self-developed swarm intelligent dynamic source-network-load matching technology and AIOT-based equipment monitoring, diagnosis and early warning technology, to build the world's first 5G-AIOT cultural stadium in the National Stadium (commonly known as "**Bird's Nest**"), and has received certificates of appreciation and high recognition from the Winter Olympics Organizing Committee, the Ministry of Science and Technology, and the client.

IoT controller Techcon Neosys and energy management system Techcon EAS were successfully applied to the Xinshuo Railway Hohhot City Production Command Center Project, improving the digital operation and maintenance management level of the infrastructure of the command center, helping the National Energy Group to enhance the combined shipping capacity, improve transportation efficiency, and accelerate the digital transformation process. During the Reporting Period, IoT controller Techcon Neosys has also successively served key projects in the industry, such as Beijing Huairou Science City, Fudan University Shanghai Cancer Center, and Guangzhou Children's Activities Center.

We have created a smart hospital green solution for Beijing GoBroad Hospital, built a smart hospital management system based on the Kunlun Platform, deeply connected with the medical information system, realized the integration of hospital intelligent operation and maintenance and medical information, which facilitated the hospital to achieve the goal of refined and low-carbon operation and maintenance management and optimize the medical treatment process, providing a more secure, comfortable and energy-saving medical treatment environment for doctors, patients and management personnel.

Smart Energy Business

With our innovation in technology, smart energy business achieved energy saving and efficiency improvement in multiple aspects. Meanwhile, comprehensive smart energy services has also made gratifying breakthroughs.

For high energy consuming industrial scenarios, industrial residual heat and waste heat were recycled through electric heat pumps for heating in complex, steam supply and other processes. We successfully developed ultra-high temperature heat pump equipment, which was popularized in response to the demand of light industrial steam, opening up a huge space for industrial steam coal-fired alternatives. Currently, it has been implemented in Wuliangye factory with the energy saving rate during actual operation of over 50%.

In the face of fierce competition in the field of intelligent heating and the diversified demands of heating companies of different scales, we have created lightweight smart heating platform products, which reshaped the original service process, shortened the project duration and improved the service efficiency with the efficient model of "factory + site". Such products were successfully applied to Baoding Datang Heating Project.

We put continuous efforts on iteration and innovation of long-distance heating, and successfully developed an expert control system for the Huaneng Jiutai long-distance project. Based on the geographic information system, we have carried out three-dimensional modeling for heat sources, long-distance pipelines and heat exchange stations, and applied digital twin technology to realize situational awareness and failure analysis to ensure optimal operation of long-distance heating systems.

Beijing Mudanyuan Station successfully applied the next-generation subway station environmental control system solution with "magnetic levitation direct expansion air-conditioning units + swarm intelligence control" as the core. The ventilation and air-conditioning system energy efficiency was above 5.0 for the full year, and the application effect has reached the industry-leading level.

Aiming at the development opportunities of the new energy industry and the construction demand of low-carbon complex, we have created a "new energy + zero-carbon complex" solution. Leveraging on superior energy management technology, combined with comprehensive energy technologies such as photovoltaic, energy storage, direct current and flexibility, and multi-energy storage, we established a flexible energy Internet for low-carbon complex, and successfully signed contracts with Xinhua Power Generation Kashi Zero-Carbon Smart Complex and Hunan Lengshuijiang Comprehensive Smart Energy Project.

We have taken the advantages of integrated innovation, and applied the integrated equipment of energy storage power stations to the Huadian Lingwu Energy Storage Project, exploring new applications in the field of "new energy + energy storage equipment" and accelerating its entry into the fast-growing strategic market.

OUTLOOK

Currently, the rapid recovery of China's economy has demonstrated strong resilience, and the release of domestic demand potential has been accelerated, giving a shot in the arm for the Group's rapid recovery from troughs and the path to development of higher quality. In the future, Technovator will continue to focus on two main business lines of "intelligence and energy saving", adhere to self-innovation, continuously create new development momentum, and explore new industrial markets. Meanwhile, Technovator will innovate business models, expand light-asset management; promote optimization and upgrading of organizational structure, continue to strengthen management, and constantly improve service quality and efficiency. We believe that with the unremitting efforts of all employees, Technovator will usher in a new development culmination.

FINANCIAL REVIEW

Revenue

In 2022, with the progress of the national industrial structure transformation and upgrading, and supported by the two main lines of "intelligence and energy saving" combined with digitalization, Technovator has been striving to innovate in the pursuit of development with unwavering determination. While the business of the Group promoted steadily, stable growth in revenue was achieved with a net revenue of approximately RMB1,738.9 million for the full year, representing a year-on-year increase of 7.4%. For the smart building and complex business, the Group made every effort to ensure the completion of projects of the Science and Technology Winter Olympics series on schedule and actively promoted digital transformation. By enhancing the self-innovative capabilities, the revenue of the segment achieved a year-on-year increase; the smart energy business cultivated deeply around the "comprehensive smart energy services", promoting the implementation of projects and satisfying the diverse demands of customers, thereby achieving increase in revenue compared with last year. However, the effect brought by persistent pandemic on the reduction of the numbers of the tender and bid projects of smart transportation business during the previous period continued to be released, resulting in a year-on-year decrease in revenue for the full year.

Revenue by business segments

The table below sets forth the Group's revenue by business segments for the years indicated.

	2022		2021		
	Revenue (RMB'000)	**% of revenue**	Revenue (RMB'000)	% of revenue	Comparison
Smart transportation	**349,528**	**20.1%**	484,377	29.9%	–27.8%
Smart building and complex	**892,492**	**51.3%**	730,203	45.2%	22.2%
Smart energy	**496,858**	**28.6%**	404,485	24.9%	22.8%
Total	**1,738,878**	**100%**	1,619,065	100%	7.4%

Smart transportation

The revenue from the smart transportation business decreased by 27.8% from approximately RMB484.4 million in 2021 to approximately RMB349.5 million in 2022. The effect brought by the COVID-19 pandemic on the reduction of the numbers of the tender and bid projects of smart transportation business during the previous period continued to be released and the implementation of the business of the segment faced immense pressure. In response to the negative effects, the Group actively promoted the technological innovation and products upgrade. The implementations of projects such as the First Phase of Xi'an Metro Line 16 (西安地鐵16號綫一期), the Second Phase of Chongqing Rail Transit Line 10 (重慶軌道交通10號線二期), and the northern extension of Wuhan Rail Transit Line 7 (Qianchuan Line) (武漢市軌道交通7號綫北延綫(前川線)) have made contribution to the revenue of the segment. The newly signed project of the Second Phase of Xuzhou Rail Transit Line 3 (徐州市軌道交通3號線二期) facilitated the smart upgrade of the whole line operation. The signing and promotion of the Gate of the Orient of Suzhou Rail Transit (蘇州市軌道交通東方之門) marked the open-up of the whole process service in smart stations.

Smart building and complex

Revenue from the smart building and complex business increased by 22.2% from approximately RMB730.2 million in 2021 to approximately RMB892.5 million in 2022. During this year, the Group articulated core businesses such as intelligentization, data center, and smart healthcare business around the building and complex business, and signed and implemented projects such as the Phase II of Dongsheng Science and Technology Park of Zhongguancun (中關村東升科技園二期), the data center of Beijing Daoxianghu Science and Innovation Park of the Agricultural Bank of China (農行北京稻香湖科創園數據中心), and Beijing Gobroad Hospital (北京高博醫院), which set the industrial representative cases and laid solid foundation for the revenue growth for the segment. During the period, the smooth progress of the supporting project of computer building of the Second Step of the First Phase of the Data Center of China Mobile (Shantou, Guangdong) (中國移動(廣東汕頭)數據中心一期二階段機樓配套工程), the comprehensive tunnel project of the municipal transportation supporting project of the Airport Economic Zone of New Beijing Airport (北京新機場臨空經濟區市政交通配套工程綜合管廊項目) as well as the Project for Renovation of the Water Cube into the Curling Stadium for the Winter Olympics (水立方冬奧會冰壺館改造項目) has injected strong impetus to the revenue growth of the segment.

Smart energy

The smart energy business achieved a revenue of approximately RMB496.9 million in 2022, representing an increase of approximately 22.8% as compared to approximately RMB404.5 million in 2021. During the year, the project of the cooling and heating station of Xibeiwang Town of Haidian District, the improvement project of heating capacity of clean energy of the 12th Division as well as the Centralized Heating System Project of the Shanyin County were implemented and settled as scheduled, driving the revenue growth of the segment. In addition, with the proven history of cooperation and extensive industrial experience, the Group established new cooperative relationships with existing clients including Xinjiang Tianfu, Taiyuan Heating and Suihua Zhongmeng, and signed new projects such as comprehensive energy efficiency improvement project of Xinjiang Tianfu, 2022 Taiyuan Absorption Heat Exchange Unit for the Centralized Heating System Project (2022年太原市集中供熱工程吸收式換熱機組項目) and Smart Heating Construction Project of Suihua Zhongmeng, further solidifying the Group's position in the field of comprehensive smart energy services and driving the revenue growth of the segment.

Cost of sales

The Group's cost of sales increased by approximately 10.3% from approximately RMB1,301.6 million in 2021 to approximately RMB1,435.4 million in 2022. The increase in cost of sales was mainly due to the increase in revenue.

Gross profit

Gross profit decreased by 4.4% from approximately RMB317.5 million in 2021 to approximately RMB303.4 million in 2022. Gross profit margin decreased by approximately 2.2 percentage points from 19.6% of last year to approximately 17.4% of this year. The gross profit margin of each business segment decreased to various extents, which was mainly due to the influence of persistent pandemic, the intensified market competition, the shrinking profit margins, as well as the rising costs of transportation, material and sub-contracting in the pandemic.

Other revenue

In 2022, the Group recorded other revenue of approximately RMB33.2 million, representing a decrease of approximately 13.1% as compared to approximately RMB38.2 million of 2021. The decrease was mainly attributable to the decrease in interest income for EMC projects under sharing periods for the year.

Other net gain/loss

In 2022, the Group recorded other gain of approximately RMB11.9 million, representing a significant change from the net loss of approximately RMB18.0 million for 2021. The receipt of final consideration settlement incurred from the disposal of subsidiaries in the previous period in last year caused a substantial loss. Such non-recurring event was absent this year. In addition, the Group had exchange gains due to the appreciation of the foreign currencies held by it, the combined effect resulted in the realization of other net gain this year.

Selling and distribution costs

Selling and distribution costs in 2022 amounted to approximately RMB81.5 million, representing a decrease of approximately 21.3% as compared to that of 2021. Selling and distribution costs accounted for 4.7% (2021: 6.4%) of revenue. The decrease was mainly attributable to the decrease of the travel expenses and the incentives for sales staff due to the pandemic this year.

Administrative and other operating expenses

Administrative and other operating expenses decreased by 7.5% from approximately RMB143.8 million in 2021 to approximately RMB133.0 million in 2022. The decrease in administrative and other operating expenses was mainly due to the more stringent expense management and control measures adopted by the Group during the pandemic.

Impairment loss on trade and other receivables and contract assets

Impairment loss on trade and other receivables and contract assets increased from approximately RMB28.6 million in 2021 to approximately RMB62.2 million in 2022. The increase in impairment losses of trade and other receivables and contract assets was due to the delay of collection of settled items and the extended ageing as influenced by the pandemic.

Finance costs

Finance costs of the Group for 2022 were approximately RMB6.7 million, representing a decrease as compared to last year, which was due to the Group's arrangement of bank loan financing and repayment based on its overall capital needs to optimize its credit structure.

Income tax

Income tax increased by 10.2% from approximately RMB8.8 million in 2021 to approximately RMB9.7 million in 2022. The effective tax rate was approximately 14.8%, representing a decrease of approximately 1.4 percentage points from 2021.

Profit for the period

Profit for the period increased by 22.1% from approximately RMB45.6 million in 2021 to approximately RMB55.7 million for the year. Net profit margin increased by 0.4 percentage point from 2.8% in 2021 to approximately 3.2% for the year.

The basic earnings per share from continuing operations of the Group increased by 21.8 percentage points year-on-year to RMB0.0705 (2021: RMB0.0579). The diluted earnings per share increased by 21.8 percentage points to RMB0.0705 (2021: RMB0.0579).

Working capital and financial resources

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

	As at 31 December 2022 RMB'000	As at 31 December 2021 RMB'000
Inventories	**1,191,189**	983,040
Trade and other receivables (Note 1)	**1,760,516**	1,456,435
Trade and other payables	**1,924,246**	1,577,167
Average inventory turnover days	**228**	227
Average trade receivables turnover days (Note 2)	**269**	262
Average trade payables turnover days (Note 2)	**360**	351

Note 1: Trade and other receivables included trade and other receivables as well as prepayments

Note 2: The calculation of turnover days excluded other receivables, other payables and related party amounts

The Group's inventories increased from approximately RMB983.0 million as at 31 December 2021 to approximately RMB1,191.2 million as at 31 December 2022. The inventory turnover days were generally on a par with last year. The inventory scale recorded a year-on-year increase, mainly because the Group increased stocking to accelerate project progress due to the relaxation and optimization of the epidemic prevention and control policy at the end of this year.

The Group's trade and other receivables amounted to approximately RMB1,760.5 million as at 31 December 2022, representing an increase as compared to approximately RMB1,456.4 million as at 31 December 2021. The average trade receivables turnover days were 269 days, representing a slight increase as compared to 262 days in 2021. The average collection pace of projects has slowed down as influenced by the pandemic, which was the main factor resulting in the increase in scale and turnover days of trade and other receivables.

The Group's trade and other payables amounted to approximately RMB1,924.2 million as at 31 December 2022, which increased significantly as compared to approximately RMB1,577.2 million as at 31 December 2021. The Group's average trade payables turnover days was approximately 360 days, representing an increase as compared to 2021. The increase in scale and turnover days of trade and other payables was resulted from the Group's adjustment to the pace of payment taking into account the progress of the projects and the credit terms of its upstream and downstream partners.

Liquidity and financial resources

In 2022, the Group financed its operations primarily through cash flow from operations and cash balance on hand. As at 31 December 2022, the Group had cash and cash equivalents of approximately RMB354.0 million, which accounted for 11.8% of the Group's net assets (31 December 2021: cash and cash equivalents of approximately RMB411.7 million).

As at 31 December 2022, the Group's indebtedness consisted of short-term bank loans of approximately RMB190.4 million with an average interest rate of 3.9% (2021: 4.0%) per annum. The capital requirement increased due to the slowdown of collection of receivables in this year as well as to meet the demands of inventory stocks at the end of the year, resulting in an increase in the outstanding bank loans as compared with last year.

As at 31 December 2022, the Group's debts were primarily bank loans denominated in RMB. Cash and cash equivalents were primarily bank deposits and cash on hand denominated in RMB and certain amounts in USD, HKD, MOP and SGD, and deposits that are readily convertible into known amounts of cash.

As at 31 December 2022, the net cash of the Group was approximately RMB163.6 million (31 December 2021: net cash of approximately RMB312.4 million). Gearing ratio, defined as loans and borrowings divided by total assets, was approximately 3.6% (2021: approximately 2.1%).

Pledge of assets
As at 31 December 2022, the Group had no pledge of assets.

Contingent liabilities
As at 31 December 2022, the Group did not have any material contingent liabilities.

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

Employee, training and development
As at 31 December 2022, the Group had a total of 779 employees compared to 812 employees as at 31 December 2021. Total staff costs decreased from approximately RMB224.0 million in 2021 to approximately RMB215.4 million in 2022.

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

The Group provides regular training for its employees to keep them abreast of the Group's products, technology developments and the market conditions of its industry. The Group also offers additional training for frontline sales staff regarding each new product launch, so as to help them deliver more effective sales and promotion. In addition, the Group's senior management also attends conferences and exhibitions to broaden their knowledge of the industry.

Material acquisitions and disposals
For the year ended 31 December 2022, the Group had no material acquisition or disposal of subsidiaries or associates.

Significant investments
For the year ended 31 December 2022, the Group had no significant investment.

Directors and Senior Management

Executive Directors

Mr. Zhao Xiaobo (趙曉波)

Aged 53, is an executive director and chief executive officer of the Company, responsible for overall strategic planning and general management of the Group. He joined the Group in May 2005 and was appointed as a director on 26 May 2005 and was re-designated as an executive director on 12 April 2011. Mr. Zhao received his Bachelor's degree in Thermal Engineering from Tsinghua University in 1993 and Executive Master of Business Administration from Tsinghua University in 2005. Mr. Zhao was qualified as professor and researcher level senior engineer (教授研究員級高級工程師) in 2009.

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

Mr. Qin Xuzhong (秦緒忠)

Aged 50, was appointed as an executive director of the Company on 7 February 2018. He was appointed as the chairman of the Board of the Company on 3 April 2018.

Mr. Qin has over 23 years of experience in the industry. He joined THTF (a company listed on the Shanghai Stock Exchange (stock code: 600100)) in June 2000. He is currently the vice president of THTF, the general manager of Tongfang Smart Energy Saving Division (同方智慧節能產業本部) and served as the chairman of Tongfang Artificial Environment Co., Ltd (同方人工環境有限公司), Tongfang Kawasaki Advanced Energy-saving Machine Co., Ltd. (同方節能裝備有限公司) and Tongfang Energy Technology Development Co., Ltd. (同方能源科技發展有限公司) respectively. He also held several positions in THTF, including the assistant of president in THTF, the standing vice general manager and project center general manager of Tongfang Digital City Division (同方數字城市產業本部). He obtained the doctor degree in heating, gas supply, ventilating and air conditioning engineering from Tsinghua University in June 2000, the executive master degree in business administration from Tsinghua University in March 2007. He was awarded as the professor senior engineer (教授級高級工程師) in Beijing in May 2012. He is also the standing vice president of China Construction Industry Association – Green Building and Intelligent Building branch (中國建築業協會綠色建造與智能建築分會), the vice president of counsel of the Engineering Design Committee of Chinese Association of Automation (中國自動化學會工程設計委員會) and a member of Technical Committee of China District Heating Association (中國城鎮供熱協會技術委員會).

Non-Executive Directors

Mr. Liang Wuquan (梁武全)

Aged 47, was appointed as a non-executive director of the Company on 17 June 2021. Mr. Liang has extensive experience in finance and management. He held several positions in China National Nuclear Corporation Co., Ltd (中國核工業集團有限公司), including as the chief accountant of the nuclear fuel business division from February 2010 to June 2012, the deputy director of the finance division from June 2012 to April 2014, and chief accountant and member of the party group of the geology and mining business division from April 2014 to May 2017. From May 2017 to October 2018, he was the chief accountant, chief legal consultant and member of the party committee of China Uranium Co., Ltd (中國鈾業有限公司). Mr. Liang then served as the deputy general manager of China National Nuclear Corporation Industry Fund Management (Beijing) Co. Ltd (中核產業基金管理（北京）有限公司) from October 2018 to December 2019, and as the deputy general manager of China National Nuclear Corporation Capital Holding Co., Ltd. (中國核工業集團資本控股有限公司) from December 2019 to February 2020. Since February 2020, Mr. Liang has been the chief financial officer and financial controller of THTF, a company listed on the Shanghai Stock Exchange (stock code: 600100).

Mr. Liang obtained a bachelor's degree in economics from the University of South China (南華大學) in June 1997 and a master's degree in accounting from Tsinghua University (清華大學) in January 2010.

Mr. Zeng Xuejie (曾學傑)

Aged 48, was appointed as a non-executive director of the Company on 17 June 2021. Mr. Zeng has over 17 years of experience in management. He was the head of the planning and development department and secretary to the board of directors in Beijing Jingcheng Water Services Co., Ltd. (北京京城水務有限公司) from July 2004 to December 2007. From December 2007 to October 2009, he was the vice general manager of the asset management department of the China Sciences Group (Holding) Co., Ltd.. From October 2009 to June 2015, he successively served as the general manager of the investment development business department, the head of the development and planning department, the head of the operations and management department and secretary to the board of directors in China Aviation International Construction and Investment Co., Ltd (中國航空國際建設投資有限公司). From June 2015 to January 2017, he was the head of the corporate development department, the secretary to the board of directors and assistant to the general manager in the Institute of Architecture Design and Research, CAS. From January 2017 to April 2020, he was the chief investment officer and the manager of the investment department of Tongfang Energy Saving Engineering Technology Co., Ltd., a wholly-owned subsidiary of the Company. Since April 2020, Mr. Zeng has been the general manager of the investment development department of the Smart Energy Saving Division of THTF.

Mr. Zeng obtained a bachelor's degree in mechatronics from Hunan University (湖南大學) in July 1996 and a master's degree in managerial sciences and engineering from the Beijing University of Technology (北京工業大學) in July 2004. He was qualified as a senior economist and a consulting engineer (investment) in the PRC.

Mr. Zhang Jian (張健)

Aged 37, was appointed as a non-executive director of the Company on 17 June 2021. Mr. Zhang has extensive experience in engineering and management. From July 2011 to October 2013, Mr. Zhang served as an engineer in China Nuclear Power Engineering Co., Ltd. (中國核電工程有限公司). From October 2013 to August 2015, he was the head of planning and project management division of China Power Investment Nuclear Power Co., Ltd. (中電投核電有限公司). He was a staff member of the strategic planning division of State Power Investment Group Co., Ltd. (國家電力投資集團公司) from August 2015 to July 2017 and of the secretariat division of the general office of State Development & Investment Co., Ltd (國家開發投資公司) from January 2018 to December 2018. From January 2019 to April 2020, Mr. Zhang served as the deputy director of the first secretariat division of China National Nuclear Corporation Co., Ltd (中國核工業集團有限公司). Since April 2020, Mr. Zhang has been the secretary to the board of THTF.

Mr. Zhang obtained a bachelor's degree in engineering physics from Tsinghua University (清華大學) in September 2008 and a master's degree in nuclear science and engineering from the No. 2 Institute of Nuclear Industrial Research and Design (核工業第二研究設計院) in July 2011.

Independent Non-Executive Directors

Dr. FAN Ren Da, Anthony (范仁達)

Aged 62, was appointed as an independent non-executive director of the Company on 8 September 2011. Dr. Fan is the chairman and managing director of AsiaLink Capital Limited and also an independent non-executive director of Neo-Neon Holdings Limited (stock code: 1868), Shanghai Industrial Urban Development Group Limited (stock code: 563), China Dili Group (stock code: 1387), CITIC Resources Holdings Limited (stock code: 1205), China Development Bank International Investment Limited (stock code: 1062), Hong Kong Resources Holdings Company Limited (stock code: 2882) and Semiconductor Manufacturing International Corporation (stock code: 981). Dr. Fan has been re-designated from an independent non-executive director to an executive director and resigned as the chairman of the remuneration committee and a member of each of the audit committee and the nomination committee of Tenfu (Cayman) Holdings Company Limited (stock code: 6868), a company listed on the Stock Exchange, with effect from 18 May 2021. Dr. Fan ceased to act as an independent non-executive director of Raymond Industrial Limited (stock code: 229) with effect from 21 May 2021. He is also the Founding President of The Hong Kong Independent Non-Executive Director Association. Dr. Fan was an independent non-executive director of CGN New Energy Holdings Co., Ltd. (stock code: 1811) from September 2014 to June 2018. Dr. Fan also serves as a non-executive director of Hilong Holding Limited (stock code: 1623). All of the said companies are listed on the Main Board of the Stock Exchange. Besides, Dr. Fan was an independent non-executive director of Lerthai Group Limited (Delisted) (formerly known as LT Commercial Real Estate Limited, previous stock code: 112) from March 2013 to June 2017, Guodian Technology & Environment Group Corporation Limited (Delisted) (previous stock code: 1296) from September 2011 to August 2017. Dr. Fan holds a master's degree in business administration from the United States of America and a PhD degree in Economics.

Mr. Chia Yew Boon (謝有文)

Aged 64, was appointed as an independent non-executive director of the Company on 8 September 2011. He received his Diploma of Chemical Engineering from Ecole Nationale Supérieure de Chimie de Strasbourg, France in July 1983.

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

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

Ms. Chen Hua (陳華)

Aged 57, was appointed as an independent non-executive director of the Company on 8 September 2011. Ms. Chen received a Bachelor's degree in Science from New York University in 1988, and a Master's degree in Science with major in taxation from Fordham University in 1992. Ms. Chen joined SB China Venture Capital (軟銀中國創業投資有限公司) as the operating partner and chief financial officer in 2010. Since 2020, Ms. Chen is the CEO of SBCVC Management Pte Limited. Ms. Chen was a director in the asset management division of Credit Suisse from 25 September 2000 to 31 December 2009. From 1993 to 2000, Ms. Chen was a Tax Consulting Manager with Arthur Andersen LLP and Ernst & Young's financial service division, providing tax and structure consulting services to broker/dealers, hedge fund, private equity, venture fund and 40 Act mutual fund companies. Ms. Chen is a U.S. certified public accountant.

Senior Management

Mr. Zhao Xiaobo (趙曉波)

Please refer to the details set out above under the paragraph headed “Executive Directors”.

Mr. Qin Xuzhong (秦緒忠)

Please refer to the details set out above under the paragraph headed “Executive Directors”.

Mr. Leung Lok Wai (梁樂偉)

Aged 47, is the chief financial officer of the Group and a joint company secretary of the Company. He joined the Group in June 2010. Mr. Leung received his Bachelor's degree in accountancy from the Hong Kong Polytechnic University in December 1999. He is a member of Hong Kong Institute of Certified Public Accountants and a member of the Institute of Internal Auditors. He has over 20 years of experience in accounting, audit, due diligence and financial management, including transaction services in PricewaterhouseCoopers, group internal audit in Swire Group and audit assurance services in KPMG. Mr. Leung was also the company secretary of Neo-Neon Holdings Limited (stock code: 1868), which is listed on the main board of the Stock Exchange.

JOINT COMPANY SECRETARIES

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

Ms. Cheok Hui Yee (石慧儀), aged 37, was appointed a joint company secretary of the Company on 23 January 2020 to satisfy the requirement under the Companies Act 1967 of Singapore that the company secretary of a company incorporated in Singapore shall be residing locally in Singapore. Ms. Cheok is an associate member and a practicing chartered secretary of the Chartered Secretaries Institute of Singapore. Ms. Cheok has over 10 years of experience in corporate secretarial practice in Singapore. She is currently a senior manager of Tricor Evatthouse Corporate Services, a division of Tricor Singapore Pte. Ltd..

Report of the Directors

The directors of the Company (the “Directors”) have pleasure in presenting their report together with the audited financial statements for the year ended 31 December 2022.

PRINCIPAL ACTIVITIES

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

BUSINESS REVIEW

The business review of the Group as at 31 December 2022 is set out under the section headed “Management Discussion and Analysis” of this annual report on pages 9 to 15.

ANALYSIS OF FINANCIAL KEY PERFORMANCE INDICATORS

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

SUBSIDIARIES

Details of the principal subsidiaries of the Group as at 31 December 2022 are set out in note 14 to the financial statements.

FINANCIAL STATEMENTS

The profit of the Group for the year ended 31 December 2022 and the state of the Company’s and the Group’s affairs as at that date are set out in the financial statements on pages 27 to 145 of this annual report.

DIVIDENDS

During 2022, the Company has not declared any dividend in respect of the financial year ended 31 December 2021. The Board does not recommend any final dividend for the year ended 31 December 2022.

RESERVES

Details of movements in reserves of the Company and the Group are set out in note 24 to the financial statements and in the consolidated statement of changes in equity, respectively.

DISTRIBUTABLE RESERVES OF THE COMPANY

As at 31 December 2022, the aggregate amount of reserves available for distribution to equity shareholders of the Company was RMB384,094,000 (2021: RMB395,306,000). Details of the reserves of the Company as at 31 December 2022 are set out in note 24 to the financial statements.

CHARITABLE DONATIONS

Charitable donations made by the Group during the year ended 31 December 2022 amounted to approximately RMB41,795 (2021: nil).

PROPERTY, PLANT AND EQUIPMENT

Movements in property, plant and equipment of the Group for the year ended 31 December 2022 are set out in note 11 to the financial statements.

SHARE CAPITAL

Details of the movements in share capital of the Company during the year ended 31 December 2022 are set out in note 24 to the financial statements.

DIRECTORS

The Directors during the year ended 31 December 2022 and as at the date of this report were:

Executive Directors
Mr. Zhao Xiaobo (趙曉波)
Mr. Qin Xuzhong (秦緒忠) (Chairman)

Non-executive Directors
Mr. Liang Wuquan (梁武全)
Mr. Zeng Xuejie (曾學傑)
Mr. Zhang Jian (張健)

Independent Non-executive Directors
Ms. Chen Hua (陳華)
Mr. Chia Yew Boon (謝有文)
Mr. Fan Ren Da Anthony (范仁達)

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

Each of the executive, non-executive and independent non-executive Directors on the Board other than Mr. Qin Xuzhong, Mr. Liang Wuquan, Mr. Zeng Xuejie and Mr. Zhang Jian had entered into a service contract with the Company for an initial term of one year, commencing from 27 October 2011. Mr. Qin Xuzhong has entered into a service contract with the Company for an initial term of one year commencing from 7 February 2018. Mr. Liang Wuquan, Mr. Zeng Xuejie and Mr. Zhang Jian entered into service contracts with the Company for an initial term of one year commencing from 17 June 2021. Each of the service contracts are automatically renewed upon expiration and until terminated by either party upon a three-month prior written notice.

In accordance with article 104 of the Company's Constitution (the "Constitution"), Mr. Qin Xuzhong and Ms. Chen Hua will retire from the Board by rotation at the forthcoming annual general meeting and, being eligible, offer themselves for re-election.

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

DIRECTORS' AND SENIOR MANAGEMENT'S BIOGRAPHIES

Biographical details of the Directors and senior management are set out on pages 16 to 22 of this annual report.

DIRECTORS' INTERESTS IN CONTRACTS

Save as disclosed below, there was no contract of significance to which the Company, its holding company, or any of its subsidiaries was a party, and in which a Director of the Company had a material interest, whether directly or indirectly, subsisted during or at the end of the year ended 31 December 2022.

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

As at 31 December 2022, the Directors and the chief executive of the Company and their respective associates had the following interests or short positions in the Shares, underlying shares of the Company (the "Shares") and debentures of the Company and its associated corporations (within the meaning of Part XV of the Securities and Futures Ordinance (Chapter 571 of Laws of Hong Kong) (the "SFO")) which have been notified to the Company and the Stock Exchange pursuant to Divisions 7 and 8 of Part XV of the SFO, including interests and short positions which the Directors and the chief executive of the Company are taken and deemed to have under such provisions of the SFO, or which are required to be and are recorded in the register required to be kept under Section 352 of the SFO or as otherwise notified to the Company and the Stock Exchange pursuant to the Model Code for Securities Transactions of Directors of Listed Issuers (the "Model Code"):

Long Positions in the Company

Name of Director and chief executive	Capacity/ Nature of interest	Number of Shares interested	Approximate percentage of interest in the issued share capital of the Company
Mr. Zhao Xiaobo	Beneficial owner	8,728,000	1.12%

Save as disclosed above, as at 31 December 2022, none of the Directors or the chief executive of the Company had or was deemed to have any interests or short position in the Shares, underlying Shares or debentures of the Company and its associated corporations (within the meaning of Part XV of the SFO), which had been recorded in the register maintained by the Company pursuant to section 352 of the SFO or which had been notified to the Company and the Stock Exchange pursuant to the Model Code.

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

ARRANGEMENT FOR DIRECTORS TO PURCHASE SHARES OR DEBENTURES

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

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

So far as is known to any Director or chief executive of the Company, as at 31 December 2022, the persons or corporations (other than Director or chief executive of the Company) who had interest or short positions in the Shares and underlying Shares of the Company which were required to be disclosed to the Company under the provisions of Division 2 and 3 of Part XV of the SFO, or which were recorded in the register required to be kept under section 336 of the SFO were as follows:

Name of Shareholders	Capacity/Nature of interest	Number of Shares interested	Approximate percentage of interest in the issued share capital of the Company
Tsinghua Tongfang Co., Ltd (同方股份有限公司)	Beneficial owner	92,000,000	11.76%
	Interest in a controlled corporation[1]	194,330,142	24.84%
Resuccess Investments Limited	Beneficial owner	194,330,142	24.84%

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

Save as disclosed above, as at 31 December 2022, the Directors and the chief executive of the Company are not aware of any other person or corporation having an interest or short position in the Shares and underlying Shares of the Company which would require to be disclosed to the Company under the provisions of Division 2 and 3 of Part XV of the SFO, or which were recorded in the register required to be kept by the Company pursuant to Section 336 of the SFO.

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

During the year ended 31 December 2022, neither the Company nor any of its subsidiaries has repurchased, sold or redeemed any of the Company's listed securities.

CONNECTED TRANSACTION

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

CONTINUING CONNECTED TRANSACTIONS

Connected persons

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

(b) China National Nuclear Corporation ("CNNC"): CNNC is a controlling shareholder of China Nuclear Capital Holdings Limited (formerly known as China Nuclear Engineering Capital Holdings Limited) ("CNEC") and CNEC is a controlling shareholder of THTF. As the result, CNNC is an associate of a connected person of the Company under Rule 14A.13(1) of the Listing Rules.

The continuing connected transactions

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

On 24 October 2019, Tongfang Technovator International (Beijing) Co., Ltd. ("Technovator Beijing") and THTF entered into a sales agreement (the "2019 Sales Agreement") to commence a new term for the transactions contemplated under the 2017 sales agreement entered into between the parties on 1 November 2017, pursuant to which Technovator Beijing agreed to sell or procure such other parties agreed by THTF, including members of the Group, to sell intelligent energy saving related products, equipment and services, which include control security systems, fire alarm systems and energy saving equipment to THTF, its subsidiaries and their respective associates and affiliates from time to time (which includes CNNC and its subsidiaries) (the "Tongfang Group") for a term of three years from 1 January 2020 to 31 December 2022 and annual caps for the years ending 31 December 2020, 2021 and 2022, being RMB250.0 million, RMB300.0 million and RMB350.0 million, respectively. The price at which the Group sells such products to the Tongfang Group will be determined based on normal commercial terms after arm's length negotiation.

For the year ended 31 December 2022, the Group sold products to Tongfang Group in the amount of approximately RMB237.3 million, which was within the approved cap of RMB350.0 million.

The Group entered into the 2019 Sales Agreement to accommodate the business needs of the Group's non-core businesses. Further details of the 2019 Sales Agreement are set out in the announcement of the Company dated 25 October 2019 and the circular of the Company dated 16 December 2019.

On 27 December 2022, Technovator Beijing and THTF entered into a sales agreement (the "2022 Sales Agreement") to commence a new term for the transactions contemplated under the 2019 sales agreement, pursuant to which Technovator Beijing agreed to sell or procure such other parties agreed by THTF, including members of the Group, to sell intelligent energy saving related products, equipment and services, which include control security systems, fire alarm systems and energy saving equipment to THTF, its subsidiaries and their respective associates and affiliates from time to time (which includes CNNC and its subsidiaries) (the "Tongfang Group") for a term of three years from 1 January 2023 to 31 December 2025 and annual caps for the years ending 31 December 2023, 2024 and 2025, being RMB420.0 million, RMB460.0 million and RMB510.0 million, respectively. The price at which the Group sells such products to the Tongfang Group will be determined based on normal commercial terms after arm's length negotiation. Further details of the 2022 Sales Agreement are set out in the announcement of the Company dated 27 December 2022 and the circular of the Company dated 31 January 2023.

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

On 24 October 2019, Technovator Beijing and THTF entered into a purchase agreement (the "2019 Purchase Agreement") to commence a new term for the transactions contemplated under the 2017 purchase agreement entered into between the parties on 1 November 2017, pursuant to which THTF agreed to sell or procure such other parties agreed by Technovator Beijing, including members of the Tongfang Group, to sell wiring, lighting and other products, equipment and systems and services relating to the Group's business of energy management, energy saving and environmental protection to the Group for a term of three years from 1 January 2020 to 31 December 2022 and annual caps for the years ending 31 December 2020, 2021 and 2022, being RMB200.0 million, RMB250.0 million and RMB300.0 million, respectively. The price of such goods and services supplied by the Tongfang Group to the Group will be determined based on normal and commercial terms after arm's length negotiation, with reference to the prevailing market price of similar goods and services at the time of a particular transaction, and in any event no less favorable to the Group than those offered by independent third party suppliers to the Group.

For the year ended 31 December 2022, the Group purchased such raw materials from Tongfang Group in the amount of approximately RMB98.6 million, which was within the approved cap of RMB300.0 million.

The Group entered into the 2019 Purchase Agreement to accommodate the business needs of the Group's non-core businesses. Further details of the 2019 Purchase Agreement are set out in the announcement of the Company dated 25 October 2019 and the circular of the Company dated 16 December 2019.

On 27 December 2022, Technovator Beijing and THTF entered into a purchase agreement (the "2022 Purchase Agreement") to commence a new term for the transactions contemplated under the 2019 Purchase agreement, pursuant to which THTF agreed to sell or procure such other parties agreed by Technovator Beijing, including members of the Tongfang Group, to sell wiring, lighting and other products, equipment and systems and services relating to the Group's business of energy management, energy saving and environmental protection to the Group for a term of three years from 1 January 2023 to 31 December 2025 and annual caps for the years ending 31 December 2023, 2024 and 2025, being RMB220.0 million, RMB250.0 million and RMB270.0 million, respectively. The price of such goods and services supplied by the Tongfang Group to the Group will be determined based on normal and commercial terms after arm's length negotiation, with reference to the prevailing market price of similar goods and services at the time of a particular transaction, and in any event no less favorable to the Group than those offered by independent third party suppliers to the Group. Further details of the 2022 Purchase Agreement are set out in the announcement of the Company dated 27 December 2022 and the circular of the Company dated 31 January 2023.

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

On 24 October 2019, Technovator Beijing and THTF entered into a master agreement (the "2019 Master Agreement") to commence a new term for the transactions contemplated under the 2017 master agreement entered into between the parties on 1 November 2017 and to commence a new term for the transactions, pursuant to which the Group may provide to or receive from the Tongfang Group miscellaneous products and services for a period of three years from 1 January 2020 to 31 December 2022 as may be required to satisfy the operational needs of the Group/ Tongfang Group from time to time in the ordinary course of business of the Group with annual caps for the category of "provision of miscellaneous products and services by the Group to the Tongfang Group" for the years ending 31 December 2020, 2021 and 2022, being RMB30.0 million, RMB40.0 million and RMB50.0 million, respectively, and annual caps for the category of "receipt of miscellaneous products and services by the Group from the Tongfang Group" for the years ending 31 December 2020, 2021 and 2022, being RMB50.0 million, RMB60.0 million and RMB70.0 million, respectively.

Pursuant to the 2019 Master Agreement, the miscellaneous products and services provided by the Group to the Tongfang Group mainly include (i) rental services (including leasing of land and premises); (ii) research and development services and products (including technology licensing); (iii) the use of trademark license; and (iv) sharing of general administration and management support services but exclude any transactions contemplated under the 2019 Sales Agreement.

The miscellaneous products and services provided by the Tongfang Group to the Group mainly include (i) rental services (including leasing of land, premises, machinery and equipment); (ii) research and development services and products (including technology licensing); (iii) the use of trademark license; and (iv) sharing of general administration and management support services, other than the transactions contemplated under the four existing trademark license agreements all dated 28 May 2010 entered into between Technovator Beijing and THTF, as amended on 4 August 2011, and any transactions contemplated under the 2019 Purchase Agreement.

The prices at which the Group or the Tongfang Group provides such services will be based on the pricing mechanism as disclosed in the announcement of the Company dated 25 October 2019 and the circular of the Company dated 16 December 2019.

For the year ended 31 December 2022, the miscellaneous products and services provided by the Group to Tongfang Group amounted to approximately RMB Nil, which was within the approved cap of RMB50.0 million.

For the year ended 31 December 2022, the miscellaneous products and services provided by the Tongfang Group to the Group amounted to approximately RMB28.0 million, which was within the approved cap of RMB70.0 million.

The Group entered into the 2019 Master Agreement to accommodate the business needs of the Group's non-core businesses. Further details of the 2019 Master Agreement are set out in the announcement of the Company dated 25 October 2019 and the circular of the Company dated 16 December 2019.

On 27 December 2022, Technovator Beijing and THTF entered into a master agreement (the "2022 Master Agreement") to commence a new term for the transactions contemplated under the 2019 Master Agreement, pursuant to which the Group may provide to or receive from the Tongfang Group miscellaneous products and services for a period of three years from 1 January 2023 to 31 December 2025 as may be required to satisfy the operational needs of the Group/Tongfang Group from time to time in the ordinary course of business of the Group with annual caps for the category of "provision of miscellaneous products and services by the Group to the Tongfang Group" for the years ending 31 December 2023, 2024 and 2025, being RMB20.0 million, RMB25.0 million and RMB30.0 million, respectively, and annual caps for the category of "receipt of miscellaneous products and services by the Group from the Tongfang Group" for the years ending 31 December 2023, 2024 and 2025, being RMB43.0 million, RMB48.0 million and RMB53.0 million, respectively. Further details of the 2022 Master Agreement are set out in the announcement of the Company dated 27 December 2022 and the circular of the Company dated 31 January 2023.

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

Pursuant to the business arrangement agreement dated 24 November 2019, THTF, Technovator Beijing and Tongfang Energy Saving Engineering Technology Co., Ltd., wholly-owned subsidiaries of the Company agreed to engage in certain business arrangements (the "2019 Business Arrangements" in relation to Intelligent rail transit, building and urban heating network businesses (the "Intelligent Businesses")), including (i) for the projects (including new contracts or projects) which THTF continues to use its name for entering into such contracts and/or projects of the Intelligent Businesses that the legal rights and obligations of which cannot be directly transferred to the Group (the "Nominee Projects"), THTF will assign, sub-contract, delegate or in any other way the parties may mutually agree so that the Group will assume these contracts. The Group will be responsible for performing the work required by the Nominee Projects and entitled to the income from the Nominee Projects. To the extent that the legal rights of THTF under the contracts in respect of any Nominee Projects have not been assigned to the Group, or for any other reasons THTF receives any payment from the customers of any Nominee Projects for any income generated, THTF is required to pay such amount to the Group no later than the balance sheet date of the month in which such amount is received without any additional compensation. THTF undertakes to assist the Group to take up the Nominee Projects without any additional compensation, including but not limited to providing any necessary information to the Group and handling the relevant project completion and settlement procedures as necessary; (ii) If debtors of the Nominee Projects settle debts by paying THTF, THTF is required to pay such amount to the Group no later than the balance sheet date of the month in which such amount is received without any additional compensation; (iii) THTF will act as the party to supply contracts to procure materials or services from third party suppliers for the Nominee Projects and will procure the necessary materials and services from the relevant third party suppliers for the Group upon instruction by the Group, and the Group is required to reimburse THTF for the amount paid by THTF; (iv) THTF agrees that the debts which are part of the liabilities of the Nominee Projects that have not been assumed by the Group as the consent from the creditors has not been obtained, THTF will continue to satisfy such debts. In the event that THTF is required to settle such debt with the relevant third party creditors, the Group is required to reimburse THTF for such amount no later than the balance sheet date of the month in which such amount is paid by THTF; and (v) THTF will continue to support the Group on the continual development and expansion of the Intelligent Businesses. THTF agrees to provide support and cooperation for the Group for the Intelligent Businesses upon reasonable request from the Group including cooperating with the Group to develop new projects and business opportunities in respect of these businesses, being a party to the relevant agreements to facilitate the Group's conducting of these businesses if necessary, and providing the required information and assistance to complete the relevant projects, in manners similar to the support to be provided by THTF as set out in paragraphs (i) to (iv) above. Such new sales, procurement or project contracts if to be signed by THTF, all of the terms shall be negotiated by the Group. By virtue of the arrangements as set out above, to the extent that any Nominee Projects are not capable to be assigned to the Group, THTF will continue to act as the party to such agreements, and will transfer any payments it receives from the relevant customers of these businesses to the Group without any additional charges. As for new project or contracts that it is necessary or desirable for THTF to be a contracting party, THTF may cooperate with the Group in the performance of such contracts for the relevant customers, and transfer any payments it receives from the relevant customers of the Intelligent Businesses to the Group without any additional charges.

The prices for new sales contracts to which THTF will act as the party will be negotiated with third party customers based on the price range as indicated by the prices charged by THTF (including those Nominee Projects signed in name of THTF) in at least two projects within the past 12 months with scope of services undertaken and/or for past sale of products by the relevant Intelligent Business which most closely resembles the requirements of the new sales contract concerned. The prices for the purchase of material and/or services to be procured under supply contracts subject to the 2019 Business Arrangements will be negotiated with third party suppliers based on the prices paid by THTF (including those Nominee Projects signed in name of THTF) in at least two purchases within the past 12 months for similar material and/or services.

The annual caps of payments to be transferred by THTF to the Group pursuant to the 2019 Business Arrangements for each of the years ended 31 December 2020, 2021 and 2022 are RMB1,600.0 million. For the year ended 31 December 2022, the payments transferred by THTF to the Group pursuant to the 2019 Business Arrangements amounted to approximately RMB886.3 million, which was within the approved annual cap of RMB1,600.0 million.

The annual caps of payments to be transferred by the Group to THTF pursuant to the 2019 Business Arrangements for each of the years ending 31 December 2020, 2021 and 2022 are RMB1,300.0 million. For the year ended 31 December 2022, the payments transferred by the Group to THTF pursuant to the 2019 Business Arrangements amounted to approximately RMB582.4 million, which was within the approved annual cap of RMB1,300.0 million.

Please refer to the announcement of the Company dated 25 October 2019 and the circular of the Company dated 16 December 2019 for further details of the 2019 Business Arrangements.

On 27 December 2022, Technovator Beijing, Tongfang Energy Saving and THTF entered into an business arrangements agreement (the "2022 Business Arrangements Agreement") to commence a new term for the transactions contemplated under the 2019 Business Arrangements Agreement, pursuant to which the parties agreed on the arrangements relating to the Intelligent Rail Transit, Building and Urban Heating Network Businesses for a term of three years from 1 January 2023 to 31 December 2025. The annual caps for the transactions contemplated under the 2022 Business Arrangements Agreement is RMB1,200.0 million, RMB1,260.0 million and RMB1,160.0 million for the payments to be transferred by THTF to the Group, and RMB980.0 million, RMB1,030.0 million and RMB950.0 million for payments to be transferred by the Group to THTF for the years ending 31 December 2023, 2024 and 2025, respectively. Further details of the 2022 Business Arrangements Agreement are set out in the announcement of the Company dated 27 December 2022 and the circular of the Company dated 31 January 2023.

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

(i) entered into in the ordinary and usual course of business of the Group;

(ii) conducted either on normal commercial terms or, if there are not sufficient comparable transactions to judge whether they are on normal commercial terms, on terms no less favourable to the Group than terms available to or from Independent Third Parties; and

(iii) in accordance with the relevant agreement governing them on terms that are fair and reasonable and in the interests of the Shareholders as a whole.

The Company's auditor, KPMG, was engaged to report on the Group's continuing connected transactions in accordance with Hong Kong Standard on Assurance Engagements 3000 (Revised) "Assurance Engagements Other Than Audits or Reviews of Historical Financial Information" and with reference to Practice Note 740 "Auditor's Letter on Continuing Connected Transactions under the Hong Kong Listing Rules" issued by the Hong Kong Institute of Certified Public Accountants. The auditor, KPMG, has issued his unqualified letter containing his findings and conclusions in respect of the continuing connected transactions disclosed by the Group in this annual report in accordance with Rule 14A.56 of the Listing Rules. A copy of the auditor's letter has been provided by the Company to the Stock Exchange.

Details of the significant related party transactions undertaken in the normal course of business are provided under note 27 to the financial statements. None of these related party transactions constitute connected transaction or continuing connected transactions as defined under the Listing Rules that is required to be disclosed, except for those described in the sections headed "Connected Transaction" and "Continuing Connected Transactions" in this report, in respect of which the disclosure requirements in accordance with Chapter 14A of the Listing Rules have been complied with.

CONTRACTS WITH CONTROLLING SHAREHOLDERS

Other than the continuing connected transactions set out above, no contract of significance has been entered into between the Company or any of its subsidiaries and the Controlling Shareholders during the year ended 31 December 2022.

NON-COMPETE UNDERTAKINGS

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

DIRECTORS' INTEREST IN COMPETING BUSINESS

None of the Directors is or was interested in any business apart from the Group's business that competes or competed or is or was likely to compete, either directly or indirectly, with the Group's business at any time during the year ended 31 December 2022 and up to and including the date of this annual report.

MANAGEMENT CONTRACTS

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

PRE-EMPTIVE RIGHTS

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

EMOLUMENT POLICY

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

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

None of the Directors waived any emoluments during the year.

PENSION SCHEME

The employees of the Group's subsidiaries which operate in China are required to participate in defined contribution central pension schemes operated by the local municipal government. The subsidiaries of the Group are required to contribute certain percentages of its payroll costs to the central pension schemes. The contributions are charged to the consolidated income statements as they become payable in accordance with the rules of the central pension scheme. No forfeited contribution is available to reduce the contribution payable in future years.

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

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

PERMITTED INDEMNITY PROVISION

Since 1 January 2022 up to and including 31 December 2022, the Company had taken out appropriate corporate liability insurance for its Directors. As of the date of this report, such corporate liability insurance remained effective.

MAJOR CUSTOMERS AND SUPPLIERS

Aggregate sales attributable to the Group's largest and five largest customers for the year ended 31 December 2022 were 13.6% (2021: 4.4%) and 27.9% (2021: 18.4%) of the Group's total sales respectively.

Aggregate purchases attributable to the Group's largest and five largest suppliers for the year ended 31 December 2022 were 4.1% (2021: 2.4%) and 11.6% (2021: 7.2%) of the Group's total purchases respectively.

At no time during the year ended 31 December 2022, did a Director, his/her close associate(s) or a Shareholder, which to the knowledge of the Director owns more than 5% of the Company's share capital, have an interest in any of the Group's five largest customers and suppliers.

AUDITORS

KPMG was the external auditor of the Company in Hong Kong and KPMG LLP was the registered auditor of the Company in Singapore during the year ended 31 December 2022, whose term will end at the conclusion of the forthcoming annual general meeting of the Company. During the three preceding financial years, there was no change in the external auditor in Hong Kong and the auditor in Singapore of the Company.

SUFFICIENCY OF PUBLIC FLOAT

Based on information that is publicly available to the Company and within the knowledge of the Directors as at the date of this annual report, the Company has maintained the prescribed public float of not less than 25% of the Company's issued Shares as required under the Listing Rules for the year ended 31 December 2022.

BANK LOANS

Details of bank loans of the Group as at 31 December 2022 are set out in note 20 to the financial statements.

PRINCIPAL RISKS AND UNCERTAINTIES

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

RELATIONSHIPS WITH EMPLOYEES, SUPPLIERS AND CUSTOMERS

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

ENVIRONMENTAL POLICIES AND PERFORMANCE

Our Group is specialized in providing energy saving and environmentally-friendly products. The Group has obtained the ISO14001 Environmental Management System Certification of the China Quality Certification Centre, which is an international standard on the operation of an environmental management system. In addition, we are committed to building an environmentally-friendly corporation that pays close attention to conserving energy. We strive to operate in compliance with the relevant environmental regulations and rules. During the year ended 31 December 2022 and up to the date of this report, the Group does not have any violation of relevant environmental regulations and rules which gives rise to significant impact to the Group's development, performance and businesses.

See also the "Environmental, Social and Governance Report – Environment Protection" in this report for more information.

COMPLIANCE WITH LAWS AND REGULATIONS

Our Group shall comply with relevant laws and regulations in the jurisdictions where the Group operates. The Group's operations are mainly carried out by the Company's subsidiaries in the PRC. Accordingly, our operations shall comply with relevant laws and regulations in the PRC. During the year ended 31 December 2022 and up to the date of this report, the Group does not have any violation of relevant laws and regulations which gives rise to significant impact to the Group's development, performance and businesses.

FIVE-YEAR SUMMARY

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

On behalf of the Board

Qin Xuzhong
Chairman

23 March 2023

COMPLIANCE WITH CORPORATE GOVERNANCE CODE

The Company is committed to maintaining and promoting high corporate governance standards. The Board believes that good corporate governance is conducive to enhancing overall performance and accountability and is essential in modern corporate administration. The Board of Directors continuously observes the principles of good corporate governance in the interests of Shareholders and devotes considerable effort to identifying and formalizing best practice.

Throughout the year ended 31 December 2022, the Company complied with all code provisions and, where appropriate, adopted the recommended best practices as set out in the Corporate Governance Code in Appendix 14 to the Main Board Listing Rules (the "Corporate Governance Code"), except for deviation from C.5.1 of the Corporate Governance Code regarding the number of board meetings held, the details of which are set out in the paragraph headed "Meetings" below in this report.

B.2.4(b) of the Corporate Governance Code stipulates that where all the independent non-executive Directors have served more than nine years on the Board, a new independent non-executive Director should be appointed at the forthcoming annual general meeting (with effect from the financial year commencing on or after 1 January 2023). As at 31 December 2022 and up to date of this annual report, all the independent non-executive Directors have served more than 11 years on the Board. The Company will use its best effort to comply with the relevant requirements.

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

MODEL CODE FOR SECURITIES TRANSACTIONS

The Company has adopted the Model Code as set out in Appendix 10 of the Rules Governing the Listing of Securities regarding securities transactions by the Directors. Any employee, director or employee of a subsidiary or the Group (the "Relevant Employees") who, because of their office or employment, are likely to possess inside information in relation to the Company or its securities are also subject to compliance with the Model Code. Having made specific enquiry with all Directors, all Directors confirmed that they have complied with the required standard set out in the Model Code and its code of conduct regarding directors' securities transactions during the year ended 31 December 2022. No incident of non-compliance of the Model Code by the Relevant Employees was noted by the Company during the Reporting Period.

BOARD OF DIRECTORS

Board Composition
The directors during the year ended 31 December 2022 and as at the date of this annual report were:

Executive Directors
Mr. Zhao Xiaobo (趙曉波)
Mr. Qin Xuzhong (秦緒忠) *(Chairman)*

Non-executive Directors
Mr. Liang Wuquan (梁武全)
Mr. Zeng Xuejie (曾學傑)
Mr. Zhang Jian (張健)

Independent Non-executive Directors
Ms. Chen Hua (陳華)
Mr. Chia Yew Boon (謝有文)
Mr. Fan Ren Da Anthony (范仁達)

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

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

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

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

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

CONTINUOUS PROFESSIONAL DEVELOPMENT FOR DIRECTORS

The Directors have been informed of the requirement under Code Provision C.1.4 of the Corporate Governance Code regarding continuous professional development. According to the records maintained by the Company, the current Directors received the following training by attending briefings, seminars, conferences or reading materials with an emphasis on the roles, functions and duties of a director of a listed company in compliance with the requirement of the Corporate Governance Code on continuous professional development during the year ended 31 December 2022:

	Corporate Governance/ Updates on Laws, Rules and Regulations		Accounting/Financial/ Management or Other Professional Skills	
Name of Director	**Read materials**	**Attended seminars briefings**	**Read materials**	**Attended seminars briefings**
Executive Directors				
Mr. Zhao Xiaobo	✓	✓	✓	✓
Mr. Qin Xuzhong	✓	✓	✓	✓
Non-executive Directors				
Mr. Liang Wuquan	✓	✓	✓	✓
Mr. Zeng Xuejie	✓	✓	✓	✓
Mr. Zhang Jian	✓	✓	✓	✓
Independent non-executive Directors				
Ms. Chen Hua	✓	✓	✓	✓
Mr. Chia Yew Boon	✓	✓	✓	✓
Mr. Fan Ren Da Anthony	✓	✓	✓	✓

CHAIRMAN AND CHIEF EXECUTIVE OFFICER

The roles of chairman and the chief executive officer are segregated. Mr. Qin Xuzhong is the chairman of the Company and Mr. Zhao Xiaobo is the chief executive officer of the Company. The chairman is responsible in leading the Board in forming the Group's strategies and policies and for organizing the business of the Board, ensuring its effectiveness and setting its agenda. The chief executive officer is directly in charge of the daily operations of the Group and is accountable to the Board for the financial and operational performance of the Group.

INDEPENDENT NON-EXECUTIVE DIRECTORS

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

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

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

BOARD DIVERSITY POLICY

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

The Board consists of seven male members and one female member, aging from 37 to 64 years old. Based on the membership and composition of the Board, the nomination committee considers that the Board has a balanced mix of experiences, including management and strategic development, finance and accounting experiences in addition to relevant industry knowledge. Furthermore, the Board has a good mix of new and experienced Directors, who have valuable knowledge and insights of the Group's business over the years, while the new Directors are expected to bring in fresh ideas and new perspective to the Group.

With regards to gender diversity on the Board, having at least one female representation, the Company recognizes the particular importance of gender diversity and will continue to promote gender diversity of the Board. To ensure gender diversity of the Board in the long run, the Company will identify and select female individuals with a diverse range of skills, experience and knowledge from time to time, and maintain a list of such female individuals, which will be reviewed by the nomination committee periodically. The Company also intends to promote gender diversity across workforce when recruiting staff, including senior management. The Company has a gender ratio of 1.8:1 in the workforce (including senior management) and will identify and select female employees to maintain greater diversity in the work force. The Company currently has one female director on the Board and will endeavour to maintain at least one female director on the Board at all times. The decision will be based on merit and contribution that the selected candidates will bring to our Board.

MEETINGS

The Board meets regularly either in person or through electronic means of communications. The number of the Board meetings and general meetings held and the attendance of each Director at these meetings for the year ended 31 December 2022 are set out as follows:

	Board Meeting	General Meeting
No. of meetings held	2	1
No. of meetings attended		
Executive Directors		
Mr. Zhao Xiaobo	2	1
Mr. Qin Xuzhong	2	1
Non-executive Directors		
Mr. Liang Wuquan	1	0
Mr. Zeng Xuejie	2	0
Mr. Zhang Jian	1	0
Independent non-executive Directors		
Ms. Chen Hua	2	0
Mr. Chia Yew Boon	2	0
Mr. Fan Ren Da Anthony	2	1

The Company has continued its best effort to fulfill the Code Provision, including but not limited to C.5.1 of the Corporate Governance Code which provides that the Board should meet regularly and board meetings should be held at least four times a year at approximately quarterly intervals. During the year, although only two regular Board meetings were held for approving the Group's interim financial performance and annual financial performance, the Directors had frequent communication with each other during the year to discuss the overall operation and strategy of the Group, and actively exchanged their views on the performance of the Group. As such, the Directors are considered to be provided in a timely manner with appropriate information to make informed decisions and perform their duties and responsibilities.

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

JOINT COMPANY SECRETARIES

Mr. Leung Lok Wai ("Mr. Leung") and Ms. Cheok Hui Yee ("Ms. Cheok") are the current joint company secretaries of the Company.

Details of the biography of Mr. Leung and Ms. Cheok are set out in the section headed "Directors and Senior Management" of the annual report of which this corporate governance report forms part. The joint company secretaries have been informed of the requirements under Rule 3.29 of the Listing Rules. Both Mr. Leung and Ms. Cheok had attained no less than 15 hours of relevant professional training during the year ended 31 December 2022.

APPOINTMENTS, RE-ELECTION AND REMOVAL OF DIRECTORS

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

TERM OF APPOINTMENT OF NON-EXECUTIVE DIRECTORS

Each of the non-executive Directors and independent non-executive Directors on the Board, other than Mr. Liang Wuquan, Mr. Zeng Xuejie and Mr. Zhang Jian, entered into service contracts with the Company for an initial term of one year commencing from 27 October 2011. Mr. Liang Wuquan, Mr. Zeng Xuejie and Mr. Zhang Jian entered into service contracts with the Company for an initial term of one year commencing from 17 June 2021. All the service contracts of non-executive Directors and independent non-executive Directors are automatically renewed upon expiration and may be terminated by either party upon a three-month prior written notice.

BOARD COMMITTEES

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

AUDIT COMMITTEE

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

During the year ended 31 December 2022, the Audit Committee mainly performed the following duties:

– reviewed the Group's unaudited interim results for the six months ended 30 June 2022 and the audited annual results for the year ended 31 December 2022, met with the external auditors to discuss such interim results and annual results (without the Company's management being present), and was of the opinion that the preparation of the relevant financial statements complied with the applicable accounting standards and requirements and that adequate disclosure has been made;

– reviewed the accounting principles and practices adopted by the Group, and recommended the appointment of the external auditors;

– reviewed the effectiveness of the Group's internal audit function;

– reviewed the effectiveness of the Group's internal control systems on all major operations of the Group, which was considered effective and adequate; and

– assisted the Board in meeting its responsibilities for maintaining an effective system of internal control.

During the year ended 31 December 2022, two meetings were held by the Audit Committee. The attendance record of each member of the Audit Committee at the meetings of the Audit Committee is set out below:

Name of Director	Attendance of Audit Committee Meetings
Ms. Chen Hua *(Chairman)*	2
Mr. Fan Ren Da Anthony	2
Mr. Chia Yew Boon	2

There had been no disagreement between the Board and the Audit Committee during the financial year ended 31 December 2022.

REMUNERATION COMMITTEE

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

During the year ended 31 December 2022, the Remuneration Committee mainly performed the following duties:

– assessed the performance of the Directors and senior management; and

– reviewed the Group's remuneration policy and the remuneration package of the executive Directors and senior management for the year of 2022 and made recommendations to the Board.

During the year ended 31 December 2022, one meeting was held by the Remuneration Committee. The attendance record of each member of the Remuneration Committee at the meetings of the Remuneration Committee is set out below:

Name of Director	Attendance of Remuneration Committee Meeting
Mr. Fan Ren Da Anthony *(Chairman)*	1
Mr. Chia Yew Boon	1
Mr. Qin Xuzhong	1

The remuneration of the members of the senior management by band for the year ended 31 December 2022 is set out below:

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

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

NOMINATION COMMITTEE

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

The Company recognizes and embraces the benefits of having a diverse Board and sees increasing diversity at the Board level as an essential element in maintaining the Company's competitive advantage and enhancing its ability to attract, retain and motivate employees from the widest possible pool of available talents.

The Board Diversity Policy was adopted by the Company, pursuant to which the nomination committee is responsible for reviewing the Board composition by considering a number of aspects, including but not limited to gender, age, cultural and educational background, professional qualifications, skills, knowledge, and industry and regional experience. The nomination committee would discuss periodically and, where necessary, agree on the measurable objectives for achieving diversity on the Board and recommend them to the Board for adoption. The Company aims to maintain an appropriate balance of diversity perspectives that are relevant to the Company's business growth.

During the year ended 31 December 2022, the Nomination Committee mainly performed the following duties:

- reviewed the annual confirmation of independence submitted by the independent non-executive Directors and assessing their independence;

- reviewed the structure, size and composition of the Board during the year;

- discussed the policy for the nomination of directors, which includes the nomination procedures and the process and criteria adopted to select and recommend candidates for directorship; and

- selected and recommended candidates for directorship during the year.

During the year ended 31 December 2022, one meeting was held by the Nomination Committee. The attendance record of each member of the Nomination Committee at the meetings of the Nomination Committee is set out below:

Name of Director	Attendance of Nomination Committee Meeting
Mr. Chia Yew Boon *(Chairman)*	1
Mr. Fan Ren Da Anthony	1
Mr. Qin Xuzhong	1

RISK MANAGEMENT COMMITTEE

The Company established a risk management committee on 29 March 2016 with written terms of reference. The primary duties of the risk management committee are to consider the risk management strategies of the Company, review the risk management system of the Group, assess the risks from major decisions and to consider solutions for significant risks, have periodic assessment on the Group's risk profile and risk management capabilities, make recommendations on the improvement of the Group's risk management systems, consider major investigations findings on risk management matters and management's response to these findings, oversee the Group's risk management systems on an ongoing basis, ensure that a review of the effectiveness of the risk management systems of the Group has been conducted at least annually and report to shareholders that it has done so in its Corporate Governance Report. During the year ended 31 December 2022 and as of the date of this annual report, the risk management committee consists of all the Directors of the Board, namely, Mr. Zhao Xiaobo and Mr. Qin Xuzhong (both are executive Directors), Ms. Chen Hua, Mr. Chia Yew Boon and Mr. Fan Ren Da Anthony (all are independent non-executive Directors), Mr. Liang Wuquan, Mr. Zeng Xuejie and Mr. Zhang Jian (all are non-executive Directors). Mr. Fan Ren Da Anthony is the chairman of the risk management committee.

During the year ended 31 December 2022, the Risk Management Committee mainly performed the following duties:

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

During the year ended 31 December 2022, one meeting was held by the Risk Management Committee. The attendance record of each member of the Risk Management Committee at the meeting of the Risk Management Committee is set out below:

Name of Director	Attendance of Risk Management Committee Meeting
Mr. Zhao Xiaobo	1
Ms. Chen Hua	1
Mr. Chia Yew Boon	1
Mr. Fan Ren Da Anthony *(Chairman)*	1
Mr. Qin Xuzhong	1
Mr. Liang Wuquan	1
Mr. Zeng Xuejie	1
Mr. Zhang Jian	1

CORPORATE GOVERNANCE FUNCTION

The Company's corporate governance function is carried out by the Board pursuant to a set of written terms of reference adopted by the Board in compliance with Code Provision A.2.1 of the Corporate Governance Code, which include (a) to develop and review the Company's policies and practices on corporate governance and make recommendations to the board; (b) to review and monitor the training and continuous professional development of the Directors and senior management of the Group; (c) to review and monitor the Company's policies and practices on compliance with legal and regulatory requirements; (d) to develop, review and monitor the code of conduct and compliance manual (if any) applicable to employees of the Group and the Directors; and (e) to review the Company's compliance with the Corporate Governance Code and disclosure in the corporate governance report. The Board has held meetings from time to time to: (a) review the Company's policies and practices on corporate governance; (b) to review and monitor the training and continuous professional development of the Directors; and (c) to review the Company's compliance with the Corporate Governance Code and disclosure in the corporate governance report.

CONSTITUTION

To conform to the current requirements of the Listing Rules, including but not limited to the Core Shareholder Protection Standards as set out in Appendix 3 to the Listing Rules, the Board has adopted a new Constitution in substitution for, and to the exclusion of, the previous Memorandum and Articles of Association of the Company. A special resolution has been passed at the annual general meeting held on 16 June 2022 to adopt the new Constitution. Further details of the new Constitution are set out in the circular of the Company dated 3 May 2022.

FINANCIAL REPORTING

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

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

EXTERNAL AUDITORS' REMUNERATION

The Company has re-appointed KPMG as the external auditor in Hong Kong and appointed KPMG LLP as the Company's registered auditor in Singapore during the year ended 31 December 2022. The external auditors are refrained from engaging in non-audit services except for specific approved items. The Audit Committee reviews the external auditor's statutory audit scope and non-audit services and approves its fees. For the year ended 31 December 2022, the total fee paid/payable in respect of audit and non-audit services provided by the Company's external auditors (including any entity that is under common control, ownership or management with the external auditors or any entity that a reasonable and informed third party having knowledge of all relevant information would reasonably conclude as part of the external auditors nationally or internationally) is set out below:

	RMB'000
Audit and audit-related services	3,230
Non-audit services	126
	3,356

INTERNAL CONTROLS AND RISK MANAGEMENT

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

The Board together with the audit committee and the risk management committee have reviewed the effectiveness of the Group's risk management, internal control and ESG risks systems on all major operations of the Group during the year under review.

The Group has an internal audit function carried out by the Group's internal audit department. The Group's internal control department has reported internal control fact findings to the Board and no major issues but areas for improvement have been identified. All of the recommendations from the Group's internal control department will be properly followed up by the Group to ensure that they are implemented within a reasonable period of time. Similar process has been carried out for the risk management systems. The Board and the audit committee considered that the key areas of the Group's internal control systems, including the adequacy of resources, qualifications and experience of our accounting and financial reporting staff, training programmes and budget of the Company's accounting, internal audit, financial reporting functions, as well as those relating to the Company's ESG performance and reporting, are reasonably implemented and effective and adequate. The Board and the risk management committee considered that the key areas of the risk management, including the identification, measuring and evaluation new risks, and the ongoing monitoring of existing business and operation risks identified to be effective and adequate. As such, the Board is of the view that the Group has fully complied with provisions of the Corporate Governance Code regarding internal control and risk management systems in general for the year ended 31 December 2022.

SHAREHOLDERS' RIGHTS

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

Under the Constitution, Directors may in general, whenever they think fit, convene extraordinary general meetings. Under Section 176 of the Companies Act 1967 of Singapore (the "Singapore Companies Act"), however, directors of the Company must notwithstanding anything in its Constitution, on the requisition of shareholders holding not less than 10% of the total number of paid-up shares of a company at the date of the deposit of the requisition, immediately proceed to convene an extraordinary general meeting to be held as soon as practicable but in any case not later than 2 months after receipt by the company of the requisition. In addition to the said right of requisition, two or more shareholders holding not less than 10% of the total number of issued shares of a company (excluding treasury shares) may also call a meeting of the company.

Procedures by which enquiries may be put to the Board

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

COMMUNICATIONS WITH SHAREHOLDERS

The management endeavours to maintain effective communications with the Shareholders and potential investors. To enable shareholders and other stakeholders to exercise their rights in an informed manner based on a good understanding of the Group's operations, businesses and financial information, the Company adopted the shareholders communication policy which aims to ensure that shareholders and other stakeholders at large are provided with ready, equal, regular and timely access to material information about the Group. The policy also sets out a number of ways to ensure effective and efficient communication with shareholders and other stakeholders is achieved.

The Company meets the Shareholders at the annual general meeting, publish interim and annual reports on the websites of the Company and the Stock Exchange, and release press releases on the Company's website to keep the Shareholders and potential investors abreast of the Group's business and development. At the annual general meeting, Directors (or their delegates as appropriate) are available to meet Shareholders and answer their enquiries. In respect of each matter to be considered at the annual general meeting and other general meetings, including the re-election of Directors, a separate resolution will be proposed by the chairman of the Board. The chairman of the Board and the chairmen of the Board Committees and, in their absence, other members of the respective committees, will be available at the annual general meeting and the other general meetings to meet with the Shareholders and answer their enquiries. The Company will also invite representatives of the auditor of the Company to attend the annual general meeting of the Company to answer Shareholders' questions about the conduct of the audit, the preparation and content of the auditor's report, the accounting policies and auditor's independence. As such, the Board is of the view that the shareholders communication policy has been properly implemented and effective and the Group has fully complied with provisions of the Corporate Governance Code regarding communication with shareholders in general for the year ended 31 December 2022.

DIVIDEND POLICY

The Company has adopted a dividend policy (the "Dividend Policy"). According to the Dividend Policy, in deciding whether to declare or recommend dividends, the Board shall consider the Company's ability to pay dividends, which will depend upon, among other things:

- the actual and expected financial results of the Group;
- cashflow of the Group;
- financial conditions of the Group;
- Shareholders' interests;
- general business conditions and strategies;
- the current and future operations of the Group;
- future business plans of the Group;
- liquidity and capital requirements of the Group;
- taxation considerations;
- amount of distributable profits;
- contractual restrictions;
- statutory and regulatory restrictions under Singapore laws, any applicable laws, rules and regulations and the Company's Constitution; and
- any other factors the Board may deem relevant.

The Board will review and reassess the Dividend Policy and its effectiveness in its sole and absolute discretion on a regular basis or as required.

ABOUT THE REPORT

This report is the seventh Environmental, Social and Governance Report (the "Report") published by Technovator International Limited. The Report focuses on the Group's efforts and contributions to environmental, social and governance. We hope that through the publication of the Report, we will strengthen communication and liaison with our stakeholders.

The board of directors and all the directors of the Group hereby warrant that the contents of the Report do not contain any false representations, misleading statements or material omissions and take joint and several liabilities for the truthfulness, accuracy and completeness of the contents.

Designation and Interpretation

For the purposes of expression and readability, the expressions "Technovator", the "Group" or the "group" mentioned herein refer to "Technovator International Limited".

Scope of the Report

Unless otherwise stated, the qualitative and quantitative information disclosed herein cover all subsidiaries and branches of Technovator. There are no significant changes in the scope of the Report as compared with that in 2021.

Reporting Period

The Environmental, Social and Governance Report of the Group is prepared on annual basis, with the reporting period from 1 January 2022 to 31 December 2022.

Basis of Preparation

The Report has been prepared in accordance with the requirements set forth in Appendix 27 Environmental, Social and Governance Reporting Guide (the "ESG Reporting Guide") to The Stock Exchange of Hong Kong Limited (the "Stock Exchange").

Access to the Report

The Chinese and English versions of the Report can be downloaded from the website of the Stock Exchange (http://www.hkexnews.hk). The Report is published in both Chinese and English; should there be discrepancies between the two versions, the Chinese version shall prevail.

CONCEPTS AND MANAGEMENT ON ENVIRONMENTAL AND SOCIAL RESPONSIBILITY

The Group attaches great importance to issues related to environmental, social and governance (ESG), performs the enterprise's social duties proactively and commits to becoming an outstanding corporate citizen in China. The Group also recognizes the importance of good corporate governance and risk management processes, including the management of ESG matters that are critical to sustainable development.

The board of directors of the Group is the highest decision-making body for ESG management which is responsible for guiding the Group's sustainability direction, setting the Group's overall vision, objectives and management strategy for sustainable development, regularly reviewing ESG materiality issues, as well as discussing and identifying ESG risks and opportunities. It considers the management and enhancement of key issues as part of ESG's annual strategic work which is taken into account as part of the development of the Group's overall strategy in order to monitor issue management and performance. The board of directors reviews the Group's annual ESG report every year, and the Group's Joint Company Secretaries organise various departments, including relevant functional departments such as human resources department, corporate management and administration department, strategic cooperation department, general management department, purchasing department, production and manufacturing department, quality management department and technology institutions, to jointly form an ESG working group (the "ESG Working Group"), and gradually improve ESG governance structure. The working group focuses on the statistical processes of relevant information for the core ESG management areas of the Group in order to disclose information on environmental, social and governance accurately and completely. The Group identifies the priority of ESG issues through communication with stakeholders and the materiality assessment of ESG issues in order to clarify the direction for the Group's sustainable development.

STAKEHOLDERS ENGAGEMENT AND RESPONSE TO THE ESG REPORTING PRINCIPLES OF THE STOCK EXCHANGE

Stakeholders Engagement

Combining the business model with internal and external communication, the Group has identified material types of stakeholders which have mutual influence with corporate operations and determined the ESG focus areas for the Group through analysing the demands of stakeholders in combination with the environmental, social and governance impact caused by the Group's own operations.

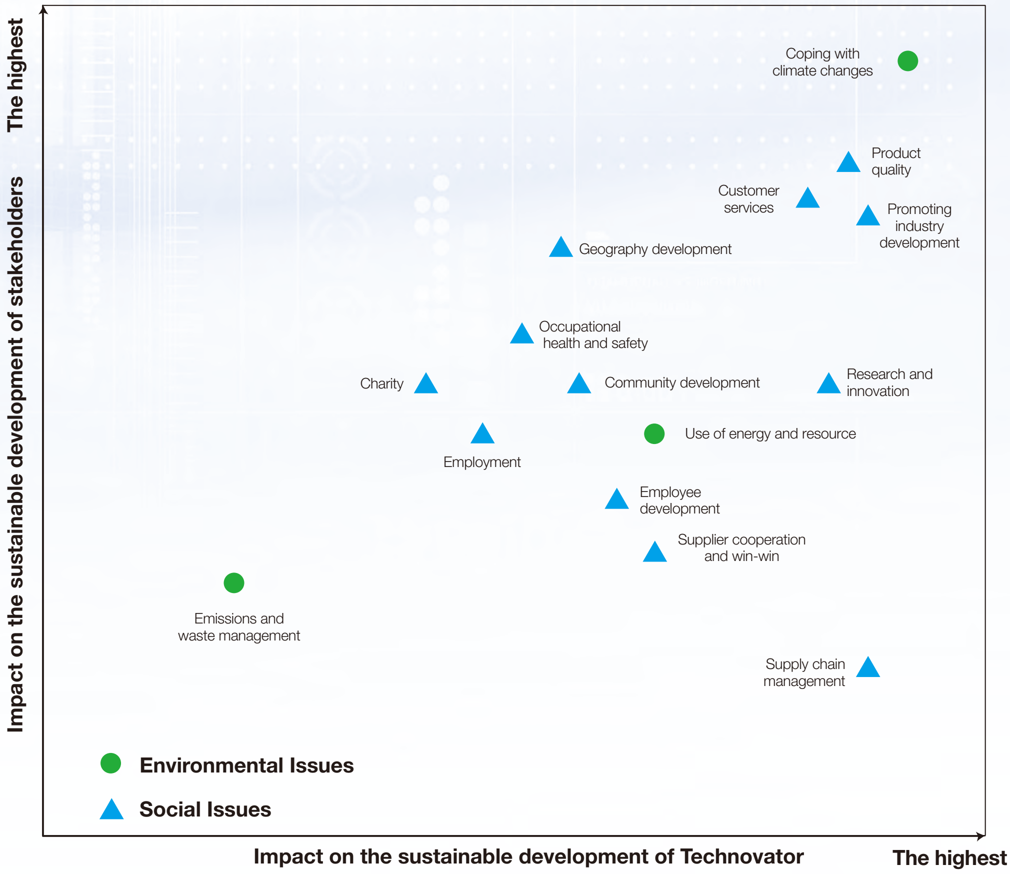
The major types of stakeholders of the Group include:

Stakeholders	Demands and expectations	Communication and response	The Group's response
Government and Supervision Authorities	– Comply with laws and regulations – Promote technology advancement – Serve for the national economy and people's livelihood	– Visit reception – Report submission – Company website – Negotiation and cooperation	Strictly comply with relevant laws and regulations; promote technology advancement; vigorously advocate energy conservation and emission reduction
Shareholders	– Maintain good business performance – Compliance operation – Information disclosure	– Company announcement – Project report – Visit reception	Endeavor to improve performance and generate profits; improve environmental and social responsibility management; disclose information in full in a truthful manner
Customers	– Provide high quality products and services – Satisfy customers' various demands	– Regular communication with customers – Customers' satisfaction survey – Customers' complaint handling and feedback	Provide sufficient, reliable and eco-friendly energy-saving products and services to fully meet customers' needs
Employees	– Protect employees' rights and interest – Guarantee occupational health – Focus on training and development – Work-life balance	– Employees' meeting – Employees' advice platform	Strictly observe the terms of labour contracts; improve the system of the congress of employees; improve the salary and employee security system; provide avenues for vocational advancement and training
Suppliers and Partners	– Open, fair and impartial purchasing – Adherence to contracts – Mutual benefit and win-win	– Signing contracts pursuant to laws – Open bidding – Project cooperation	Adhere to open and transparent business principles and processes; actively fulfill of contracts and agreements; facilitate mutual visits and communication
Community	– Participate community's development – Support public activities – Assist educational business	– Community activities involvement – Interview and communication	Organize and actively participate in extensive public welfare; building harmonious and civilized communities; assist in the development of education

Response to the ESG Reporting Principles of the Stock Exchange

Materiality: In order to further identify the key areas of practices and information disclosure for corporate ESG, enhance the pertinence and responsiveness of the report, the Group has initiated the identification procedures for material issues and has decided the materiality level of each issue with the principle of materiality to clarify disclosure extent and boundary, ensuring a more accurate and complete disclosure of information related to the operation management of the Group.

Identification procedures of issues on environmental, social and governance
Sources of Issues
– Analysis of multi-media information – Benchmarking research of international and domestic peers – Internationally-recognized sustainable development guidelines – Suggestions from the management of the Group – Analysis and suggestions from internal and external experts
Screening Criteria
– The Group's values, policies, strategies and long-term and short-term goals – Relevant laws, regulations, international treaties or voluntary agreements – Benchmarking results of peers – Demands and expectations explicitly expressed by stakeholders – Suggestions from the management and the social responsibility management team of the Group
Results of Materiality Assessment
Through the identification process, the Group has identified the environmental, social and governance issues related to its sustainable development, and made judgments on the materiality level of each issue, the results of which are as follows:



2022 Material Issues Matrix of Technovator

Principle of Quantitative: In accordance with "Key Performance Indicator" requirements in the Environmental, Social and Governance Reporting Guide set out in Appendix 27 to the Rules Governing the Listing of Securities on the Stock Exchange, the Group discloses quantitative indicators related to the "environmental" and "social" categories and interprets for immaterial indicators.

Principle of Balance: The Report discloses efforts to achieve objectivity and impartiality that truly reflect the effectiveness and practice of the Group's 2022 ESG work, and to disclose issues encountered and improvement measures in a responsible manner.

Principle of Consistency: The Report follows a consistent method of information statistics, and the scope of the information statistics organization in 2022 is consistent with 2021, and certain indicators have been disclosed for two consecutive years since 2021.

§1 COPING WITH CLIMATE CHANGES

At present, abnormal climate phenomena such as global warming remain a global concern. The goal of carbon peak and the vision of carbon neutrality put up by the PRC mean that stricter requirements are being placed on coping with climate change, promoting low carbon development and building an ecological civilisation. As a leading urban smart energy-saving service provider in the PRC, by performing the corporate responsibility of “conserving energy for the country and saving resources for the people”, the Group consistently provides “Intelligence + Energy Saving” solutions for urban development in fields such as smart transportation, smart building and complex and smart energy so as to promote the smart, green and healthy development of cities to provide people with a safe, comfortable, energy-saving and sustainable smart environment to cope with the challenges posed by climate change. The Group has set out our efforts and future direction for tackling climate change by the areas of governance, strategy, risk management, and distinction between indicators and targets.

Governance

In terms of governance, the board of directors is the highest decision-making body for ESG management which is responsible for guiding the Group’s sustainability direction as well as discussing and identifying ESG risks and opportunities, including those related to coping with climate change. The ESG Working Group is formed by the collaboration among various departments to jointly identify and study the impact of climate change on our operations. With reference to the TCFD (the Task Force on Climate-related Financial Disclosures) Framework, we gradually carried out status quo review, strategy formulation, risk management, identification and management of indicators and targets in relation to the possible risks and opportunities faced by the Group due to climate change.

Strategies

Climate-related risks include risks in relation to the transition to a low-carbon economy (the “Transition Risks”) and risks in relation to the physical impact of climate change (the “Physical Risks”). Among which, the Transition Risks may be classified into policy and legal risks, technical risks, market risks and reputational risks, while the Physical Risks include acute risks (such as typhoons, floods and other extreme weather conditions) and chronic risks (persistently high temperatures and other changes in climate pattern).

In order to address climate change, in addition to preventing risks, we shall also play an active role in identifying opportunities. The Group provides “Intelligence + Energy Saving” solutions for urban development in fields such as smart transportation, smart building and complex and smart energy and promotes the smart, green and healthy development of cities:

In the field of smart transportation, the Group has intensively explored the informatization, intellectualization as well as energy-saving and carbon reduction of smart transportation with our business covering various fields including urban rail transit, intercity railway and lightweight passenger transport system. The Group have been engaged in the research and development of innovative integrated operation and management platform of intelligent stations and further enriched the families of M+ urban rail transit solutions. By combining with the magnetic levitation direct-cooled air-conditioning units, EEC System for Metro facilitated the energy conservation and emission reduction for rail transit.

To achieve maximum energy saving in metro stations, Technovator started with the “heart” of air-conditioning units by overturning the traditional design structure of station ventilation and air-conditioning systems and independently developing magnetic levitation direct-cooled air-conditioning units. Through the integration and innovation with respect to refrigerant direct evaporation technology, magnetic technology and wind-fluorine joint commissioning technology, the product realized the extremely simplified, efficient and product-oriented design of the current ventilation and air-conditioning system. At Mudanyuan Station of Beijing Metro, the product integrated the functions of wind-water linkage, energy saving optimization and fault diagnosis, so as to achieve the most optimal operation of the equipment, reaching a general energy saving rate of 20% and saving about 200 square metres of space floor of the cold station.

In the field of smart building and complex, the Group promoted the urbanization of building energy-saving business, and paid attention to various types of high energy consuming buildings and complexes. In combination with business models like contracted energy management model and escrow operation, we provided comprehensive solutions covering smart, energy-saving and energy utilization as well as operational services, constantly setting new benchmarks in the building energy-saving industry.

Technovator actively implemented its philosophy of "High-tech Winter Olympics, Green Olympics (科技冬奥、綠色辦奧)" by giving full play to its technology and service advantages in the field of integration of digital intelligence. Focusing on the opening and closing ceremonies of the 2022 Olympics & Paralympics Winter Games as well as the service guarantee of venues and living facilities during the events, Technovator served the intelligent viewing and performance experience of the opening and closing ceremonies of the Bird's Nest through the application of digital intelligence, realizing the intelligent "ice-water conversion" of the Ice Cube, and guarding the "fastest ice" of the Ice Ribbon, enabling the low-carbon operation of the Winter Olympic Village in Yanqing, and achieving the goal of "intelligent venues serving the Winter Olympics", which interprets with solid actions the spirits of the Beijing Winter Olympics of bearing in mind the big picture, being confident and open, rising to the challenge, pursuing excellence and creating a better future together.

Chongqing Xiantao International Big Data Valley, an emerging industrial cluster with big data, cloud computing and e-commerce, is located in the Yuelai International Business District of Chongqing Liangjiang New Area, with an overall GFA of approximately 1,200,000 square metres and an air-conditioned area of approximately 900,000 square metres. Technovator utilizes its smart energy technology, coupled with micro-grid, gas-fired triple-supply and energy storage and other multi-energy complementary methods, to provide comprehensive energy services to Xiantao Data Valley including the cooling, heating and partial power.

In the field of smart energy, the Group has intensively explored central heating intelligence as well as energy saving and efficiency enhancement, serving over hundreds of urban heating networks, and establishing an overall chain layout from energy production, energy transmission and distribution to energy consumption. As a pioneer in the heating automation industry, the Group has, based on its insight of heating production and transmission and distribution system and combined with its intelligence technology and information technology, integrated advanced heating concept and control logic into each heating segment. In the field of heating energy-saving, the Group has gained a deep energy-saving service capability throughout the whole industry chain and accumulated comprehensive energy-saving advantages in various aspects, such as core technology, hardware equipment and software products.

The Centralized Heating and Energy Saving Improvement Project of Xinjiang Tianfu (新疆天富集中供熱節能改造項目) was to establish a smart energy management platform for the heating system of Tianfu Energy Heating Branch (天富能源供熱分公司). It enabled the unattended, safe and stable operation of 320 heat exchange stations and realized the integrated scheduling and adjustment of network sources of "One City, One Pipeline Network" (一城一網) and its renovation area of the secondary network balancing was 1,870,000 square metres, improving the heating quality of end users. From 2021 to 2022, the energy saving rate in heating seasons reached 31.8%, equivalent to 164,317 tons of standard coal. Through implementation of the project and the heating operation and maintenance services provided by the Company, we built an urban-level intelligent heating and clean waste heat heating system for Shihezi City, improving regional environmental quality, promoting the realization of the strategic goal of "double carbon", and providing a demonstration model for centralized heating in other large and medium-sized cities in China.

The establishment of the Hohhot Chengfa Group EMC Heating Project (呼和浩特城發集團EMC供熱項目) was to provide a comprehensive centralized heating expert management system for the Sanhe Village Branch of Hohhot Chengfa Heating Group (城發供熱集團三合村分公司). An intelligent energy management platform for the heating system was established which achieved the comprehensive management and control, conducted statistics and analysis of various data, provided scientific load forecasting, formulated low-energy consumption operation plans and operation parameters, guided the safe, low consumption and economic operation of heating enterprises, and guaranteed the unattended, safe and stable operation of 130 heat exchange stations. On the premise of ensuring the safety and stability of heating, the project achieved the goal of on-demand heating and energy saving with the energy saving rate in heating season in 2022 reached 11% which improved regional environmental quality, and promoted the realization of the strategic goal of "double carbon".

The establishment of the Suihua 2022 Intelligent Heating Construction Project (綏化市2022智慧供熱建設項目) was to provide a comprehensive centralized heating management and control system for Suihua Zhongmeng Thermal Power Co., Ltd. (綏化中盟熱電有限公司). We established an intelligent heating and energy management platform for comprehensive management through the whole network balance and optimization software, artificial intelligence cloud platform, SCADA control software, Web publishing platform, Internet of things water conservancy balance cloud platform for secondary network and room temperature acquisition platform, conducted statistics and analysis of various data, provided scientific load forecasting, formulated low-energy consumption operation plans and operation parameters, and guided the safe, low consumption and economic operation of heating enterprises. The transformation area of the secondary network balancing was 2,110,000 square metres. The secondary network balancing significantly improved the heating quality for end users and saved the energy consumption of heating stations, ultimately achieving energy-saving operation while ensuring the quality of heating.

Risk Management

In response to climate change, we put emphasis on capturing development opportunities, identified and assessed Physical Risks and Transition Risks. We combined the technique of "Internet + Energy" with cloud platform to integrate urban resources in an all-round way and promoted the smart, green and healthy development of cities to provide people with a safe, comfortable, energy-saving and sustainable smart environment. At the same time, we improved the relevant risk management and target-setting system to promote high-quality and green development.

Indicators and Targets

The Group has identified and monitored indicators related to environmental, social and climate related risks, and has conducted annual statistics and disclosure of relevant data, including:

- energy (gasoline and power) consumption;
- water consumption;
- greenhouse gas emissions (including Scope 1 and Scope 2);
- hazardous waste disposal;
- non-hazardous waste disposal.

We will continue to focus on the impact of climate change on the Group's business, fully respond to policy requirements, further improve strategy formulation, risk management, identification and management of indicators and targets, and work together with all sectors to cope with climate change and achieve sustainable development together.

§2 LEADING INDUSTRY INNOVATION

§2.1 Innovation on Research and Development

Innovation is the core driver of the Group's long-term prosperity in the industry. Focusing on the frontier of energy conservation technologies, the Group realizes technological innovation by taking the lead. With technological innovation as the core and oriented towards knowledge and innovation, the Group performs the corporate responsibility of "saving energy for the country and saving resources for the people", which highly meets the industry development trend of "Internet + Energy Saving", helping the industry to carry out research and development for technological innovation and contributing to the smart, green and healthy development of cities. The Group continues to maintain the momentum of innovation by obtaining information on international market demand and technology development trends in the industry and cross-industry application scenarios through multiple channels, and by maintaining close cooperation with scientific and technological committees, tertiary institutions and industry research institutes to keep abreast of national technological developments in the industry.

During the year, the Group achieved significant R&D results in multiple aspects. The functions of "Kunlun (昆侖)" digital platform upgraded constantly, with its capacity increased effectively from end to cloud service of IoT cities scenario. Key components such as low-code development tools, big data governance tools and microservice stack successively launched. Techcon Neosys, an IoT controller, passed the inspection organized by the National Smart Building and Residential Area Digitalization and Standardization Technical Committee (全國智能建築及居住區數字化標準化技術委員會) and obtained National Security Product Certificate. A series of innovative applications put into use and demonstration, including smart station integrated operation and management platform, new energy safety production system, zero-carbon complex smart energy platform, and long-distance heating project. The super heat pump which produces steam by waste heat has been applied in Wuliangye wine factory (五糧液酒廠) with excellent energy-saving efficiency, paving the path towards the alternative of industrial steam energy. The new generation of magnetic levitation air-conditioning units was included in the Catalogue of Key Promoted Products during the 14th Five Year Plan of the National Green Rail Transit Industry.

The Group attaches great importance to cultivating scientific and technological innovation talents. As of 31 December 2022, we have a number of experts from Tsinghua University, a quality pool of technical development employees, among them, personnel with senior titles also accounts for 28.3%, while those with postgraduates and above qualifications accounts for 42.7%. In order to further encourage employees to be engaged in innovation and R&D, the Group allows and encourages all frontline staff of the Group to propose R&D project requirements, which will be assessed by technical, market and finance experts organized by the Technology Research Institute, and after approval, they will received R&D fund and conduct R&D activities. In addition, the Group encouraged staff to write, publish and gather articles. The Group also rewarded, commended and promoted R&D teams across the whole Group who noticeably promoted business innovation of the Group. In 2022, the Group has a total of 159 R&D personnel and invested an aggregate of RMB15.21 million in R&D activities.

In the future, the Group will continue to focus on the two main business lines of "intelligence + energy saving", adhere to the innovative path which combines the production, learning, research, application major equipment and major projects, and constantly innovate and iterate focusing on the software and hardware products and full cycle solutions for the three business segments of smart transportation, smart building and complex and smart energy.

§2.2 Protection of Intellectual Property

Protection of intellectual property is indispensable for innovative R&D and effective management of intellectual property is beneficial to protecting technological and innovative achievements and strengthening the competitiveness of enterprises. The Group fully respects the intellectual property of others, while firmly committed to protect our own intellectual property rights from being infringed. The Group strictly complies with the Patent Law of the People's Republic of China (《中華人民共和國專利法》), the Copyright Law of the People's Republic of China (《中華人民共和國著作權法》), the Trademark Law of the People's Republic of China (《中華人民共和國商標法》) and other laws and regulations, and based on relevant laws and regulations, formulated Intellectual Property Management System (《知識產權管理制度》), which clearly standardized the working procedures of patent application, patent maintenance, patent protection, patent licensing and transfer.

The Group has carried out intellectual property protection work in a planned and organized manner to promote the active transformation of scientific achievements of each business unit. As the centralized management department of intellectual property, the Technology Research Institute of the Group handles all intellectual property applications of each business unit, and the Group has set up an intellectual property specialist position to carry out management as required.

In 2022, the Group obtained 8 patents during the year, totalling 52 patents by the end of 2022, and obtained 20 software copyrights during the year, totalling 157 software copyrights by the end of the year.

§2.3 Leading Industry Development

As an important promoter of domestic energy-saving service industry and a leading enterprise in science and technology service industry, the Group actively cooperates with scientific research institutions and invests in the R&D of national scientific research projects. The Group also participates in industrial communication and research established by various organizations to promote the construction of an industrial standard system, making a commitment to drive industry development and progress.

The Group cooperated with scientific research institutions and intensely participated in many national scientific research projects to jointly promote the development of technologies in the industry. In 2022, we conducted in-depth collaborations with various businesses in the fields of smart energy-saving and smart heating. For instance, the Group joined hands with an energy-chemistry group in Yan'an to establish a scientific innovation project named "Smart Heating", and cooperated in the segments of smart heating, clean heating and industrial waste heat utilization in Yan'an.

In terms of formulating industry standards, the Group actively participated in the construction of the intelligent building industry standard system, including standards in the field of intelligent buildings and electrical, metro, heating and air conditioning and building energy conservation, data center, utility tunnel, BIM as well as urban fire-fighting monitoring. The Group participated in the compilation of 17 national and industrial standards, and actively promoted the healthy development of the industry.

- In August 2022, the partial amendment of the Standards on Smart Building Project Quality Inspection (《智能建築工程質量驗收規範》) in which the Group participated was officially launched. The amendments aimed at aligning with the development of smart building technology and building demand, and the continuous application of new products, new materials, new technologies and new crafts in smart building, thereby making these standards more updated, feasible and instructive.

As a leading enterprise in science and technology service industry, Technovator has achieved high quality, intelligence and diversification with its outstanding innovation and digital intelligence capabilities, strong market competitiveness and customer service satisfaction. Technovator has achieved numerous industry accolades as the industry benchmark for another year. Some of the awards and honors obtained by the Group in 2022 were as follows.

Awarded Unit	Awards and honors
Tongfang Technovator Int (Beijing) Co., Ltd.	2022 Most Influential Brand in the Smart Building Industry of China 2022 Brand Enterprise with Products of Craftsmanship in the Smart Building Industry of China 2021 “10th Building Electrical Brand Competitiveness” (Entering the top 10) Top 10 Brands with Products of Craftsmanship in the Smart Building Industry of China (for six consecutive years) 2021 Brand Enterprise in the Energy-saving Services Industry 2021 Outstanding Member Unit in the Energy Saving Industry 2021 Case Award for the Outstanding Demonstration Project of Contract Energy Management-the Contract Energy Management Project for the Improvement of Ventilation and Air-conditioning of Beijing Subway Line 15 2021 Outstanding Survey and Design Awards in the Industries of Engineering Surveying, Building Design and Municipal Public constructions-First Prize for Design of Building Engineering Standards
Tongfang Energy Saving Engineering Technology Co., Ltd.	2022 Brand Enterprise with Products of Craftsmanship in the Smart Building Industry of China 2022 AAA Credit Enterprises in China 2022 5A Certificate for Public Facilities for Energy-Saving services Companies in terms of Comprehensive Strengths awarded by the ESCO Committee of China Energy Conservation Association (中國節能產業委員會) Top 10 Brands with Products of Craftsmanship in the Smart Building Industry of China (for six consecutive years) 2021 Brand Enterprise in the Energy Saving Services Industry 2021 Outstanding Member Unit in the Energy Saving Industry 2021 Outstanding Technology in Energy Saving and Energy Efficiency Improvement-Smart Heating Balance Control Technology (Including primary network and secondary network) 2021 Case Award of Outstanding Demonstration Project of Contract Energy Management-the EMC project of the Smart Heating Network Energy-saving Engineering Renovation of Shenmu City Heating Co., Ltd. (神木市供熱有限責任公司)

§3 ENVIRONMENT PROTECTION

Environment protection and energy conservation is an obligatory social responsibility and also the foundation for enterprises to achieve green development and operation. The Group's production and operation involve the production and manufacturing of smart controller, rail transit safety door, and intelligent heating system. As an unconventional high energy consuming company, despite the fact that environmental issues have not been identified as important to the Group in the materiality assessment, the Group continues to emphasise the importance of environmental protection in its daily operations and development, with energy conservation, emission reduction and recycling of resources as its environmental objectives during the course of business.

The Group is always strictly in compliance with relevant laws and regulations such as the Environmental Protection Law of the People's Republic of China (《中華人民共和國環境保護法》), the Law of the People's Republic of China on the Prevention and Control of Environmental Pollution by Solid Waste (《中華人民共和國固體廢棄物污染環境防治法》) and the Law of the People's Republic of China on Conserving Energy (《中華人民共和國節約能源法》). The Group formulated environmental management systems for processing and manufacturing business (such as PCB) in its production and operation, which includes the Rules Governing Identification of Environmental Factors and Determination of Important Factors (《環境因素識別、重要因素確定管理制度》), the Rules Governing Environmental Targets, Indicators and Programs (《環境目標、指標和方案管理制度》), the Rules Governing Environmental Monitoring and Conformance Evaluation (《環境監測與合規性評價管理制度》), and the Rules Governing Noncompliance and Rectification Measures on Environment (《環境不符合、糾正措施管理制度》), enabling the Group to dynamically assess its business impact on the environment and resources and continues to strengthen environmental management and control and improve its environmental management system. The Group has obtained the ISO 14001 Environmental Management System Certification and will continue to improve the environmental compliance risk management in its operation, promote innovating measures for environmental-friendly and sustainable development and establish a good corporate social image.

In 2022, there were no breaches of relevant environmental laws and regulations that had a material impact on the Group.

§3.1 Emission Management

The Group's enterprises follow a policy of source control, end-of-pipe treatment and technological innovation, and actively pursue technological improvements in all aspects to reduce emissions and waste generation. With an environmental objective of reducing pollutants emission in the course of business operation, the Group actively promoted green environmental protection development philosophy, and continuously enhanced the emission management, so as to reduce the generation of emission from source.

The Group does not involve the emission of industrial waste gas in its production and operation. A small amount of waste gas and direct greenhouse gas are emitted during the use of official vehicles, while indirect greenhouse gas indirect comes from production and power consumption in offices. Waste water is mainly generated from production and office operations. The Group reduced indirect waste gas emissions through standardizing the use of official vehicles. Since indirect greenhouse gases account for a large proportion of the Group's total greenhouse gases, the Group indirectly reduced greenhouse gas emissions by advocating electricity saving. The waste water emitted by the Group does not contain special pollutants, and will be discharged to the sewage treatment plant for treatment and purification through the municipal pipe network in the place where it operates.

	Type of exhaust gas	2022	2021
Waste gas emissions	Sulphur dioxide (kg)	**0.27**	0.31
	Nitrogen oxides (kg)	**3.42**	5.10
	Particulate matter (kg)	**0.25**	0.38
Direct greenhouse gas (ton carbon dioxide equivalence)		**40.41**	46.70
Indirect greenhouse gas (ton carbon dioxide equivalence)		**2,388.14**	3,787.49
Total greenhouse gases (ton carbon dioxide equivalence)		**2,428.55**	3,830.19[1]
Greenhouse gas emission intensity (ton carbon dioxide equivalence/RMB10,000 revenue)		**0.014**	0.023

1 Greenhouse gas emissions are calculated as follows:
Direct greenhouse gases emissions: the Group's energy consumption multiplied by the corresponding emission factors, with the emission factors referring to ① China Energy Statistical Yearbook (《中國能源統計年鑒》) and ② IPCC 2006 (《IPCC2006》);
Indirect greenhouse gas emissions: the Group's purchased electricity consumption multiplied by the corresponding emission factors, with the emission factors referring to the "Guidelines for Verification of Enterprise Greenhouse Gas Emission Reports (for Trial Implementation)" (《企業溫室氣體排放報告核查指南(試行)》) issued by the Ministry of Ecology and Environment;
Total greenhouse gas emissions: sum of direct and indirect greenhouse gas emissions.

The Group attaches particular importance to waste management. In the process of product development and production, we identify hazardous waste from the source, and endeavor to reduce the impact of wastes on the environment as much as possible. Hazardous wastes discharged by the Group include dross spot generated during production and operation, used toner cartridges and used ink cartridges generated from office operations. Non-hazardous wastes are mainly metal packages, wires and waste cardboard boxes generated during production as well as used papers generated from office operations. With an environmental objective of reducing pollutants emission (including waste) in the course of business operation, the Group actively promoted green environmental protection development philosophy, and actively recycled the recyclable non-hazardous waste so as to reduce its impact on environment.

Some of the Group's offices cooperate with printing equipment providers in the place where they operate and the printing equipment providers are responsible for recycling and filling the used ink cartridges and recycling them, which can reduce waste. Hazardous wastes are disposed by qualified third party, while non-hazardous wastes are recycled by the Group and classified and collectively disposed by the environmental hygiene department. Metal packages, wires and waste cardboard boxes that can be used continuously are recycled by the Group and applied in the corresponding process to reduce waste.

Type of waste		2022	2021
Hazardous waste	Tin dross (ton)	**0.48**	0.46
	Used toner cartridges (kg)	**17.60**	20.80
	Used ink cartridges (kg)	**2.35**	2.65
Total hazardous waste (kg)		**499.95**	483.45
Discharge density of hazardous waste (kg/RMB10,000 revenue)		**0.003**	0.002
Non-hazardous waste	Metal packages (ton)	**0.28**	0.26
	Wires (ton)	**0.13**	0.12
	Cardboard boxes (ton)	**0.66**	0.60
	Papers (ton)[2]	**51.82**	82.30
Total non-hazardous waste (kg)		**52,890**	83,280
Discharge density of non-hazardous waste (kg/RMB10,000 revenue)		**0.304**	0.514

2 In 2022, the amount of waste paper was reduced which was in line with the Group's reduced on-site working hours due to the impact of the pandemic.

§3.2 Use of Resources

The Group's enterprises follow a policy of source control, end-of-pipe treatment and technological innovation, and actively pursue technological improvements in all aspects to increase recycling and continuously improving the efficiency of natural resources use and minimising the impact of operations on the environment and natural resources.

The main energy and resources consumed by the Group during its operation include: electric energy, gasoline, water resources, office supplies and packaging materials. Gasoline is mainly used for driving motor vehicles, and electric energy is mainly used for the Group's office and operating facilities. For production and manufacture and office operation, the Group's water resources all came from the municipal pipeline network, thus we did not need to worry about the water sourcing. In addition, office supplies such as paper are consumed during the Group's office operations.

Types of resources	2022	2021
Power consumption (kWh)[3]	**3,914,347**	6,201,422
Total gasoline consumption (l)	**18,428**	21,300
Comprehensive energy consumption ('000 kWh)	**4,075.40**	6,387.58
Comprehensive energy consumption intensity (1000 kWh/RMB10,000 revenue)	**0.023**	0.040
Water consumption (m^3)[4]	**38,878**	95,155
Water consumption intensity (m^3/RMB10,000 revenue)	**0.224**	0.588

3 In 2022, Youyi Heating (友誼熱力) of the Group replaced some large-sized circulating water pumps, and the motor of the heating network circulating pump in the new heat source plant. After the secondary network balancing adjustment in the early late-cold period, the water pump was adjusted to lower frequency. Therefore, the power consumption of the Group in 2022 decreased as compared with that in 2021.

4 In 2022, Youyi Heating (友誼熱力) of the Group strengthened the inspection of the pipe network, used drugs to detect the leakage points within the secondary network and the private drainage by users, repaired more than 80 leakage points in total, and removed over 10 unapproved water-drainage taps. Therefore, the water consumption of the Group in 2022 decreased as compared with that in 2021.

With an environmental objective of saving energy use and recycling of resources (including reducing use of water resources) in the course of business operation, the Group actively practices energy and resource saving by taking the following measures:

- Implement online office system, replace paper approval with OA approval system, reduce printing, and advocate double-sided printing and using paper twice for reimbursement;

- To address the issue of overtime work over the weekend in summer, mobile air conditioners are installed in some offices and meeting rooms to solve the air conditioning issue for overtime work and ad-hoc meetings over the weekend, and at the same time avoid the need to turn on the air conditioning on the whole floor to reduce energy consumption;

- Intelligent light control is used on certain floors of the office area. After work, lights in the office area and meeting rooms will automatically turn off. Meeting rooms use sensor lights and as such, lights will automatically turn off when there is no one in the meeting room, avoiding energy consumption;

- water-saving signs are posted over the sinks to enhance the awareness of water saving;

- Strengthen the inspection of water equipment in the office area to prevent “rushing, seeping, dropping and leaking”(「跑、冒、滴、漏」).

- Strengthen the management of official vehicles, and apply exclusive fuel cards for each official car, while do not encourage the use of official cars without special external business affairs; Encourage joint meetings of multiple places to be held via video conference to reduce business trips; Encourage employees to adopt green transportation, etc.

The packaging materials of the Group’s products mainly include cardboard boxes, plastics, fillers and so on. We strictly followed relevant national requirements and recycled certain packaging materials, so as to reduce the use of product packaging materials in the production process and reduce pollutant emissions.

Types of packaging materials	2022	2021
Cardboard boxes (ton)	5.90	5.60
Plastics (ton)	0.02	0.02
Fillers (ton)	0.02	0.02
Total consumption amount of packaging materials (ton)	5.94	5.64
Consumption of recycled packaging materials (ton)	0.12	0.11
Consumption density of packaging materials (kg/RMB10,000 revenue)	0.034	0.023

§4 CARING FOR EMPLOYEES

Employees are the core element of the sustainable development of enterprises and an important component of the core competitiveness for enterprises and the people-oriented development and operation philosophy serves as the important premise of sustainable development for enterprises. Through well-established employment system, harmonious staff relationship, excellent working environment, reasonable incentives as well as protection of employees' interest, enterprises are allowed to form inner strong cohesion and work together with employees for mutual growth.

§4.1 Equal Employment

The Group strictly complies with laws and regulations of the related operation location such as the Labor Law of the PRC (《中華人民共和國勞動法》), the Labor Contract Law of the PRC (《中華人民共和國勞動合同法》), the Regulations on Prohibiting Use of Child Labor (《禁止使用童工規定》), Employment Ordinance (《僱傭條例》) in Hong Kong region and Employment Act (《就業法案》) of Republic of Singapore. With reference to its own conditions, the Group formulates and improves systems and measures, including the Management Measures for Staff Recruitment (《招聘管理制度》), the Welfare Management System (《福利管理制度》), the Enterprise Annuity Management System (《企業年金管理制度》), the Employee Complaint Management System (《員工申訴管理制度》), Employee Care and Subsidy Management (《員工關懷與補助管理》) as well as the Internship Student Management System (《實習學生管理制度》), specifying the requirements of the ages and working hours of applicants to avoid child labor and forced labor, to establish a sound inventive mechanism, devise a scientifically reasonable distribution system, protect legal rights of the staff, mobilize the enthusiasm and creativity of the staff, boost their efficiency and improve business benefits of the Group, accommodating the sustainable development demands of the enterprise.

Recruitment and dismissal

Upholding the principles of fairness, impartiality and openness, the Group recruits law-abiding talents who are suitable for the position by means of internal or society recruitment. The Group conducts exit interview with each staff member before he/she leaves the Company in order to ascertain the reasons for his/her resignation and realize continuous improvement and optimization. For employees in severe violations of labor discipline or the regulations of the Company, with gross negligence and malpractice, causing significant damage to the Company, or held criminally liable, the Group will take measures to dismiss them. There was no dismissal of employees by the Group for the abovementioned behaviors in 2022.

Equal opportunity, diversity and anti-discrimination

The Group adheres to the principles of gender equality and equal pay for equal work, enters labor contracts with all employees according to law, and strictly implements various labor protection policies, to ensure all employees with different backgrounds of ethnicity, race, gender and religion enjoy equal employment opportunities and labor protection. In 2022, the Group did not have any material non-compliance issues in respect of the laws and regulations on employment, recruitment and dismissal, promotion, equal opportunity and anti-discrimination.

Remuneration

The Group insists on the principles of making distribution according to performance, responsibility and contribution, and setting position-based remuneration that is subject to adjustment according to position change and the same standard for the same position. According to the regulations of the system of the Group, there will be a reasonable increase in the salary of employees per annum. In 2022, the Group did not commit any irregularities in remuneration packages.

Working hours and leaves

The Group strictly complies with the laws and regulations in relation to employees' working hours and leaves formulated by government at each level, reasonably arranges employees' work and rest time. The Group implements a standard working hour system which arranges employees to work five days per week and eight hours per day, and to take leave on weekends and statutory holidays. Employees can enjoy paid annual leave, paternity leave, marriage leave and funeral leave in accordance with the laws, while female employees can also enjoy a half-day leave in the International Working Women's Day on 8 March, breastfeeding leave and maternity leave. In 2022, the Group did not commit any irregularities on working hours and leaves. The Group strictly complies with relevant laws and regulations of the PRC, and there was no child labor or forced labor nor any violence of relevant laws.

Benefits

The Group complies with the requirements in national and local laws and regulations, and pays basic pension insurance, basic medical insurance, unemployment insurance, work-related injury insurance, maternity insurance and housing provident fund and on schedule each month for all employees. In 2022, the social insurance coverage rate of the Group's employees was 100%.

While providing competitive compensations, the Group also offers benefits such as subsidy for working meals, heating, labor insurance and heatstroke prevention, weddings and maternity gifts and reimbursement of medical expenses for employees' children, employees who meet certain requirements can participate in the corporate annuity plan. In addition, we also provide employees with group commercial accident insurance and additional medical insurance, quarterly birthday party and all kinds of holiday benefits, including for Women's Day, Mid-Autumn Festival, Dragon Boat Festival and Spring Festival.

Staff Birthday Party

Employee Care

Upholding "people centrism", the Group cares for every staff member, providing institutional guarantee for the basic needs of employees who have difficulties in livelihood, or suffered from sickness. In addition to helping the staff to solve substantive issues, the Group also organized love and care activities to console employees in need. By establishing a corporate culture of mutual support and care, the Group boosts the corporate cohesion and enhances employees' sense of well-being.


New Year's Eve dinner and skiing activities organized for employees who stayed behind during the Spring Festival

During the reporting period, the Group has a total workforce of 779, among which 775 employees entered into labor contract and four employees signed labor agreements. The contracting rate for employees with labor contracts and labor agreements was 100%. In 2022, turnover for employees of the Group was 10.9%.

Set out below is the staff employment by type and their turnover:

Age	Number of employees	Proportion of total employees	Turnover rate
Under 30 years old (30 years old exclusive)	118	15.1%	18.6%
30-50 years old (50 years old exclusive)	584	75.0%	9.9%
50 years old and above	77	9.9%	6.5%

Gender	Number of employees	Proportion of total employees	Turnover rate
Male	504	64.7%	10.5%
Female	275	35.3%	11.6%

Region	Number of employees	Proportion of total employees	Turnover rate
Mainland	771	99.0%	11.0%
Hong Kong, Macao and Taiwan	2	0.3%	0
Overseas	6	0.7%	0

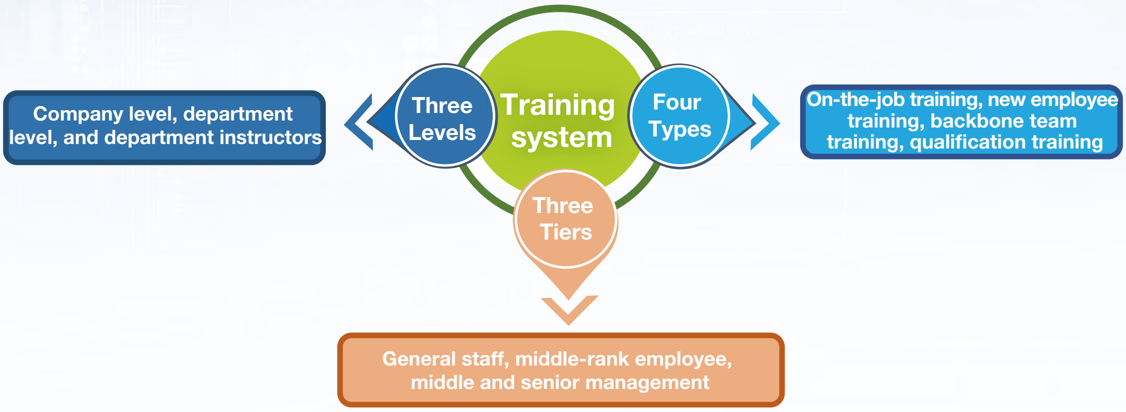
Level	Number of employees	Proportion of total employees
Senior management	20	2.6%
Middle-level management	75	9.6%
General staff	684	87.8%

§4.2 Staff Development and Training

The talent is the core competitiveness for enterprises. Adhering to the principle of mutual development for the enterprise and employees, the Group made efforts to provide broad career platform and development space for its employees by setting up training system for talent development and laying smooth career path for employees' promotion.

The Group established the Performance Appraisal Management System (《績效考核管理制度》), which takes the business performance as the core, comprehensively considers employees' potential capability and developmental needs, and specifies the promotion process for employees to ensure that all employees enjoy a fair and smooth promotion opportunities. The Group classified the job positions into five categories, namely management, management services, technical, marketing and operation based on the requirements of business development, and subdivided their functional department and development system according to employees' work experience and knowledge.

The Group formulated and implemented the Training Management System (《培訓管理制度》) and developed a training system featuring "Three Levels", "Four Types" and "Three Tiers". Trainings purposely cover aspects of corporate management, leadership, qualification certification, skills training and corporate culture, so as to improve the knowledge and skill level of employees, highlight key talents cultivation and provide a sound basis for the improvement of the Group's operation. Furthermore, the Training Management System (《培訓管理制度》) also provides training mechanism and training information feedback in a bid to improve the training efficiency and refine employees' training work.



Training Management System of the Group

In accordance with the Training Management System (《培訓管理制度》), the Group takes the development goal and employees' actual needs as the starting point while the Human Resources Department designs targeted training development plan for different ranks and types of employees according to the annual strategy, operation plan and coordinated resources of the Group. It conducts a centralized induction training system for new employees once a month, while instructors are appointed to offer one-to-one induction training for new employees, and the training coverage rate of new employees is 100%. As to the whole staff, the "micro classroom" live broadcast in the "Ding Talk" office group is launched once a month in order to improve their professional quality. For senior leaders and key talents reserve, the Group cooperates with a number of external training institutions to provide employees with external training courses in accordance with their positions. For newly-promoted managers and key talent reserve, the Group carried out basic management training courses to support the talent echelon construction of the Group. In terms of the professional qualification and occupational title, the Group organizes and provides training to its employees on a regular basis to encourage them to participate in the qualification examination and obtain the qualification certificate. In 2022, employee training hours of the Group were 22,594 hours.

The percentage of the employees trained and training hours per capita by gender are as follows:

	Percentage of the employees trained	Training hours per capita (hour)
Male employees	97.7%	43.50
Female employees	94.1%	30.86

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

	Percentage of the employees trained	Training hours per capita (hour)
Senior Management	72.1%	25.99
Middle-level management	86.7%	50.77
General staff	98.6%	39.78

§ 4.3 Occupational Health and Safety

Safety production and employee's health are powerful guarantee for stable operation of enterprise. The Group pays high attention to employee's health and safety, implements safety production and occupational disease prevention, and commits to providing a healthy and safe production environment and working space for employees. It strictly abides by the relevant laws and regulations, such as the Safety Production Law of the People's Republic of China (《中華人民共和國安全生產法》) and the Occupational Disease Prevention Law of the People's Republic of China (《中華人民共和國職業病防治法》), implements the safety management policy of safety-led, prevention-oriented and comprehensive management, and carries out the responsibility system for production safety. The Group formulated the Administrative Measures for Safe Work Production (《安全生產工作管理辦法》), Inspection System for Safe Production (《安全生產檢查制度》), Post Safety Operation Rules (《崗位安全操作規程》), Provision and Management System for Labor Protection Articles (《勞動防護用品配備和管理制度》), Management System for Dangerous Work (《危險作業管理制度》), Reward and Punishment System for Safe Work (《安全生產獎勵和處罰制度》) to ensure the standard of operation, equipment and management in the production process. It has continuously improved occupational health and safety performance by taking effective management measures to prevent loss from accidents.

Implement responsibility and strict management

As the centralized management department of safe production of the Group, the manufacturing department signs the fire control and safe production management responsibility letters with each manufacturing base layer by layer. Base leaders and responsible persons of the departments, departments and teams, teams and individuals sign layer by layer to establish the principle that safety management must attached to production management and whoever in charge must be held accountable.

Safety officers are appointed in the base to be responsible for the arrangement, deployment, supervision and summary of safe production work in the office area. Base safety officers are the persons in charge of the safe production of the manufacturing bases. Safety officers are responsible for the safe production of the manufacturing bases, and the base senior leaders are the first person responsible for the safe production. The managers of each department are the persons in charge of the safe work of the departments, and a personnel is designated to be directly in charge of the safe production.

Strengthen safety publicity and education to improve the safety quality of employees

Employees' safety standards and their awareness and consciousness of recognizing the hidden danger of accidents are directly related to production safety. As such, we must do a good job of publicity and education and standardize the safe production operations of employees to achieve safe production, and let employees understand that "from I am required to be safe to I want to be safe, I will be safe" (「要我安全到我要安全、我會安全」), and truly realize "do not hurt others, do not hurt themselves, do not be hurt by others" (「不傷害他人、不傷害自己、不被他人傷害」) to transform the safety behaviors from passive acceptance to conscious and active actions and lay a solid foundation for production safety. We actively provide safety education and training to our employees, including the three-level safety orientation education, and employees in special positions are required to hold necessary certificates. The Group implements a regular safety meeting system, organizes safety week and monthly activities, and rolls out safety publicity activities. In 2022, the safety production training hours of the Group for the operation staff were 25 hours per person.

Strengthen safety inspection and strengthen safety rectification

To eliminate safety hazards, make safety precautions, provide safe and reliable working environment for employees and enhance their sense of security, the Group makes hard efforts in the renovation and rectification of safety facilities and increases safety rectification and rectification efforts. It establishes safety checklist for safe production and performs regular safety inspection, holiday inspection, seasonal inspection, electrical equipment safety inspection and temporary random inspection. If any problem is found, a notice of inspection and rectification will be issued in time. If the problem cannot be corrected, preventive measures shall be formulated and incorporated into the rectification plan, and measures will be formulated and implemented step by step, which ensures the normal operation of the Company's safe production. The Group strictly implements internal policies such as the Management System for Safe Use of Electricity (《安全用電管理制度》), the Protection Measures for Electricity Leakage of Equipment and Circuit (《設備、電路中的漏電保護措施》), and Special Equipment and Operator Management System (《特種設備及操作人員管理制度》) and Management System for Hazard Identification, Risk Assessment and Measure Implementation (《危險源辨識、風險評價、確定措施管理制度》). It conducted risk management and hazard investigation in an orderly manner, formed a target-monitoring-evaluation-improved occupational health management model and carried out detailed and process-based safety management for all aspects of production and operation.

Safe production emergency management

Safety prevention and emergency work are the fundamental guarantees for achieving safe production. The Group has formulated the Fire Facilities Management System (《消防設施管理制度》) on the basis of strict compliance to the Law of the People's Republic of China on Fire Prevention (《中華人民共和國消防法》). In addition, the Group organizes employees to carry out fire emergency drills on a regular basis, and carries out effective safety supervision on daily production and operation as well as major holiday fire inspections. For the emergency preparation, the Group formulated the QES Emergency Preparedness and Corresponding System (《QES應急準備和相應制度》), Production Safety Accident Emergency Rescue Plan (《生產安全事故應急救援預案》), Emergency Preparedness and Response Plan for Mechanical Injury (《機械傷害應急準備與響應預案》), Emergency Preparedness and Response Plan for Injury Accidents (《傷害事故應急準備與響應預案》) and other methods to clarify emergency response measures, improve employees' emergency response and rescue capabilities, and ensure life safety and property safety.

Occupational health protection

In the aspect of the occupational hazards prevention and control, the Group formulated a series of systems, including the Management System for Objectives and Solutions of Occupational Health and Safety (《職業健康安全目標和方案管理制度》) and the Management System for Occupational Health and Safety Performance Monitoring and Compliance Evaluation (《職業健康安全績效監測與合規性評價管理制度》) in accordance with the requirements of the system. The Group clearly defines the responsibilities of occupational disease prevention and control of various departments and positions, to implement occupational disease prevention and management in order to facilitate the goal of creating a safety, healthy and pleasant working environment for employees. The Group formulated and issued the Provision and Management System for Labor Protection Articles (《勞動防護用品配備和管理制度》) and Administrative Measures for Industrial Accidents (《工傷事故管理辦法》) to regulate the types and duration of labor protection equipment for all positions and specify the work-related accident response process and support arrangements. The occupational hazards faced by our staff are mainly dust, waste gas and steam in the production department. We implement 5S management to ensure the control of production lighting, dust and noise to reduce occupational hazards. The Group regularly provides employees with gloves, masks and other protective equipment, electrostatic dischargers and other labor protection facilities, posts safety warning signs and sets up safety barriers to safeguard their safety and health.

In 2022, there was no instance of material non-compliance in providing safe working environment and protecting employees from occupational hazards. No fatal or serious production accident occurred and the hours of work injury loss was zero, and there were no fatal accidents occurred concerning safe production responsibilities in both 2020 and 2021.

§5 PRODUCT RESPONSIBILITY

§5.1 Supply Chain Management

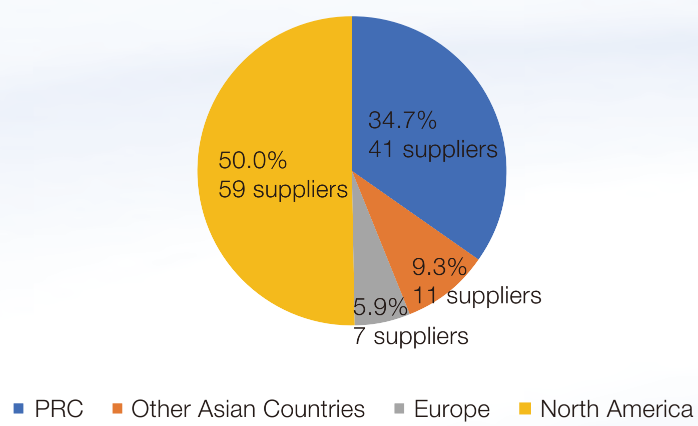
The sincere cooperation of our suppliers has been an important guarantee for our on-going operation. The Group upholds an open, fair and impartial principal and attaches importance to the communication with our suppliers in a bid to establish a long-term, win-win relationship with them, jointly undertake product responsibility and strengthen quality assurance.

The Group has formulated the Supplier Management and Control Procedure (《供貨商管理控制程序》). It specifies the obligations of procurement related departments such as purchasing department, quality management department, and storage and distribution department, and provides the basic requirements and workflow for the selection, assessment and management of suppliers. The Group has also instituted the Table of Data and Comments on Suppliers (《供應商資料及評價表》). From the aspects of enterprise qualification, performance capability, product quality and after-sales service, we will carry out supplier evaluation. According to the evaluation results, supplier access and exit will be implemented according to the regulations so as to control the quality of the source. If necessary, site examination will be conducted on the manufacturers who are admitted to the suppliers list of the Group for the first time in order to exercise stringent risks control. All suppliers are evaluated and reviewed by the Group in accordance with this evaluation methodology.

The Group has passed ISO 14001:2005 Environmental Management System certification and strictly abides by QC080000 electronic and electrical originals and products hazardous substances process management system. Most of the Group's products are exported to Europe and need to comply with RoHS (Restriction of Hazardous Substances) standards and WEEE (Waste Electrical and Electronic Equipment) Directive. Therefore, the Group strengthens the evaluation and management of RoHS raw materials and auxiliary materials suppliers, and the suppliers with good and high reputation, quality management and environmental management system certification will be given priority to reduce environmental and social risks in the supply chain and strengthen quality assurance. In order to effectively ensure that suppliers' products meet the requirements of HSF (Hazardous substances free) and that the product quality, price, delivery date, and the coordination degree of hazardous substances reduction meet the requirements of the Group's hazardous substances process management system, the Group has formulated the Procedures for Control on Product Procurement Process (《產品採購過程控制程序》) to standardize the procurement process, reduce operational risks, and achieve standardized management of global multichannel supply in terms of procurement of raw materials, ancillary materials, suppliers, as well as logistics, trade and other service providers. For finished product suppliers, the Group prioritizes suppliers that have passed the Environmental Management System (ISO 14001) and Occupational Health and Safety Management System (OHSAS18001) certification.

During the reporting period, the Group had 118 suppliers and the distribution of suppliers is as follows:

Geographical Distribution of the Group's Suppliers in 2022



§5.2 Product Quality

The Group adheres to the idea of "Quality Comes First" in all workplaces and strictly complies with the Product Quality Law of the People's Republic of China (《中華人民共和國產品質量法》). It established quality management system and electrical appliance harmful substances management system based on the Group's actual situations and in accordance with ISO 9001:2005 Quality Management System Requirements (《質量管理體系要求》), QC080000 (IECQ-HSPM) Process Management System for Electronic and Electrical Originals and Products Hazardous Substances (《電子與電器原件和產品有害物質過程管理體系》) and other requirements, and passed the third-party system certification. At the same time, the Group instituted an effective quality management structure according to the requirements of quality management system by setting up a centralized department at the management layer and a quality control position at the project implementation layer to fully implement product quality assurance work. With the extensive application of AI, our Group paid more attention to data quality in product quality management in recent years and established the standards on meta data collection and data quality in relevant industry.

In conjunction with the need for our products to meet not only the requirements of highly reliable management of public facilities, but also the specificities of the environment in which the equipment operates, the Group strictly implements quality control measures, including formulating the Management System for Consistency of Certified Products (《認證產品一致性管理制度》), the QES Rectification Measures Management System (《QES糾正措施管理制度》), the Management System for Unqualified Products Output (《產品不合格輸出管理制度》) and Management System for Unqualified Projects Output (《工程不合格輸出管理制度》), so as to ensure the product's specific electromagnetic environment and application scenarios. In order to clarify product and engineering eligibility criteria in the aspects of design, purchasing, producing process and delivery, and standardize treatment of potentially unqualified products and unqualified projects, the interface between market demand and R&D tasks is facilitated to ensure that customer needs are met by deploying a cross-departmental R&D management environment. At the same time, we follow the cycle of Plan (P), Do (D), Check (C) and Action (A) for quality management to carry out product work in an orderly, effective and continuous manner. In terms of software research and development, the Group passed the CMMI, namely Capability Maturity Model Integration, International Certification, obtained the CMMI 2.0III qualification certificate evaluated by the Carnegie Mellon Software Engineering Institute (SEI) so as to ensure that the Group could effectively handle more complicated software problems based on CMMI to achieve parallel progress of software engineering, and that the R&D process is fully traceable, to further benefit from coordination of various subjects and process improvement, which marks that the Group's software development, quality management and process improvement has been at the forefront of the world. Product testing is independent of product development. In the stage of product design, parallel test plans are designed, and testing can be further divided into two independent processes of testing and verification according to needs. As for key products and major projects, R&D personnel will be dispatched to provide on-site support and collect firsthand information in a timely manner so as to solve the problems swiftly. For the secrecy system of the product, through the Group's practice in secrecy-related projects, we have accumulated experience in the development of secrecy-related systems and the selection of secrecy-related application components. In order to meet the needs of more application scenarios, we plan to strengthen our R&D efforts in both security detection and real-time response of our products in the future, including: meeting the security protection needs of national critical infrastructure and meeting the needs of unmanned rail vehicles, etc.

Benefited from the comprehensive product quality management process, no product was recalled for safety and health reasons in 2022. No material non-compliance incidents occurred on health and safety matters relating to products and services provided. There was no violation of relevant laws and regulations relating to advertisements and trademarks that have material impact on the Group.

§5.3 Customer Service

Customers are the foundation in the survival and development of companies. The customers of the Group are mainly enterprises. Therefore, the Group insists on customer-oriented, takes effective feedbacks from customers as driving force of our continual progress and development and adheres to improving customer satisfaction in order to establish good relationships with customers. The Group formulated Customer Service Management System (《客服管理制度》) and provided the product after-sales service hotline and mailbox to our customers. In integrated management department, customer service officer is in place to answer enquiries from customers. Upon receiving customers' complaint, the integrated management department will coordinate, liaise with the manufacturing department on a timely basis and follow up the handling progress in order to make sure that every complaint is handled properly. When our products do have quality problems, customers can fill in the quality feedback form and send it to our customer service officers by email. If it is necessary to return the product to the factory for maintenance after communication between the technical personnel and the customer, the customer shall deliver the defect product (including the list of defect product) to the designated maintenance center of the Group for maintenance service as informed by the customer service officer.

In 2022, the Group has not received any complaints about quality problems of self-produced components and a total of 50 complaints about quality problems of outsourced finished products. The Group actively cooperated with customers and finished product suppliers to handle complaints, and timely assisted finished product suppliers to improve their work process according to customers' advice. The Group resolved all customer complaints and customer satisfaction surveys showed 100% satisfaction. Due to the nature of our business, the Group does not directly provide products and services to individual customers, so it does not involve customer personal data or privacy.

§6 ANTI-CORRUPTION

An honest and upright working environment is an essential guarantee for an enterprise to achieve a long-term development. The Group is devoted to fighting against any kind of corruptions. It strictly abides by the national laws and regulations, including the Supervision Law of the People's Republic of China (《中華人民共和國監察法》), the Criminal Law of the People's Republic of China (《中華人民共和國刑法》), the Anti-Money Laundering Law of the People's Republic of China (《中華人民共和國反洗錢法》), the Rules on Supervision and Enforcement for Discipline Inspection Authority (《紀律檢查機關監督執工作規則》) and the Rules on Supervision and Enforcement for Regulation Authorities (《監察機關監督執法工作規定》). The Group always maintains a "zero tolerance" attitude towards acts of corruption. With the mindset of being responsible to customers, honest to the Company, non-corrupt, responsible, pragmatic and steady, the Group has continuously strengthened its organizational structure and team building, and improved its internal management system and supervision mechanism. In the Group's management system compilation and staff manual, we have clearly required all staff to be fair and integrity. The Group also signed an integrity agreement with each employee and enhanced employees' vigilance against corruption to further standardize their conduct.

The internal control department of the Group is responsible for anti-corruption and regularly checks the internal control and management documents and systems of the Group. It pays close attention to the update of relevant national laws and regulations, and revises relevant internal control and anti-corruption management systems based on the requirements of laws and regulations. The Group brings the work of anti-corruption into all kinds of important meetings of the Group, takes it as an important matter in the training of the Group's internal control and management, and strengthens the anticorruption propaganda and education through the billboard. It requires all employees to be fair and honest so as to create a cultural atmosphere on clean and integrity. In 2022, our accumulated training time for anti-corruption was 512 hours with 93 employees participated. For anti-corruption, there were no cases of violation occurred that have material impact on the Company and no cases of anti-corruption or corruption litigation occurred. In cooperation with our suppliers, the Group expressly prescribes the anti-corruption clauses through relevant contracts and annexes.

The Group also set up internal reporting channels, including mailbox, telephone hotline and e-mail, and provided anti-corruption channels for cooperative suppliers. Employees and suppliers can report corruption and bribery anonymously or in real name through these channels which are supervised and managed by the internal control department of the Group. If there is case of improper act reported, the Group will initiate a response process and the case will be timely reported to the responsible person of the department or the management of the Group and be strictly and thoroughly investigated. For the privacy protection of whistle-blowers, the Group completely conceals all the information of the whistle-blowers when handling the reported cases, and will not provide the reported evidence to the person being reported or any other content that may disclose the information of the whistle-blowers. During the year, the Group did not receive any report related to corruption and violation of the integrity practice policy.

§7 COMMUNITY PARTICIPATION

As a responsible enterprise citizen, the Group has been actively responding to the national call by honestly fulfilling its social responsibilities and contributing a harmonious and win-win momentum to the society. Capitalizing on its own strengths and advantages, the Group has practiced its social responsibility and cared for people's needs for heating by ensuring the heating time.

According to the "providing heating in staggered peak periods" requirement by the government, as at 5 October 2022, Youyi Heating Factory under the Group started the operation of coal-firing for the heating of 2022-2023.

Youyi Heating stocked the raw coal for heating in advance as well as maintained and improved the equipment and facilities by adopting the ways such as "stock coal in summer for the use in winter", "problems in winter to be fixed in summer", thereby providing strong guarantee of heating. Meanwhile, it also improved various safety systems, formulated heating emergency proposals and established heating shifts and emergency repairing system, which safeguarded the smooth launching and safe operation of winter heating. In order to improve the heating quality, the heating factory and heating exchanger station underwent comprehensive checking, further ensuing the heating capacity and quality. After the end of the previous heating season, Youyi Heating has performed comprehensive examination on all heating equipment, heating pipes and wires. By staggering the peak seasons, it collected and stored the coal in summer to prepare for the use in winter. In addition, it also tested the heating network to ensure all the equipment can be used without defects for stable heating. The current heating period started from 5 October 2022 to 30 April 2023. During the 208-day heating period, heating will be provided to over 16,000 residents with heating coverage of 1,270,000 square metres.

In the future, driven by the carbon peak and carbon neutrality goals, the Group will continue to undertake its social responsibilities, protect the city temperature with actions, serve the people's livelihood, and "heat up" the people's happiness with heating.

SEHK ESG REPORTING GUIDE CONTENT INDEX

ESG Reporting Guide		Reporting Contents
Subject Area A. Environmental		
Aspect A1: Emissions		
A1	General Disclosure Information on: (a) the policies; and (b) compliance with relevant laws and regulations that have a significant impact on the issuer relating to air and greenhouse gas emissions, discharges into water and land, and generation of hazardous and non-hazardous waste.	3. Environment Protection
A1.1	The types of emissions and respective emissions data.	3.1 Emission Management
A1.2	Direct (Scope 1) and energy indirect (Scope 2) greenhouse gas emissions (in tonnes) and, where appropriate, intensity (e.g. per unit of production volume, per facility).	3.1 Emission Management
A1.3	Total hazardous waste produced (in tonnes) and, where appropriate, intensity (e.g. per unit of production volume, per facility).	3.1 Emission Management
A1.4	Total non-hazardous waste produced (in tonnes) and, where appropriate, intensity (e.g. per unit of production volume, per facility).	3.1 Emission Management
A1.5	Description of emission target(s) set and steps taken to achieve them.	3.1 Emission Management
A1.6	Description of how hazardous and non-hazardous wastes are handled, and a description of reduction target(s) set and steps taken to achieve them.	3.1 Emission Management
Aspect A2: Use of Resources		
A2	General Disclosure Policies on the efficient use of resources, including energy, water and other raw materials.	3.2 Use of Resources
A2.1	Direct and/or indirect energy consumption by type (e.g. electricity, gas or oil) in total (kWh in ‘000s) and intensity (e.g. per unit of production volume, per facility).	3.2 Use of Resources
A2.2	Water consumption in total and intensity (e.g. per unit of production volume, per facility).	3.2 Use of Resources
A2.3	Description of energy use efficiency target(s) set and steps taken to achieve them.	3.2 Use of Resources
A2.4	Description of whether there is any issue in sourcing water that is fit for purpose, water efficiency target(s) set and steps taken to achieve them.	3.2 Use of Resources
A2.5	Total packaging material used for finished products (in tonnes) and, if applicable, with reference to per unit produced.	3.2 Use of Resources

Aspect A3: The Environment and Natural Resources		
A3	General Disclosure Policies on minimising the issuer's significant impacts on the environment and natural resources.	3. Environment Protection
A3.1	Description of the significant impacts of activities on the environment and natural resources and the actions taken to manage them.	3. Environment Protection
Aspect A4: Climate Change		
A4	General Disclosure Policies on identification and mitigation of significant climate-related issues which have impacted, and those which may impact, the issuer.	1. Coping with Climate Changes
A4.1	Description of the significant climate-related issues which have impacted, and those which may impact, the issuer, and the actions taken to manage them.	1. Coping with Climate Changes
Subject Area B. Social		
Employment and Labour Practices		
Aspect B1: Employment		
B1	General Disclosure Information on: (a) the policies; and (b) compliance with relevant laws and regulations that have a significant impact on the issuer relating to compensation and dismissal, recruitment and promotion, working hours, rest periods, equal opportunity, diversity, anti-discrimination, and other benefits and welfare.	4.1 Equal Employment
B1.1	Total workforce by gender, employment type (for example, full – or part-time), age group and geographical region.	4.1 Equal Employment
B1.2	Employee turnover rate by gender, age group and geographical region.	4.1 Equal Employment
Aspect B2: Health and Safety		
B2	General Disclosure Information on: (a) the policies; and (b) compliance with relevant laws and regulations that have a significant impact on the issuer relating to providing a safe working environment and protecting employees from occupational hazards.	4.3 Occupational Health and Safety
B2.1	Number and rate of work-related fatalities occurred in each of the past three years including the reporting year.	4.3 Occupational Health and Safety
B2.2	Lost days due to work injury.	4.3 Occupational Health and Safety
B2.3	Description of occupational health and safety measures adopted, and how they are implemented and monitored.	4.3 Occupational Health and Safety

Aspect B3: Development and Training		
B3	General Disclosure Policies on improving employees' knowledge and skills for discharging duties at work. Description of training activities.	4.2 Staff Development and Training
B3.1	The percentage of employees trained by gender and employee category (e.g. senior management, middle management).	4.2 Staff Development and Training
B3.2	The average training hours completed per employee by gender and employee category.	4.2 Staff Development and Training
Aspect B4: Labour Standards		
B4	General Disclosure Information on: (a) the policies; and (b) compliance with relevant laws and regulations that have a significant impact on the issuer relating to preventing child and forced labour.	4.1 Equal Employment
B4.1	Description of measures to review employment practices to avoid child and forced labour.	4.1 Equal Employment
B4.2	Description of steps taken to eliminate such practices when discovered.	4.1 Equal Employment
Operating Practices		
Aspect B5: Supply Chain Management		
B5	General Disclosure Policies on managing environmental and social risks of the supply chain.	5.1 Supply Chain Management
B5.1	Number of suppliers by geographical region.	5.1 Supply Chain Management
B5.2	Description of practices relating to engaging suppliers, number of suppliers where the practices are being implemented, and how they are implemented and monitored.	5.1 Supply Chain Management
B5.3	Description of practices used to identify environmental and social risks along the supply chain, and how they are implemented and monitored.	5.1 Supply Chain Management
B5.4	Description of practices used to promote environmentally preferable products and services when selecting suppliers, and how they are implemented and monitored.	5.1 Supply Chain Management

Aspect B6: Product Responsibility		
B6	General Disclosure Information on: (a) the policies; and (b) compliance with relevant laws and regulations that have a significant impact on the issuer relating to health and safety, advertising, labelling and privacy matters relating to products and services provided and methods of redress.	5. Product Responsibility
B6.1	Percentage of total products sold or shipped subject to recalls for safety and health reasons.	5.2 Product Quality
B6.2	Number of products and service related complaints received and how they are dealt with.	5.3 Customer Service
B6.3	Description of practices relating to observing and protecting intellectual property rights.	2.2 Protection of Intellectual Property
B6.4	Description of quality assurance process and recall procedures.	5.2 Product Quality
B6.5	Description of consumer data protection and privacy policies, and how they are implemented and monitored.	Explained in the section headed "5.3 Customer Service" of the Report
Aspect B7: Anti-corruption		
B7	General Disclosure Information on: (a) the policies; and (b) compliance with relevant laws and regulations that have a significant impact on the issuer relating to bribery, extortion, fraud and money laundering.	6. Anti-corruption
B7.1	Number of concluded legal cases regarding corrupt practices brought against the issuer or its employees during the reporting period and the outcomes of the cases.	6. Anti-corruption
B7.2	Description of preventive measures and whistle-blowing procedures, and how they are implemented and monitored.	6. Anti-corruption
B7.3	Description of anti-corruption training provided to directors and staff.	6. Anti-corruption
Community		
Aspect B8: Community Investment		
B8	General Disclosure Policies on community engagement to understand the needs of the communities where the issuer operates and to ensure its activities take into consideration the communities' interests.	7. Community Participation
B8.1	Focus areas of contribution (e.g. education, environmental concerns, labour needs, health, culture, sport).	7. Community Participation
B8.2	Resources contributed (e.g. money or time) to the focus area.	7. Community Participation

Independent Auditor's Report

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

OPINION

We have audited the consolidated financial statements of Technovator International Limited ("the Company") and its subsidiaries ("the Group") set out on pages 85 to 144 which comprise the consolidated statement of financial position as at 31 December 2022, the consolidated income statement, the consolidated income statement and other comprehensive income, the consolidated statement of changes in equity and the consolidated cash flow statement for the year then ended and notes to the consolidated financial statements, including a summary of significant accounting policies.

In our opinion, the consolidated financial statements give a true and fair view of the consolidated financial position of the Group as at 31 December 2022 and of its consolidated financial performance and its consolidated cash flows for the year then ended in accordance with Hong Kong Financial Reporting Standards ("HKFRSs") issued by the Hong Kong Institute of Certified Public Accountants ("HKICPA") and have been properly prepared in compliance with the disclosure requirements of the Hong Kong Companies Ordinance.

BASIS FOR OPINION

We conducted our audit in accordance with Hong Kong Standards on Auditing ("HKSAs") issued by the HKICPA. Our responsibilities under those standards are further described in the *Auditor's responsibilities for the audit of the consolidated financial statements* section of our report. We are independent of the Group in accordance with the HKICPA's *Code of Ethics for Professional Accountants* ("the Code") together with any ethical requirements that are relevant to our audit of the consolidated financial statements in Singapore, and we have fulfilled our other ethical responsibilities in accordance with these requirements and the Code. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

KEY AUDIT MATTERS

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

KEY AUDIT MATTERS *(Continued)*

Accounting for construction projects

Refer to note 3 to the consolidated financial statements and the accounting policies on page 107.

The Key Audit Matter	How the matter was addressed in our audit
The Group's revenue for the year ended 31 December 2022 from construction projects totalled RMB1,389 million, which accounted for 80% of the total revenue for the year. The construction projects of the Group are primarily energy saving projects relating to transportation, building and industrial businesses. Revenue from construction projects is recognised in proportion to the stage of completion of the project, measured by comparing the costs incurred up to the reporting date to the total forecast costs at completion of the project when the control of the goods is regarded as being transferred over time under HKFRS 15. Based on the nature of construction activities, revenue and profit or loss recognised on a project in progress at the reporting date is highly dependent on management's estimation of the total costs required to complete the project and the percentage of work completed at the reporting date.	Our audit procedures to assess accounting for construction projects included the following: • obtaining an understanding of the entity and its environment and assessing the design, implementation and operating effectiveness of management's key internal controls in relation to accounting for construction projects; • inspecting contracts on a sample basis to obtain an understanding of the key terms and risks associated with individual projects and the accounting implications thereof; • recalculating management's calculations of the percentage of completion at the reporting date and revenue recognised for each project by comparing the key inputs in the calculations, including total project revenue, costs incurred to date and amounts invoiced to date, with project terms, invoices issued and vendor invoices, on a sample basis; • examining written documentation from customers indicating their acceptance of the work performed to reporting date on projects, with reference to related third party engineers' certification of work completed, if any, on a sample basis;

KEY AUDIT MATTERS *(Continued)*

Accounting for construction projects *(Continued)*
Refer to note 3 to the consolidated financial statements and the accounting policies on page 107.

The Key Audit Matter	How the matter was addressed in our audit
We identified accounting for construction projects as a key audit matter because a significant degree of management judgement is required to be exercised, based on the latest progress of each project, particularly in estimating the future costs to complete a project which could be subject to management bias.	• challenging management's estimations of the expected future costs required to complete individual projects by comparing costs to be incurred with signed subcontractor projects and by benchmarking with similar estimations for comparable projects, on a sample basis, and assessing if there was any indication of management bias in the estimations; • assessing the reliability of management's projects cost forecasting process and whether there is any indication of management bias by comparing the actual costs for projects completed during the current year to forecasts made at the prior year end and enquiring of management for reasons for any material differences between the estimations and the actual outcome; • identifying possible onerous projects by comparing the latest budgeted costs, taking into consideration the actual costs incurred up to 31 December 2022, with the project revenue for individual projects, on a sample basis, and assessing if any provision for foreseeable losses was required when the budgeted costs exceeded the project revenue; and • assessing the related disclosures in the consolidated financial statements with reference to the requirements of the prevailing accounting standards.

KEY AUDIT MATTERS *(Continued)*

Valuation of contract assets and trade receivables

Refer to notes 16 and 17 to the consolidated financial statements and the accounting policies on pages 99-101.

The Key Audit Matter	How the matter was addressed in our audit
The Group's contract assets and trade receivables arise from the Group's construction projects. As at 31 December 2022, the aggregate amount of contract assets and trade receivables totalled RMB2,561 million. The Group measures loss allowances on contract assets and trade receivables at amounts equal to lifetime expected credit losses (the "ECL") using a provision matrix which involves significant management judgement in estimating loss rate and adjusting factors that are specific to the debtors and an assessment of both the current and forecast industries in which they operate at the reporting date. At 31 December 2022, the Group recognised loss allowances for contract assets and trade receivables of RMB162 million. We identified the valuation of contract assets and trade receivables as a key audit matter because of the significance of the contract assets and trade receivables balance and because the estimation of ECL is inherently subjective and involves a significant degree of management judgement.	Our audit procedures to assess the valuation of contract assets and trade receivables included the following: • obtaining an understanding of the entity and its environment and assessing the design, implementation and operating effectiveness of management's key internal controls relating to credit control and the estimation of the ECL; • obtaining an understanding on the methods, key assumptions and data of the ECL model adopted by management, including the basis of the historical loss rates, historical transition rates and recalculating the historical loss rates and historical transition rates in the ECL model; • assessing the relevance and reliability of the ageing report by comparing the details in the ageing report with relevant underlying documents, including goods delivery notes, completion reports for construction services and payment terms as set out in the contracts with customers, on a sample basis; and • assessing the related disclosures in the consolidated financial statements with reference to the requirements of the prevailing accounting standards.

KEY AUDIT MATTERS *(Continued)*

Assessment of the potential impairment of Property, plant and equipment and Intangible assets
Refer to notes 11 and 12 to the consolidated financial statements and the accounting policies on page 101-102.

The Key Audit Matter	How the matter was addressed in our audit
As at 31 December 2022, the carrying values of the Group's Property, Plant and Equipment ("PP&E") and intangible assets amounted to RMB129 million and RMB559 million, respectively. The Group's PP&E and intangible assets are allocated to relevant cash generating units ("CGUs") for the purpose of assessing if there is any impairment as at 31 December 2022. When it is determined that indicators of potential impairment of PP&E and intangible assets exist, management compares the carrying amount of the CGU with its recoverable amount, which is estimated by discounted cash flow forecast, to determine the amount of impairment, if any. The preparation of discounted cash flow forecasts involves the exercise of significant management judgement, particularly in estimating forecast revenue, forecast cost of sales, forecast expenses and the discount rates applied.	Our audit procedures to assess the potential impairment of PP&E and intangible assets included the following: • obtaining an understanding of the entity and its environment and assessing the design, implementation and operating effectiveness of management's key internal controls relating to impairment assessment of PP&E and intangible assets; • assessing management's identification of indicators of potential impairment of the PP&E and intangible assets; • assessing the methods adopted by management in the preparation of the discounted cash flow forecasts, and management's identification of CGUs and the allocation of assets and liabilities to each CGU with reference to our understanding of the Group's business and the requirements of the prevailing accounting standards; • challenging the key assumptions adopted in the discounted cash flow forecasts, including forecast revenue, forecast cost of sales, forecast expense by comparing these inputs with the historical results of each CGU and economic and industry forecasts; • comparing key financial data, including revenue, cost of sales and expenses, in the discounted cash flow forecasts with the budgets;

KEY AUDIT MATTERS *(Continued)*

Assessment of the potential impairment of Property, plant and equipment and Intangible assets *(Continued)*
Refer to notes 11 and 12 to the consolidated financial statements and the accounting policies on page 101-102.

The Key Audit Matter	How the matter was addressed in our audit
We identified assessment of the potential impairment of PP&E and intangible assets as a key audit matter because of the impairment assessments involve the exercise of significant judgement in estimating the inputs in the impairment assessment model, which can be inherently uncertain and could be subject to management bias in their selection.	• involving our internal valuation specialists on a sample basis to assess whether the discount rates applied in the discounted cash flow forecast were within the range adopted by other companies in the same industry and/or comparable to external market data; • comparing the actual results for the current year with the forecasts prepared in the prior year to assess the reliability of management's forecasting process and whether there is any indication of management bias; • performing sensitivity analyses of the key assumptions adopted by management to assess what changes thereto, either individually or collectively, would result in a different conclusion being reached and assessing whether there were any indicators of management bias in the selection of key assumptions; and • assessing the disclosures in the consolidated financial statements in respect of the impairment assessment of PP&E and intangible assets with reference to the requirements of the prevailing accounting standards.

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

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

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

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

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

RESPONSIBILITIES OF THE DIRECTORS FOR THE CONSOLIDATED FINANCIAL STATEMENTS

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

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

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

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

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

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

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

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

- 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.

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

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

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

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

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

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

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

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

KPMG
Certified Public Accountants

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

23 March 2023

Consolidated Income Statement

For the year ended 31 December 2022
(Expressed in Renminbi ("RMB"))

	Note	2022 RMB'000	2021 RMB'000
Revenue	3,4	**1,738,878**	1,619,065
Cost of sales		**(1,435,444)**	(1,301,576)
Gross profit		**303,434**	317,489
Other revenue	5(a)	**33,197**	38,283
Other net gain/(loss)	5(b)	**11,893**	(17,999)
Selling and distribution costs		**(81,452)**	(103,532)
Administrative and other operating expenses		**(133,009)**	(143,800)
Impairment loss on trade and other receivables and contract assets		**(62,167)**	(28,638)
Share of profits or losses of associates		**207**	(83)
Profit from operations		**72,103**	61,720
Finance costs	6(a)	**(6,687)**	(7,361)
Profit before taxation		**65,416**	54,359
Income tax	7(a)	**(9,698)**	(8,787)
Profit for the year		**55,718**	45,572
Profit attributable to:			
Equity shareholders of the company		**55,127**	45,307
Non-controlling interests		**591**	265
Profit for the year		**55,718**	45,572
Earnings per share	10		
Basic (RMB)		**0.0705**	0.0579
Diluted (RMB)		**0.0705**	0.0579

The accompanying notes form part of these financial statements.

Consolidated Income Statement and Other Comprehensive Income

For the year ended 31 December 2022
(Expressed in Renminbi ("RMB"))

	2022 RMB'000	2021 RMB'000
Profit for the year	**55,718**	45,572
Other comprehensive income for the year		
Item that may be reclassified subsequently to profit or loss:		
Exchange differences on translation of financial statements of overseas subsidiaries, net of nil tax	**3,471**	(1,113)
Total comprehensive income for the year	**59,189**	44,459
Attributable to:		
Equity shareholders of the Company	**58,598**	44,236
Non-controlling interests	**591**	223
Total comprehensive income for the year	**59,189**	44,459

The accompanying notes form part of these financial statements.

Consolidated Statement of Financial Position

At 31 December 2022
(Expressed in Renminbi ("RMB"))

	Note	31 December 2022 RMB'000	31 December 2021 RMB'000
Non-current assets			
Property, plant and equipment	11	129,364	135,290
Interests in associates		3,532	3,325
Intangible assets	12	558,607	533,227
Financial assets measured at amortised cost	13	410,388	438,973
Deferred tax assets	23	39,289	33,975
		1,141,180	1,144,790
Current assets			
Inventories	15	1,191,189	983,040
Contract assets	16	842,869	803,913
Trade and other receivables	17	1,636,535	1,341,508
Prepayments		123,981	114,927
Cash and cash equivalents	18	354,040	411,747
		4,148,614	3,655,135
Current liabilities			
Trade and other payables	19	1,924,246	1,577,167
Contract liabilities	16	107,880	117,700
Loans and borrowings	20	190,424	99,388
Lease liabilities	21	926	2,266
Income tax payable		34,892	28,461
		2,258,368	1,824,982
Net current assets		1,890,246	1,830,153
Total assets less current liabilities		3,031,426	2,974,943

	Note	31 December 2022 RMB'000	31 December 2021 RMB'000
Non-current liabilities			
Deferred tax liabilities	22	**25,683**	27,259
Deferred income	23	**7,246**	7,887
Lease liabilities	21	**846**	220
		33,775	35,366
NET ASSETS		**2,997,651**	2,939,577
CAPITAL AND RESERVES			
Share capital	24	**1,189,968**	1,189,968
Reserves		**1,790,357**	1,731,759
Total equity attributable to equity shareholders of the Company		**2,980,325**	2,921,727
Non-controlling interests		**17,326**	17,850
TOTAL EQUITY		**2,997,651**	2,939,577

Approved and authorised for issue by the board of directors on 23 March 2023.

Zhao Xiaobo
Qin Xuzhong
) *Directors*

The accompanying notes form part of these financial statements.

Consolidated Statement of Changes in Equity

For the year ended 31 December 2022
(Expressed in Renminbi ("RMB"))

	Attributable to equity shareholders of the Company							
	Share capital RMB'000 Note 24(c)	Statutory reserves RMB'000 Note 24(d)(i)	Translation reserve RMB'000 Note 24(d)(ii)	Other reserves RMB'000 Note 24(d)(iii)	Retained profits RMB'000	Total RMB'000	Non-controlling interests RMB'000	Total equity RMB'000
Balance at 1 January 2021	1,189,968	176,344	41,750	(537,048)	2,006,477	2,877,491	17,627	2,895,118
Changes in equity for 2021:								
Profit for the year	–	–	–	–	45,307	45,307	265	45,572
Other comprehensive income	–	–	(1,071)	–	–	(1,071)	(42)	(1,113)
Total comprehensive income for the year	–	–	(1,071)	–	45,307	44,236	223	44,459
Appropriation to reserves	–	6,282	–	–	(6,282)	–	–	–
Balance at 31 December 2021	1,189,968	182,626	40,679	(537,048)	2,045,502	2,921,727	17,850	2,939,577

	Attributable to equity shareholders of the Company							
	Share capital RMB'000 Note 24(c)	Statutory reserves RMB'000 Note 24(d)(i)	Translation reserve RMB'000 Note 24(d)(ii)	Other reserves RMB'000 Note 24(d)(iii)	Retained profits RMB'000	Total RMB'000	Non-controlling interests RMB'000	Total equity RMB'000
Balance at 1 January 2022	1,189,968	182,626	40,679	(537,048)	2,045,502	2,921,727	17,850	2,939,577
Changes in equity for 2022:								
Profit for the year	–	–	–	–	55,127	55,127	591	55,718
Other comprehensive income	–	–	3,471	–	–	3,471	–	3,471
Total comprehensive income for the year	–	–	3,471	–	55,127	58,598	591	59,189
Appropriation to reserves	–	8,940	–	–	(8,940)	–	–	–
De-registration of subsidiary	–	–	–	–	–	–	(1,115)	(1,115)
Balance at 31 December 2022	1,189,968	191,566	44,150	(537,048)	2,091,689	2,980,325	17,326	2,997,651

The accompanying notes form part of these financial statements.

Consolidated Cash Flow Statement

For the year ended 31 December 2022
(Expressed in Renminbi ("RMB"))

	Note	2022 RMB'000	2021 RMB'000
Operating activities			
Profit for the year		**55,718**	45,572
Adjustments for:			
Income tax		**9,698**	8,787
Depreciation	6(c)	**40,959**	37,187
Amortisation of intangible assets	6(c)	**72,722**	71,414
Impairment losses on trade and other receivables and contract assets		**62,167**	28,638
Impairment losses on prepayments	6(c)	**1,789**	10,398
Finance costs	6(a)	**6,687**	7,361
Interest income	5(a)	**(27,632)**	(31,066)
Share of profits or losses of associates		**(207)**	83
Investment loss		**–**	14,081
Net gain on liquidation of subsidiary		**(417)**	–
Net loss on disposal of property, plant and equipment	5(b)	**2**	43
Net gain on debt restructure		**(6,918)**	–
Net gain on debt waiver		**(2,398)**	–
Foreign exchange loss, net		**(1,117)**	(414)
Changes in working capital:			
(Increase)/decrease in inventories		**(208,149)**	45,826
Increase in trade and other receivables		**(325,823)**	(92,738)
Increase in contract assets		**(43,509)**	(115,249)
Increase in trade and other payables		**349,429**	22,940
Decrease in contract liabilities		**(10,529)**	(19,431)
Decrease in deferred income		**(641)**	(1,664)
Cash (used in)/generated from operations		**(28,169)**	31,768
Income tax paid		**(16,197)**	(22,335)
Net cash (used in)/generated from operating activities		**(44,366)**	9,433

The accompanying notes form part of these financial statements.

	Note	2022 RMB'000	2021 RMB'000
Investing activities			
Payments for the purchase of property, plant and equipment		**(29,840)**	(24,629)
Expenditure on intangible assets		**(98,102)**	(78,126)
Interest received		**27,632**	31,229
Receipt from escrow account for subsidiary disposal		**–**	11,279
Net cash used in investing activities		**(100,310)**	(60,247)
Financing activities			
Capital element of lease rentals paid	18(b)	**(2,115)**	(1,728)
Interest element of lease rentals paid	18(b)	**(57)**	(134)
Proceeds from loans and borrowings	18(b)	**190,414**	99,288
Repayment of loans and borrowings	18(b)	**(99,288)**	(214,227)
Other borrowing costs paid	18(b)	**(6,720)**	(7,127)
Decrease in restricted deposit		**10,323**	19,177
Net cash generated from/(used in) financing activities		**92,557**	(104,751)
Net decrease in cash and cash equivalents		**(52,119)**	(155,565)
Cash and cash equivalents at the beginning of the year		**394,196**	551,161
Effect of foreign exchange rate changes		**4,735**	(1,400)
Cash and cash equivalents at the end of the year	18	**346,812**	394,196

The accompanying notes form part of these financial statements.

1 GENERAL INFORMATION

Technovator International Limited (the "Company") was incorporated in Singapore on 25 May 2005 under the name of "Technovator Int Private Ltd." as an exempted company with limited liability under the Singapore Companies Act 1967. The name of the Company was changed to Technovator International Limited on 8 September 2011. The Company and its subsidiaries hereinafter are collectively referred to as the "Group". Technovator is principally engaged in integrated and comprehensive urban smart energy saving services. Its business covers three major segments including smart transportation, smart buildings and complex and smart energy, providing the customers with smart energy management products, solutions and integrated services throughout their full life cycles. The details of the subsidiaries directly or indirectly owned by the Company are set out in note 14.

The controlling shareholder of the Company is Tsinghua Tongfang Co., Ltd. ("THTF"). On 30 December 2019, State-owned Assets Supervision and Administration Commission of the State Council ("SASAC") approved Tsinghua Holding Co., Ltd. ("Tsinghua Holding"), the single largest shareholder of THTF, to transfer its directing holding shares of THTF to China Nuclear Engineering Capital Holdings Limited ("CNEC"). CNEC is the wholly owned subsidiary of China National Nuclear Corporation ("CNNC"). On 31 December 2019, the ultimate controlling shareholder of THTF has changed from the Ministry of Education of the PRC to SASAC.

2 SIGNIFICANT ACCOUNTING POLICIES

(a) Statement of compliance

These financial statements have been prepared in accordance with all applicable Hong Kong Financial Reporting Standards (HKFRSs), which collective term includes all applicable individual Hong Kong Financial Reporting Standards, Hong Kong Accounting Standards (HKASs) and Interpretations issued by the Hong Kong Institute of Certified Public Accountants (HKICPA), accounting principles generally accepted in Hong Kong and the disclosure requirements of the Hong Kong Companies Ordinance. These financial statements also comply with the applicable disclosure provisions of the Rules Governing the Listing of Securities on The Stock Exchange of Hong Kong Limited. Significant accounting policies adopted by the Group are disclosed below.

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

(b) Basis of preparation of the financial statements

The consolidated financial statements for the year ended 31 December 2022 comprise the Group and the Group's interests in associates.

The measurement basis used in the preparation of the financial statements is the historical cost basis.

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

2 SIGNIFICANT ACCOUNTING POLICIES *(Continued)*

(b) Basis of preparation of the financial statements *(Continued)*

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

Judgements made by management in the application of HKFRSs that have significant effect on the financial statements and major sources of estimation uncertainty are discussed in note 29.

(c) Changes in accounting policies

The HKICPA has issued the following amendments to HKFRSs that are first effective for the current accounting period of the Group:

- Amendments to HKAS 16, *Property, plant and equipment: Proceeds before intended use*
- Amendments to HKAS 37, *Provisions, contingent liabilities and contingent assets: Onerous contracts – cost of fulfilling a contract*

None of these developments have had a material effect on how the Group's results and financial position for the current or prior periods have been prepared or presented. The Group has not applied any new standard or interpretation that is not yet effective for the current accounting period.

(d) Subsidiaries and non-controlling interests

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

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

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

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

2 SIGNIFICANT ACCOUNTING POLICIES *(Continued)*

(d) Subsidiaries and non-controlling interests *(Continued)*

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

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

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

(e) Associates

An associate is an entity in which the Group or Company has significant influence, but not control or joint control, over its management, including participation in the financial and operating policy decisions.

An investment in an associate is accounted for in the consolidated financial statements under the equity method. Under the equity method, the investment is initially recorded at cost, adjusted for any excess of the Group's share of the acquisition-date fair values of the investee's identifiable net assets over the cost of the investment (if any). The cost of the investment includes purchase price, other costs directly attributable to the acquisition of the investment, and any direct investment into the associate that forms part of the Group's equity investment. Thereafter, the investment is adjusted for the post acquisition change in the Group's share of the investee's net assets and any impairment loss relating to the investment (see note 2(j)(ii)). At each reporting date, the Group assesses whether there is any objective evidence that the investment is impaired. Any acquisition-date excess over cost, the Group's share of the post-acquisition, post-tax results of the investees and any impairment losses for the year are recognised in the consolidated income statement, whereas the Group's share of the post-acquisition post-tax items of the investees' other comprehensive income is recognised in the consolidated income statement and other comprehensive income.

When the Group's share of losses exceeds its interest in the associate, the Group's interest is reduced to nil and recognition of further losses is discontinued except to the extent that the Group has incurred legal or constructive obligations or made payments on behalf of the investee. For this purpose, the Group's interest is the carrying amount of the investment under the equity method together with any other long-term interests that in substance form part of the Group's net investment in the associate (after applying the ECL model to such other long-term interests where applicable).

Unrealised profits and losses resulting from transactions between the Group and its associates are eliminated to the extent of the Group's interest in the investee, except where unrealised losses provide evidence of an impairment of the asset transferred, in which case they are recognised immediately in the consolidated income statement.

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

2 SIGNIFICANT ACCOUNTING POLICIES *(Continued)*

(f) Other investments in debt and equity securities

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

Investments in debt and equity securities are recognised/derecognised on the date the Group commits to purchase/sell the investment. The investments are initially stated at fair value plus directly attributable transaction costs, except for those investments measured at fair value through profit or loss (FVPL) for which transaction costs are recognised directly in the income statement. These investments are subsequently accounted for as follows, depending on their classification. Currently, the Group does not have financial assets classified as FVPL or financial assets measured at fair value through other comprehensive income (FVOCI).

(i) Investments other than equity investments

Non-equity investments held by the Group are classified into one of the following measurement categories:

– amortised cost, if the investment is held for the collection of contractual cash flows which represent solely payments of principal and interest. Interest income from the investment is calculated using the effective interest method (see note 2(t)(vi)).

– FVOCI – recycling, if the contractual cash flows of the investment comprise solely payments of principal and interest and the investment is held within a business model whose objective is achieved by both the collection of contractual cash flows and sale. Changes in fair value are recognised in other comprehensive income, except for the recognition in the income statement of expected credit losses, interest income (calculated using the effective interest method) and foreign exchange gains and losses. When the investment is derecognised, the amount accumulated in other comprehensive income is recycled from equity to profit or loss.

– FVPL if the investment does not meet the criteria for being measured at amortised cost or FVOCI (recycling). Changes in the fair value of the investment (including interest) are recognised in the income statement.

(ii) Equity investments

An investment in equity securities is classified as FVPL unless the equity investment is not held for trading purposes and on initial recognition of the investment the Group makes an election to designate the investment at FVOCI (non-recycling) such that subsequent changes in fair value are recognised in other comprehensive income. Such elections are made on an instrument-by-instrument basis, but may only be made if the investment meets the definition of equity from the issuer's perspective. Where such an election is made, the amount accumulated in other comprehensive income remains in the fair value reserve (non-recycling) until the investment is disposed of. At the time of disposal, the amount accumulated in the fair value reserve (non-recycling) is transferred to retained earnings. It is not recycled through the income statement. Dividends from an investment in equity securities, irrespective of whether classified as at FVPL or FVOCI, are recognised in the income statement as other income in accordance with the policy set out in note 2(t)(v).

2 SIGNIFICANT ACCOUNTING POLICIES *(Continued)*

(g) Property, plant and equipment

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

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

Items may be produced while bringing an item of property, plant and equipment to the location and condition necessary for it to be capable of operating in the manner intended by management. The proceeds from selling any such items and the related costs are recognised in profit or loss.

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

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

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

Where parts of an item of property, plant and equipment have different useful lives, the cost of the item is allocated on a reasonable basis between the parts and each part is depreciated separately. Both the useful life of an asset and its residual value, if any, are reviewed annually.

(h) Intangible assets (other than goodwill)

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

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

2 SIGNIFICANT ACCOUNTING POLICIES *(Continued)*

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

Where the Group enters into service concession arrangements under which the Group constructs, uses and operates certain assets for the provision of public services, construction revenue and costs are recognised in the income statement by reference to the stage of completion at the end of reporting period while the fair value of construction service is capitalised initially as service concession assets in the statement of financial position and amortised on a straight-line basis over the shorter of the assets' useful lives and the period in which the service concession assets are expected to be available for use by the Group. Service concession assets are carried on the statement of financial position at cost less accumulated amortisation and impairment losses, if any (note 2(j)).

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

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

– Patents and technology know-how	5 years
– Service concession assets	20-23 years

Both the period and method of amortisation are reviewed annually.

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

(i) Leased assets

At inception of a contract, the Group assesses whether the contract is, or contains, a lease. A contract is, or contains, a lease if the contract conveys the right to control the use of an identified asset for a period of time in exchange for consideration. Control is conveyed where the customer has both the right to direct the use of the identified asset and to obtain substantially all of the economic benefits from that use.

(i) As a lessee

Where the contract contains lease component(s) and non-lease component(s), the Group has elected not to separate non-lease components and accounts for each lease component and any associated non-lease components as a single lease component for all leases.

At the lease commencement date, the Group recognises a right-of-use asset and a lease liability, except for short-term leases that have a lease term of 12 months or less and leases of low-value assets which, for the Group are primarily laptops and office furniture. When the Group enters into a lease in respect of a low-value asset, the Group decides whether to capitalise the lease on a lease-by-lease basis. The lease payments associated with those leases which are not capitalised are recognised as an expense on a systematic basis over the lease term.

2 SIGNIFICANT ACCOUNTING POLICIES *(Continued)*

(i) Leased assets *(Continued)*

(i) As a lessee *(Continued)*

Where the lease is capitalised, the lease liability is initially recognised at the present value of the lease payments payable over the lease term, discounted using the interest rate implicit in the lease or, if that rate cannot be readily determined, using a relevant incremental borrowing rate. After initial recognition, the lease liability is measured at amortised cost and interest expense is calculated using the effective interest method. Variable lease payments that do not depend on an index or rate are not included in the measurement of the lease liability and hence are charged to the income statement in the accounting period in which they are incurred.

The right-of-use asset recognised when a lease is capitalised is initially measured at cost, which comprises the initial amount of the lease liability plus any lease payments made at or before the commencement date, and any initial direct costs incurred. Where applicable, the cost of the right-of-use assets also includes an estimate of costs to dismantle and remove the underlying asset or to restore the underlying asset or the site on which it is located, discounted to their present value, less any lease incentives received. The right-of-use asset is subsequently stated at cost less accumulated depreciation and impairment losses (see notes 2(g) and 2(j)(ii)).

The initial fair value of refundable rental deposits is accounted for separately from the right-of-use assets in accordance with the accounting policy applicable to investments in debt securities carried at amortised cost (see notes 2(f)(i), 2(t)(vi) and 2(j)(i)). Any difference between the initial fair value and the nominal value of the deposits is accounted for as additional lease payments made and is included in the cost of right-of-use assets.

The lease liability is remeasured when there is a change in future lease payments arising from a change in an index or rate, or there is a change in the Group's estimate of the amount expected to be payable under a residual value guarantee, or there is a change arising from the reassessment of whether the Group will be reasonably certain to exercise a purchase, extension or termination option. When the lease liability is remeasured in this way, a corresponding adjustment is made to the carrying amount of the right-of-use asset, or is recorded in the income statement if the carrying amount of the right-of-use asset has been reduced to zero.

In the consolidated statement of financial position, the current portion of long-term lease liabilities is determined as the present value of contractual payments that are due to be settled within twelve months after the reporting period.

(ii) As a lessor

When the Group acts as a lessor, it determines at lease inception whether each lease is a finance lease or an operating lease. A lease is classified as a finance lease if it transfers substantially all the risks and rewards incidental to the ownership of an underlying assets to the lessee. If this is not the case, the lease is classified as an operating lease.

When a contract contains lease and non-lease components, the Group allocates the consideration in the contract to each component on a relative stand-alone selling price basis. The rental income from operating leases is recognised in accordance with note 2(t)(iv).

When the Group is an intermediate lessor, the sub-leases are classified as a finance lease or as an operating lease with reference to the right-of-use asset arising from the head lease. If the head lease is a short-term lease to which the Group applies the exemption described in note 2(i)(i), then the Group classifies the sub-lease as an operating lease.

2 SIGNIFICANT ACCOUNTING POLICIES *(Continued)*

(j) Credit losses and impairment of assets

(i) Credit losses from financial instruments and contract assets

The Group recognises a loss allowance for expected credit losses (ECLs) on the following items:

– financial assets measured at amortised cost (including cash and cash equivalents, trade and other receivables, and long-term receivables); and

– contract assets as defined in HKFRS 15 (see note 2(l));

Measurement of ECLs

ECLs are a probability-weighted estimate of credit losses. Credit losses are measured as the present value of all expected cash shortfalls (i.e. the difference between the cash flows due to the Group in accordance with the contract and the cash flows that the Group expects to receive).

The expected cash shortfalls are discounted using the following discount rates where the effect of discounting is material:

– fixed-rate financial assets, trade and other receivables and contract assets: effective interest rate determined at initial recognition or an approximation thereof; and

– variable-rate financial assets: current effective interest rate.

The maximum period considered when estimating ECLs is the maximum contractual period over which the Group is exposed to credit risk.

In measuring ECLs, the Group takes into account reasonable and supportable information that is available without undue cost or effort. This includes information about past events, current conditions and forecasts of future economic conditions.

ECLs are measured on either of the following bases:

– 12-month ECLs: these are losses that are expected to result from possible default events within the 12 months after the reporting date; and

– lifetime ECLs: these are losses that are expected to result from all possible default events over the expected lives of the items to which the ECL model applies.

Loss allowances for trade receivables and contract assets are always measured at an amount equal to lifetime ECLs. ECLs on these financial assets are estimated using a provision matrix based on the Group's historical credit loss experience, adjusted for factors that are specific to the debtors and an assessment of both the current and forecast general economic conditions at the reporting date.

For all other financial instruments (including loan commitments issued), the Group recognises a loss allowance equal to 12-month ECLs unless there has been a significant increase in credit risk of the financial instrument since initial recognition, in which case the loss allowance is measured at an amount equal to lifetime ECLs.

2 SIGNIFICANT ACCOUNTING POLICIES *(Continued)*

(j) Credit losses and impairment of assets *(Continued)*

(i) Credit losses from financial instruments and contract assets (Continued)

Significant increases in credit risk

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

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

– failure to make payments of principal or interest on their contractually due dates;

– an actual or expected significant deterioration in a financial instrument's external or internal credit rating (if available);

– an actual or expected significant deterioration in the operating results of the debtor; and

– existing or forecast changes in the technological, market, economic or legal environment that have a significant adverse effect on the debtor's ability to meet its obligation to the Group.

Depending on the nature of the financial instruments, the assessment of a significant increase in credit risk is performed on either an individual basis or a collective basis. When the assessment is performed on a collective basis, the financial instruments are grouped based on shared credit risk characteristics, such as past due status and credit risk ratings.

ECLs are remeasured at each reporting date to reflect changes in the financial instrument's credit risk since initial recognition. Any change in the ECL amount is recognised as an impairment gain or loss in the income statement. The Group recognises an impairment gain or loss for all financial instruments with a corresponding adjustment to their carrying amount through a loss allowance account, except for investments in debt securities that are measured at FVOCI (recycling), for which the loss allowance is recognised in other comprehensive income and accumulated in the fair value reserve (recycling).

Basis of calculation of interest income

Interest income recognised in accordance with note 2(t)(vi) is calculated based on the gross carrying amount of the financial asset unless the financial asset is credit-impaired, in which case interest income is calculated based on the amortised cost (i.e. the gross carrying amount less loss allowance) of the financial asset.

At each reporting date, the Group assesses whether a financial asset is credit-impaired. A financial asset is credit-impaired when one or more events that have a detrimental impact on the estimated future cash flows of the financial asset have occurred.

2 SIGNIFICANT ACCOUNTING POLICIES *(Continued)*

(j) Credit losses and impairment of assets *(Continued)*

(i) Credit losses from financial instruments and contract assets *(Continued)*

Basis of calculation of interest income (Continued)

Evidence that a financial asset is credit-impaired includes the following observable events:

– significant financial difficulties of the debtor;

– a breach of contract, such as a default or past due event;

– it becoming probable that the borrower will enter into bankruptcy or other financial reorganisation;

– significant changes in the technological, market, economic or legal environment that have an adverse effect on the debtor; or

– the disappearance of an active market for a security because of financial difficulties of the issuer.

Write-off policy

The gross carrying amount of a financial asset or contract asset is written off (either partially or in full) to the extent that there is no realistic prospect of recovery. This is generally the case when the Group determines that the debtor does not have assets or sources of income that could generate sufficient cash flows to repay the amounts subject to the write-off.

Subsequent recoveries of an asset that was previously written off are recognised as a reversal of impairment in the income statement in the period in which the recovery occurs.

(ii) Impairment of other non-current assets

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

– property, plant and equipment, including right-of-use assets;

– intangible assets; and

– investments in subsidiaries and associates in the Company's statement of financial position.

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

2 SIGNIFICANT ACCOUNTING POLICIES *(Continued)*

(j) Credit losses and impairment of assets *(Continued)*

(ii) Impairment of other non-current assets *(Continued)*

– Calculation of recoverable amount

The recoverable amount of an asset is the greater of its fair value less costs of disposal and value in use. In assessing value in use, the estimated future cash flows are discounted to their present value using a pre-tax discount rate that reflects current market assessments of the time value of money and the risks specific to the asset. Where an asset does not generate cash inflows largely independent of those from other assets, the recoverable amount is determined for the smallest group of assets that generates cash inflows independently (i.e. a cash-generating unit). A portion of the carrying amount of a corporate asset (for example, head office building) is allocated to an individual cash-generating unit if the allocation can be done on a reasonable and consistent basis, or to the smallest group of cash-generating units if otherwise.

– Recognition of impairment losses

An impairment loss is recognised in the income statement if the carrying amount of an asset, or the cash-generating unit to which it belongs, exceeds its recoverable amount. Impairment losses recognised in respect of cash-generating units are allocated, to reduce the carrying amount of the other assets in the unit (or group of units) on a pro rata basis, except that the carrying value of an asset will not be reduced below its individual fair value less costs of disposal (if measurable) or value in use (if determinable).

– Reversals of impairment losses

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

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

(k) Inventories and other contract costs

(i) Inventories

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

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

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

When inventories are sold, the carrying amount of those inventories is recognised as an expense in the period in which the related revenue is recognised.

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

A right to recover returned goods is recognised for the right to recover products from customers sold with a right of return.

2 SIGNIFICANT ACCOUNTING POLICIES *(Continued)*

(k) Inventories and other contract costs *(Continued)*

(ii) Other contract costs

Other contract costs are either the incremental costs of obtaining a contract with a customer or the costs to fulfil a contract with a customer which are not capitalised as inventory (see note 2(k)(i)), property, plant and equipment (see note 2(g)) or intangible assets (see note 2(h)).

Incremental costs of obtaining a contract are those costs that the Group incurs to obtain a contract with a customer that it would not have incurred if the contract had not been obtained e.g. an incremental sales commission. Incremental costs of obtaining a contract are capitalised when incurred if the costs relate to revenue which will be recognised in a future reporting period and the costs are expected to be recovered. Other costs of obtaining a contract are expensed when incurred.

Costs to fulfil a contract are capitalised if the costs relate directly to an existing contract or to a specifically identifiable anticipated contract; generate or enhance resources that will be used to provide goods or services in the future; and are expected to be recovered. Costs that relate directly to an existing contract or to a specifically identifiable anticipated contract may include direct labour, direct materials, allocations of costs, costs that are explicitly chargeable to the customer and other costs that are incurred only because the Group entered into the contract (for example, payments to sub-contractors). Other costs of fulfilling a contract, which are not capitalised as inventory, property, plant and equipment or intangible assets, are expensed as incurred.

Capitalised contract costs are stated at cost less accumulated amortisation and impairment losses. Impairment losses are recognised to the extent that the carrying amount of the contract cost asset exceeds the net of (i) remaining amount of consideration that the Group expects to receive in exchange for the goods or services to which the asset relates, less (ii) any costs that relate directly to providing those goods or services that have not yet been recognised as expenses.

Amortisation of capitalised contract costs is charged to the income statement when the revenue to which the asset relates is recognised. The accounting policy for revenue recognition is set out in note 2(t).

(l) Contract assets and contract liabilities

A contract asset is recognised when the Group recognises revenue (see note 2(t)) before being unconditionally entitled to the consideration under the payment terms set out in the contract. Contract assets are assessed for expected credit losses (ECL) in accordance with the policy set out in note 2(j)(i) and are reclassified to receivables when the right to the consideration has become unconditional (see note 2(m)).

A contract liability is recognised when the customer pays consideration before the Group recognises the related revenue (see note 2(t)). A contract liability would also be recognised if the Group has an unconditional right to receive consideration before the Group recognises the related revenue. In such cases, a corresponding receivable would also be recognised (see note 2(m)).

For a single contract with the customer, either a net contract asset or a net contract liability is presented. For multiple contracts, contract assets and contract liabilities of unrelated contracts are not presented on a net basis.

When the contract includes a significant financing component, the contract balance includes interest accrued under the effective interest method (see note 2(t)).

2 SIGNIFICANT ACCOUNTING POLICIES *(Continued)*

(m) Trade and other receivables

A receivable is recognised when the Group has an unconditional right to receive consideration. A right to receive consideration is unconditional if only the passage of time is required before payment of that consideration is due. If revenue has been recognised before the Group has an unconditional right to receive consideration, the amount is presented as a contract asset (see note 2(l)).

Trade receivables that do not contain a significant financing component are initially measured at their transaction price. Trade receivables that contain a significant financing component and other receivables are initially measured at fair value plus transaction costs. All receivables are subsequently stated at amortised cost, using the effective interest method and including an allowance for credit losses (see note 2(j)(i)).

(n) Interest-bearing borrowings

Interest-bearing borrowings are recognised initially at fair value less transaction costs. Subsequent to initial recognition, interest-bearing borrowings are stated at amortised cost using the effective interest method. Interest expense is recognised in accordance with the Group's accounting policy for borrowing costs (see note 2(v)).

(o) Trade and other payables

Trade and other payables are initially recognised at fair value. Subsequent to initial recognition, Trade and other payables are stated at amortised costs unless the effect of discounting would be immaterial, in which case they are stated at invoice amounts.

(p) Cash and cash equivalents

Cash and cash equivalents comprise cash at bank and on hand, demand deposits with banks and other financial institutions, and short-term, highly liquid investments that are readily convertible into known amounts of cash and which are subject to an insignificant risk of changes in value, having been within three months of maturity at acquisition. Bank overdrafts that are repayable on demand and form an integral part of the Group's cash management are also included as a component of cash and cash equivalents for the purpose of the consolidated cash flow statement. Cash and cash equivalents are assessed for expected credit losses (ECL) in accordance with the policy set out in note 2(j)(i).

(q) Employee benefits

(i) Short-term employee benefits and contributions to defined contribution retirement plans

Salaries, annual bonuses, paid annual leave, contributions to defined contribution retirement plans and the cost of non-monetary benefits are accrued in the year in which the associated services are rendered by employees. Where payment or settlement is deferred and the effect would be material, these amounts are stated at their present values.

(ii) Termination benefits

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

2 SIGNIFICANT ACCOUNTING POLICIES *(Continued)*

(r) Income tax

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

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

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

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

The limited exceptions to recognition of deferred tax assets and liabilities are those temporary differences arising from goodwill not deductible for tax purposes, the initial recognition of assets or liabilities that affect neither accounting nor taxable profit (provided that they are not part of a business combination), and temporary differences relating to investments in subsidiaries to the extent that, in the case of taxable differences, the Group controls the timing of reversal and it is probable that the differences will not reverse in the foreseeable future, or in the case of deductible differences, unless it is probable that they will reverse in the future.

The amount of deferred tax recognised is measured based on the expected manner of realisation or settlement of the carrying amount of the assets and liabilities, using tax rates enacted or substantively enacted at the end of the reporting period. Deferred tax assets and liabilities are not discounted.

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

2 SIGNIFICANT ACCOUNTING POLICIES *(Continued)*

(r) Income tax *(Continued)*

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

in the case of current tax assets and liabilities, the Company or the Group intends either to settle on a net basis, or to realise the asset and settle the liability simultaneously; or

– in the case of deferred tax assets and liabilities, if they relate to income taxes levied by the same taxation authority on either:

  – the same taxable entity; or

  – different taxable entities, which, in each future period in which significant amounts of deferred tax liabilities or assets are expected to be settled or recovered, intend to realise the current tax assets and settle the current tax liabilities on a net basis or realise and settle simultaneously.

(s) Provisions, contingent liabilities and onerous contracts

(i) Provisions and contingent liabilities

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

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

Where some or all of the expenditure required to settle a provision is expected to be reimbursed by another party, a separate asset is recognised for any expected reimbursement that would be virtually certain. The amount recognised for the reimbursement is limited to the carrying amount of the provision.

(ii) Onerous contracts

An onerous contract exists when the Group has a contract under which the unavoidable costs of meeting the obligations under the contract exceed the economic benefits expected to be received from the contract. Provisions for onerous contracts are measured at the present value of the lower of the expected cost of terminating the contract and the net cost of fulfilling the contract. The cost of fulfilling the contract includes both the incremental costs of fulfilling that contract and an allocation of other costs that relate directly to fulfilling that contract.

2 SIGNIFICANT ACCOUNTING POLICIES *(Continued)*

(t) Revenue and other income

Income is classified by the Group as revenue when it arises from the sale of goods or the provision of services.

Revenue is recognised when control over a product or service is transferred to the customer, at the amount of promised consideration to which the Group is expected to be entitled, excluding those amounts collected on behalf of third parties such as value added tax or other sales taxes.

Further details of the Group's revenue and other income recognition policies are as follows:

(i) Sale of goods

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

(ii) Service fee income

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

(iii) Construction projects

The Group's construction activities under construction contracts with customers create or enhance an asset controlled by the customers.

When the outcome of a construction project can be reasonably measured, revenue from the contract is recognised over time during the construction process using the cost-to-cost method. Under the cost-to-cost method, revenue is recognised based on the proportion of the actual costs incurred relative to the estimated total costs to provide a faithful depiction of the transfer of those services.

The likelihood of the Group earning contractual bonuses for early completion or suffering contractual penalties for late completion are taken into account in making these estimates, such that revenue is only recognised to the extent that it is highly probable that a significant reversal in the amount of cumulative revenue recognised will not occur. The Group applies the most likely amount approach to estimate such variable consideration by considering the single most likely amount in a limited range of possible consideration amount, taking into account the Group's current progress and future performance expectations compared to the agreed completion timeline.

When the outcome of the project cannot be reasonably measured, revenue is recognised only to the extent of contract costs incurred that are expected to be recovered.

If at any time the costs to complete the project are estimated to exceed the remaining amount of the consideration under the project, then a provision is recognised in accordance with the policy set out in note 2(s)(ii).

2 SIGNIFICANT ACCOUNTING POLICIES *(Continued)*

(t) Revenue and other income *(Continued)*

(iv) Rental income from operating leases

Rental income receivable under operating leases is recognised in the income statement in equal instalments over the periods covered by the lease term.

(v) Dividends

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

(vi) Interest income

Interest income from bank deposits is recognised as it accrues using the effective interest method. For financial assets measured at amortised cost or FVOCI (recycling) that are not credit-impaired, the effective interest rate is applied to the gross carrying amount of the asset. For credit-impaired financial assets, the effective interest rate is applied to the amortised cost (i.e. gross carrying amount net of loss allowance) of the asset (see note 2(j)(i)).

(vii) Government grants

Government grants are recognised in the statement of financial position initially when there is reasonable assurance that they will be received and that the Group will comply with the conditions attaching to them. Grants that compensate the Group for expenses incurred are recognised as income in the income statement on a systematic basis in the same periods in which the expenses are incurred. Grants that compensate the Group for the cost of an asset are recognised as income in the income statement on a systematic basis over the useful life of the asset.

(u) Translation of foreign currency transactions

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

Non-monetary assets and liabilities that are measured in terms of historical cost in a foreign currency are translated using the foreign exchange rates ruling at the transaction dates. The transaction date is the date on which the Company initially recognises such non-monetary assets and liabilities. Non-monetary assets and liabilities denominated in foreign currencies that are stated at fair value are translated using the foreign exchange rates ruling at the dates the fair value was measured.

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

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

2 SIGNIFICANT ACCOUNTING POLICIES *(Continued)*

(v) Borrowing costs

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

The capitalisation of borrowing costs as part of the cost of a qualifying asset commences when expenditure for the asset is being incurred, borrowing costs are being incurred and activities that are necessary to prepare the asset for its intended use or sale are in progress. Capitalisation of borrowing costs is suspended or ceases when substantially all the activities necessary to prepare the qualifying asset for its intended use or sale are interrupted or complete.

(w) Related parties

(i) A person, or a close member of that person's family, is related to the Group if that person:

(a) has control or joint control over the Group;

(b) has significant influence over the Group; or

(c) is a member of the key management personnel of the Group or of a parent of the Group.

(ii) An entity is related to the Group if any of the following conditions applies:

(a) the entity and the Group are members of the same group (which means that each parent, subsidiary and fellow subsidiary is related to the others).

(b) one entity is an associate or joint venture of the other entity (or an associate or joint venture of a member of a group of which the other entity is a member).

(c) both entities are joint ventures of the same third party.

(d) one entity is a joint venture of a third entity and the other entity is an associate of the third entity.

(e) the entity is a post-employment plan for the benefit of employees of either the Group or an entity related to the Group.

(f) the entity is controlled or jointly-controlled by a person identified in (i).

(g) a person identified in (i)(a) has significant influence over the entity or is a member of the key management personnel of the entity (or of a parent of the entity)

(h) the entity, or any member of a group of which it is a part, provides key management personnel services to the Group or to the Group's parent.

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

2 SIGNIFICANT ACCOUNTING POLICIES *(Continued)*

(x) Segment reporting

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

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

3 REVENUE

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

(a) Disaggregation of revenue

Disaggregation of revenue from contracts with customers by service lines is as follows:

	2022 **RMB'000**	2021 RMB'000
Revenue from smart transportation business	**349,528**	484,377
Revenue from smart building and complex business	**892,492**	730,203
Revenue from smart energy business	**496,858**	404,485
	1,738,878	1,619,065

Disaggregation of revenue from contracts with customers by the timing of revenue recognition and by geographic markets is disclosed in notes 4(a) and 4(c) respectively.

(b) Revenue expected to be recognised in the future arising from contracts with customers in existence at the reporting date

As at 31 December 2022, the aggregated nominal contract amount allocated to the remaining performance obligations under the Group's existing contracts is approximately RMB2,724,461,000 (2021: RMB2,406,156,000). This amount represents revenue expected to be recognised in the future from construction projects entered into by the customers with the Group. The Group will recognise the expected revenue in future when or as the work is completed.

The above amount also does not include any amounts of additional consideration that the Group may earn in the future by meeting the conditions set out in the Group's construction projects with the customers, unless at the reporting date it is highly probable that the Group will satisfy the conditions for earning the additional consideration.

4 SEGMENT REPORTING

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

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

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

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

(a) Information about reportable segments

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

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

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

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

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

4 SEGMENT REPORTING *(Continued)*

(a) Information about reportable segments *(Continued)*

Disaggregation of revenue from contracts with customers by timing of revenue recognition, as well as information regarding the Group's reportable segments as provided to the Group's most senior executive management for the purposes of resource allocation and assessment of segment performance for the years ended 31 December 2022 and 2021 is set out below:

	STB		SBB		SEB		Total	
	2022 RMB'000	2021 RMB'000	**2022 RMB'000**	2021 RMB'000	**2022 RMB'000**	2021 RMB'000	**2022 RMB'000**	2021 RMB'000
Disaggregated by timing of revenue recognition								
Point in time	**12,331**	24,188	**146,799**	144,708	**80,799**	37,658	**239,929**	206,554
Over time	**337,197**	460,189	**745,693**	585,495	**416,059**	366,827	**1,498,949**	1,412,511
Revenue from external customers	**349,528**	484,377	**892,492**	730,203	**496,858**	404,485	**1,738,878**	1,619,065
Inter-segment revenue	**–**	–	**–**	–	**–**	–	**–**	–
Reportable segment revenue	**349,528**	484,377	**892,492**	730,203	**496,858**	404,485	**1,738,878**	1,619,065
Reportable segment profit	**25,930**	39,027	**72,227**	74,149	**98,838**	82,908	**196,995**	196,084
Interest income	**2,891**	4,117	**2,865**	4,534	**21,876**	22,415	**27,632**	31,066
Impairment loss on trade and other receivables and contract assets	**(13,692)**	(8,849)	**(34,616)**	(12,623)	**(13,859)**	(7,166)	**(62,167)**	(28,638)
Impairment loss on property, plant and equipment	**–**	–	**–**	–	**–**	–	**–**	–
Impairment loss on prepayments	**(274)**	(4,078)	**(700)**	(6,168)	**(815)**	(152)	**(1,789)**	(10,398)

(b) Reconciliations of reportable segment profit or loss

	2022 RMB'000	2021 RMB'000
Profit		
Reportable segment profit	**196,995**	196,084
Depreciation and amortisation	**(113,681)**	(108,601)
Finance costs	**(6,687)**	(7,361)
Unallocated head office and corporate expenses	**(11,211)**	(25,763)
Consolidated profit before taxation	**65,416**	54,359

(c) Geographic information

For the year ended 31 December 2022, as the Group does not have material operations outside the People's Republic of China ("PRC"), no geographic segment information is presented.

5 OTHER REVENUE AND OTHER NET GAIN/(LOSS)

(a) Other revenue

	2022 RMB'000	2021 RMB'000
Government grants	5,347	7,155
Interest income	27,632	31,066
Others	218	62
	33,197	38,283

(b) Other net gain/(loss)

	2022 RMB'000	2021 RMB'000
Net foreign exchange gain/(loss)	2,652	(586)
Net loss on disposal of property, plant and equipment	(2)	(43)
Others	9,243	(17,370)
	11,893	(17,999)

As included in others, RMB6,918,000 and RMB2,398,000 mainly represent net gain on debt restructure and net gain on debt waiver respectively.

6 PROFIT BEFORE TAXATION

Profit before taxation is arrived at after charging:

(a) Finance costs

	2022 RMB'000	2021 RMB'000
Interest on loans and borrowings	6,630	7,227
Interest on lease liabilities (Note 18(b))	57	134
	6,687	7,361

(b) Staff costs

	2022 RMB'000	2021 RMB'000
Salaries and other benefits	195,877	204,553
Contributions to defined contribution retirement schemes	19,561	19,435
	215,438	223,988

Staff costs include directors' and senior management's remuneration (notes 8 and 27(d)).

6 PROFIT BEFORE TAXATION *(Continued)*

(b) Staff costs *(Continued)*

Pursuant to the relevant labour rules and regulations in the PRC, the Group's PRC subsidiaries participate in a defined contribution retirement scheme (the "Scheme") organised by the local authorities whereby the subsidiaries are required to make contributions to the Scheme at 16% of the eligible employees' salaries from 1 May 2019. Contributions to the Scheme vest immediately.

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

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

(c) Other items

	2022 RMB'000	2021 RMB'000
Cost of inventories (Note 15(b))	**1,262,497**	1,137,304
Research and development expenses	**15,210**	11,428
Amortisation of intangible assets (Note 12)	**72,722**	71,414
Depreciation (Note 11)		
– owned property, plant and equipment	**38,937**	35,186
– right-of-use assets	**2,022**	2,001
Impairment losses		
– prepayment	**1,789**	10,398
Auditors' remuneration		
– audit services	**3,230**	3,050
– non-audit services	**126**	120

7 INCOME TAX

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

	2022 RMB'000	2021 RMB'000
Current tax		
Provision for the year	**18,030**	10,798
(Over)/under-provision in respect of prior years	**(1,442)**	3,785
	16,588	14,583
Deferred tax		
Origination and reversal of temporary differences (Note 22(a))	**(6,890)**	(5,796)
	9,698	8,787

7 INCOME TAX *(Continued)*

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

	Note	2022 RMB'000	2021 RMB'000
Profit before taxation		**65,416**	54,359
Expected tax calculated at the respective tax rates	(i)/(ii)	**17,242**	15,612
Tax effect on non-deductible expenses		**1,606**	1,554
Effect of tax concession	(iii)	**(12,595)**	(17,128)
Tax effect of unused tax losses and temporary differences		**4,887**	4,964
(Over)/under-provision in prior years		**(1,442)**	3,785
Actual income tax expense		**9,698**	8,787

Notes:

(i) The Company is subject to Singapore corporate income tax at 17% for the years ended 31 December 2022 and 2021. No provision for Singapore income tax was made because the Company sustained tax losses for the years ended 31 December 2022 and 2021.

(ii) The subsidiaries of the Group established in the PRC are subject to PRC corporate income tax ("CIT") rate of 25% for the years ended 31 December 2022 and 2021.

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

The subsidiary of the Group established in Hong Kong is subject to Hong Kong profits tax rate of 16.5% for the years ended 31 December 2022 and 2021.

(iii) Tongfang Technovator Int (Beijing) Co., Ltd. ("Technovator Beijing") is recognised as a high and new technology enterprise and is eligible to enjoy a preferential tax rate of 15% until December 2023.

Tongfang Energy Saving Engineering Technology Co., Ltd.("Tongfang Energy Saving") is recognised as a high and new technology enterprise and is eligible to enjoy a preferential tax rate of 15% until December 2022.

Tongfang Technovator Software (Beijing) Co., Ltd.("Tongfang Software") is recognised as a high and new technology enterprise and is eligible to enjoy a preferential tax rate of 15% until December 2024.

8 DIRECTORS' REMUNERATION

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

	Year ended 31 December 2021					
	Directors' fees RMB'000	Salaries, allowances and benefits in-kind RMB'000	Discretionary bonuses RMB'000	Retirement scheme contributions RMB'000	Sub-total RMB'000	Total RMB'000
Executive directors						
Zhao Xiaobo	–	600	905	–	1,505	1,505
Qin Xuzhong	–	–	–	–	–	–
Non-executive directors						
Liu Tianmin (resigned on 17 June 2021)	84	–	–	–	84	84
Wang Yinghu (resigned on 17 June 2021)	84	–	–	–	84	84
Zeng Xuejie (appointed on 17 June 2021)	–	–	–	–	–	–
Liang Wuquan (appointed on 17 June 2021)	–	–	–	–	–	–
Zhang Jian (appointed on 17 June 2021)	–	–	–	–	–	–
Independent non-executive directors						
Fan Ren Da Anthony	294	–	–	–	294	294
Chia Yew Boon	294	–	–	–	294	294
Chen Hua	229	–	–	–	229	229
	985	600	905	–	2,490	2,490

8 DIRECTORS' REMUNERATION *(Continued)*

	Year ended 31 December 2022					
	Directors' fees RMB'000	Salaries, allowances and benefits in-kind RMB'000	Discretionary bonuses RMB'000	Retirement scheme contributions RMB'000	Sub-total RMB'000	Total RMB'000
Executive directors						
Zhao Xiaobo	–	601	613	–	1,214	1,214
Qin Xuzhong	–	–	–	–	–	–
Non-executive directors						
Zeng Xuejie	–	–	–	–	–	–
Liang Wuquan	–	–	–	–	–	–
Zhang Jian	–	–	–	–	–	–
Independent non-executive directors						
Fan Ren Da Anthony	322	–	–	–	322	322
Chia Yew Boon	322	–	–	–	322	322
Chen Hua	250	–	–	–	250	250
	894	601	613	–	2,108	2,108

9 INDIVIDUALS WITH HIGHEST EMOLUMENTS

Of the five individuals with the highest emoluments, one (2021: one) is a director whose emoluments are disclosed in note 8. The aggregate of the emoluments in respect of the other individuals are as follows:

	2022 RMB'000	2021 RMB'000
Salaries and other benefits	2,511	2,942
Discretionary bonuses	2,374	1,950
	4,885	4,892

The emoluments of the four (2021: four) individuals with the highest emoluments are within the following bands:

	2022 Number of Individuals	2021 Number of Individuals
HK$1,000,001 – HK$1,500,000	3	3
HK$1,500,001 – HK$2,000,000	1	–
HK$2,000,001 – HK$2,500,000	–	1

10 EARNINGS PER SHARE

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

(a) Basic earnings per share

The calculation of basic earnings per share is based on the profit attributable to ordinary equity shareholders of the Company of RMB55,127,000 (2021: RMB45,307,000) and the weighted average number of ordinary shares of 782,192,189 (2021: 782,192,189) in issue during the year, calculated as follows:

Weighted average number of ordinary shares:

	2022 Number of shares	2021 Number of shares
Issued ordinary shares at 1 January	782,192,189	782,192,189
Effect of purchase of own shares	–	–
Weighted average number of ordinary shares at 31 December	782,192,189	782,192,189

(b) Diluted earnings per share

There were no dilutive potential shares outstanding during the years ended 31 December 2022 and 2021.

11 PROPERTY, PLANT AND EQUIPMENT

(a) Reconciliation of carrying amount

	Leasehold improvements RMB'000	Furniture and fittings RMB'000	Computers and office equipment RMB'000	Plant and machinery RMB'000	Motor vehicles RMB'000	Leasehold land and buildings RMB'000	Construction in progress ("CIP") RMB'000	Total RMB'000
Cost:								
At 1 January 2021	19,335	3,152	8,929	397,324	7,336	7,421	75,348	518,845
Additions	–	135	743	2,885	144	635	20,722	25,264
Transfer out	–	–	–	(34,096)	–	–	(57,896)	(91,992)
Disposals	–	(221)	(52)	(185)	(1,243)	–	–	(1,701)
Exchange adjustments	(28)	(13)	(11)	–	(16)	(17)	–	(85)
At 31 December 2021 and 1 January 2022	19,307	3,053	9,609	365,928	6,221	8,039	38,174	450,331
Additions	1,372	94	319	8,623	94	1,239	23,232	34,973
Transfer in/(out)	–	–	–	42,638	–	–	(42,638)	–
Disposals	–	–	(32)	–	–	(629)	–	(661)
Exchange adjustments	109	54	46	–	13	67	–	289
At 31 December 2022	20,788	3,201	9,942	417,189	6,328	8,716	18,768	484,932
Accumulated depreciation and impairment:								
At 1 January 2021	8,233	1,300	5,828	274,319	5,911	1,311	–	296,902
Charge for the year	867	319	849	32,795	356	2,001	–	37,187
Written back on disposals	–	(199)	(48)	(164)	(1,247)	–	–	(1,658)
Transfer out	–	–	–	(17,337)	–	–	–	(17,337)
Exchange adjustments	(21)	(11)	(8)	–	(14)	1	–	(53)
At 31 December 2021	9,079	1,409	6,621	289,613	5,006	3,313	–	315,041
At 1 January 2022	9,079	1,409	6,621	289,613	5,006	3,313	–	315,041
Charge for the year	495	287	1,160	36,714	281	2,022	–	40,959
Written back on disposals	–	–	(30)	–	–	(629)	–	(659)
Exchange adjustments	103	48	39	–	3	34	–	227
At 31 December 2022	9,677	1,744	7,790	326,327	5,290	4,740	–	355,568
Net book value:								
At 31 December 2021	10,228	1,644	2,988	76,315	1,215	4,726	38,174	135,290
At 31 December 2022	11,111	1,457	2,152	90,862	1,038	3,976	18,768	129,364

11 PROPERTY, PLANT AND EQUIPMENT *(Continued)*

(b) Right-of-use assets

The analysis of the net book value of right-of-use assets by class of underlying asset is as follows:

	31 December 2022 RMB'000	1 January 2022 RMB'000
Leasehold land and buildings, carried at depreciated cost	**3,976**	4,726

The analysis of expense items in relation to leases recognised in the income statement is as follows:

	2022 RMB'000	2021 RMB'000
Depreciation charge of right-of-use assets by class of underlying asset:		
– Leasehold land and buildings	**2,022**	2,001
Interest on lease liabilities (Note 6(a))	**57**	134
Expense relating to short-term leases	**10,995**	14,494

During the year, additions to right-of-use assets were RMB1,239,000, which is comprised of leasehold land and buildings.

Details of total cash outflow for leases and the maturity analysis of lease liabilities are set out in notes 18(c) and 21, respectively.

12 INTANGIBLE ASSETS

	Trade name RMB'000	Patents and technology know-how RMB'000	Service concession assets RMB'000	Total RMB'000
Cost:				
At 1 January 2021	4	522,241	100,410	622,655
Additions	–	90,291	94,253	184,544
Disposals	–	(86,491)	–	(86,491)
At 31 December 2021	4	526,041	194,663	720,708
At 1 January 2022	4	526,041	194,663	720,708
Additions	–	89,259	8,843	98,102
Disposals	–	(6,394)	–	(6,394)
At 31 December 2022	4	608,906	203,506	812,416
Accumulated amortisation:				
At 1 January 2021	–	183,767	1,454	185,221
Charge for the year	–	66,754	4,660	71,414
Other additions	–	–	17,337	17,337
Written back on disposals	–	(86,491)	–	(86,491)
At 31 December 2021	–	164,030	23,451	187,481
At 1 January 2022	–	164,030	23,451	187,481
Charge for the year	–	66,748	5,974	72,722
Written back on disposals	–	(6,394)	–	(6,394)
At 31 December 2022	–	224,384	29,425	253,809
Net book value:				
At 31 December 2021	4	362,011	171,212	533,227
At 31 December 2022	4	384,522	174,081	558,607

The amortisation charge for the year is included in "Cost of sales" and "Administrative and other operating expenses" in the consolidated income statement.

The Group has entered into a service concession arrangement with certain government authorities in the PRC on a Build-operate-transfer ("BOT") basis in respect of its heating or power supplying service. Pursuant to the service concession arrangement contracts, the Group (i) is responsible for the construction of the underlying assets, and the acquisition of the related facilities and equipment; (ii) has the contractual obligations to maintain the infrastructure at a specified level of serviceability and also maintain the infrastructure to an acceptable level of working conditions before handing over the infrastructure to the grantors; and (iii) is entitled to operate the underlying assets upon completion for a specified concession period for 20 to 30 years by charging user or grantors of the public service. The Group will not hold any residual interest in the underlying assets upon expiration of the concession period. As such, the service concession arrangement contracts are accounted for as service concession arrangements and an intangible asset was recognised at an amount equal to the fair value of the consideration for provision of construction service upon initial recognition.

13 OTHER FINANCIAL ASSETS

	2022 RMB'000	2021 RMB'000
Long-term receivables	614,566	596,109
Less: current portion of long-term receivables	(204,178)	(157,136)
	410,388	438,973

At 31 December 2022, long-term receivables included receivables of Karamay construction project of RMB54,222,280 (2021: RMB54,222,280). Karamay construction project ("Karamay project") is a construction project entered into among Karamay Construction Management Co., Ltd. ("Karamay Construction"), THTF and Technovator Beijing in 2013. Pursuant to Karamay contract, Karamay Construction engaged THTF as the contractor to carry out the construction project with the finance and major equipment supply provided by Technovator Beijing. The estimated total financing provided by Technovator Beijing is approximately RMB180 million. Karamay Construction should repay Technovator Beijing by five annual instalments, with an investment return charged at 140% of the then prevailing lending interest rate in respect of loans for the same term as quoted by the People's Bank of China. Karamay Construction didn't grant any security to Technovator Beijing.

The remaining balance of long-term receivables mainly represent trade receivables of certain construction projects which are repayable by instalments over a 2 to 9 years period.

14 INVESTMENTS IN SUBSIDIARIES

The following list contains the particulars of the Company's principal subsidiaries at 31 December 2022.

				Proportion of ownership interest			
Name of company	Place and date of incorporation/ establishment	Principal country of operation	Particulars of issued and fully paid up share/ registered capital	Group's effective interest	Held by the Company	Held by a subsidiary	Principal activity
Technovator Beijing	Beijing, PRC 7 August 2006	PRC	USD 83,000,000	100%	100%	–	Design, manufacturing and marketing of building automation solutions
Tongfang Energy Saving	Beijing, PRC 21 June 2002	PRC	RMB231,812,167	100%	–	100%	Energy management services, marketing of heating power equipment
Tongfang Software	Beijing, PRC 22 November 2013	PRC	RMB10,000,000	100%	–	100%	Software development, technology development, marketing, service and consulting

All the above subsidiaries were established as limited liability companies in the PRC.

15 INVENTORIES

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

	31 December 2022 RMB'000	31 December 2021 RMB'000
Raw materials	**386,526**	341,365
Work in progress	**17,225**	13,700
Finished goods	**787,438**	627,975
	1,191,189	983,040

(b) The analysis of the amount of inventories recognised as an expense and included in the consolidated income statement is as follows:

	2022 RMB'000	2021 RMB'000
Carrying amount of inventories sold	**1,262,497**	1,137,304

16 CONTRACT ASSETS AND CONTRACT LIABILITIES

(a) Contract assets

	31 December 2022 RMB'000	31 December 2021 RMB'000
Contract assets		
Arising from performance under construction projects	**842,869**	803,913
Receivables from contracts with customers within the scope of HKFRS 15, which are included in "Trade and other receivables" (Note 17)	**1,560,008**	1,242,603

Typical payment terms which impact on the amount of contract assets recognised are as follows:

– Construction projects
The Group's construction projects include payment schedules which require stage payments over the construction period once milestones are reached. These payment schedules prevent the build-up of significant contract assets.

16 CONTRACT ASSETS AND CONTRACT LIABILITIES *(Continued)*

(b) Contract liabilities

	31 December 2022 RMB'000	31 December 2021 RMB'000
Contract liabilities		
Construction projects Billings in advance of performance	**107,880**	117,700

Typical payment terms which impact on the amount of contract liabilities recognised are as follows:

– Construction projects
When the Group receives a deposit before the production activity commences this will give rise to contract liabilities at the start of a contract, until the revenue recognised on the project exceeds the amount of the deposit. The amount of deposit, if any, was negotiated on a case by case basis with customers.

Movements in contract liabilities

	2022 RMB'000	2021 RMB'000
Balance at 1 January	**117,700**	137,131
Decrease in contract liabilities as a result of recognising revenue during the year that was included in the contract liabilities at the beginning of the period	**(42,187)**	(54,271)
Increase in contract liabilities as a result of billing in advance of construction activities	**32,367**	34,840
Balance at 31 December	**107,880**	117,700

The amount of contract liabilities expected to be recognised as income after more than one year is RMB43,793,000 (2021: RMB45,929,000).

17 TRADE AND OTHER RECEIVABLES

	2022 RMB'000	2021 RMB'000
Trade debtors due from related parties	368,896	173,393
Other trade debtors	1,340,669	1,177,886
Bills receivable	4,303	31,302
Less: Allowance for doubtful debts	(153,860)	(139,978)
	1,560,008	1,242,603
Other receivables		
– amounts due from related parties	3,737	37,391
– amounts due from third parties	81,516	69,919
Less: Allowance for doubtful debts	(8,726)	(8,405)
	1,636,535	1,341,508

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

Ageing analysis

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

	2022 RMB'000	2021 RMB'000
Current	1,511,748	1,112,374
Less than 1 month past due	5,842	6,296
More than 1 month but less than 3 months past due	6,538	50,380
More than 3 months but less than 12 months past due	26,811	66,710
More than 12 months past due	9,069	6,843
	48,260	130,229
	1,560,008	1,242,603

Trade debtors and bills receivable are due within 1–180 days from the date of billing. Further details of the Group's credit policy are set out in note 25(a).

18 CASH AND CASH EQUIVALENTS

(a) Cash and cash equivalents comprise:

	2022 RMB'000	2021 RMB'000
Deposit with banks and other financial institutions	7,228	17,693
Cash at bank and in hand	346,812	394,054
Cash and cash equivalents in the consolidated statement of financial position	354,040	411,747
Restricted deposit	(7,228)	(17,551)
Cash and cash equivalents in the consolidated cash flow statement	346,812	394,196

(b) Reconciliation of liabilities arising from financing activities

	Loans and borrowings RMB'000 (Note 20)	Lease liabilities RMB'000 (Note 21)	Total RMB'000
At 1 January 2021	214,227	3,579	217,806
Changes from financing cash flows:			
Proceeds from loans and borrowings	99,288	–	99,288
Repayment of loans and borrowings	(214,227)	–	(214,227)
Capital element of lease rentals paid	–	(1,728)	(1,728)
Interest element of lease rentals paid	–	(134)	(134)
Other borrowing costs paid	(7,127)	–	(7,127)
Total changes from financing cash flows	(122,066)	(1,862)	(123,928)
Other changes:			
Increase in lease liabilities from entering into new leases during the year	–	635	635
Interest expenses	7,227	134	7,361
Total other changes	7,227	769	7,996
At 31 December 2021	99,388	2,486	101,874

18 CASH AND CASH EQUIVALENTS *(Continued)*

(b) Reconciliation of liabilities arising from financing activities *(Continued)*

	Loans and borrowings RMB'000 (Note 20)	Lease liabilities RMB'000 (Note 21)	Total RMB'000
At 1 January 2022	99,388	2,486	101,874
Changes from financing cash flows:			
Proceeds from loans and borrowings	190,414	–	190,414
Repayment of loans and borrowings	(99,288)	–	(99,288)
Capital element of lease rentals paid	–	(2,115)	(2,115)
Interest element of lease rentals paid	–	(57)	(57)
Other borrowing costs paid	(6,720)	–	(6,597)
Total changes from financing cash flows	84,406	(2,172)	82,234
Other changes:			
Increase in lease liabilities from entering into new leases during the year	–	1,422	1,422
Interest expenses	6,630	36	6,666
Total other changes	6,630	1,458	8,088
At 31 December 2022	190,424	1,772	192,196

(c) Total cash outflow for leases

Amounts included in the cash flow statement for leases comprise the following:

	2022 RMB'000	2021 RMB'000
Within operating cash flows	10,995	14,494
Within financing cash flows	2,115	1,728
	13,110	16,222

These amounts relate to the following:

	2022 RMB'000	2021 RMB'000
Leasehold land and buildings	13,110	16,222

19 TRADE AND OTHER PAYABLES

	2022 RMB'000	2021 RMB'000
Trade and bills payables due to related parties	92,939	116,661
Other trade and bills payables	1,593,442	1,228,427
	1,686,381	1,345,088
Other payables and accruals		
– amounts due to related parties	7,994	12,003
– amounts due to third parties	229,871	220,076
Financial liabilities measured at amortised cost	1,924,246	1,577,167

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

	2022 RMB'000	2021 RMB'000
By date of invoice:		
Within 3 months	1,202,994	906,468
More than 3 months but within 6 months	65,283	61,722
More than 6 months but within 12 months	90,872	86,348
More than 12 months	327,232	290,550
	1,686,381	1,345,088

20 LOANS AND BORROWINGS

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

	2022 RMB'000	2021 RMB'000
Bank loans		
– unsecured and unguaranteed	**180,424**	79,388
– guaranteed	**10,000**	20,000
	190,424	99,388

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

	2022 RMB'000	2021 RMB'000
Within 1 year or on demand	**190,424**	99,388

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

	2022 RMB'000	2021 RMB'000
Unsecured banking facilities	**700,000**	681,000

At 31 December 2022, the facilities were utilised to the extent of RMB190,424,000 (2021: RMB99,388,000).

At 31 December 2022, none of the Group's banking facilities are subject to the fulfilment of covenants.

21 LEASE LIABILITIES

At 31 December 2022, the lease liabilities were repayable as follows:

	2022 RMB'000	2021 RMB'000
Within 1 year	**926**	2,266
After 1 year but within 2 years	**846**	220
	1,772	2,486

22 INCOME TAX IN THE STATEMENT OF FINANCIAL POSITION

(a) Deferred tax assets and liabilities recognised

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

	Credit loss allowance and impairment loss RMB'000	Receipts by instalment RMB'000	Total RMB'000
At 1 January 2021	(29,725)	28,805	(920)
Credited to the consolidated income statement (Note 7(a))	(4,250)	(1,546)	(5,796)
At 31 December 2021	(33,975)	27,259	(6,716)
At 1 January 2022	**(33,975)**	**27,259**	**(6,716)**
Credited to the consolidated income statement (Note 7(a))	**(5,314)**	**(1,576)**	**(6,890)**
At 31 December 2022	**(39,289)**	**25,683**	**(13,606)**

	2022 RMB'000	2021 RMB'000
Represented by:		
Deferred tax assets	**(39,289)**	(33,975)
Deferred tax liabilities	**25,683**	27,259
	(13,606)	(6,716)

(b) Deferred tax assets not recognised

At 31 December 2022, in accordance with the accounting policy set out in note 2(r), the Company did not recognise deferred tax assets in respect of unused tax losses of RMB219,107,000 (2021: RMB207,905,000) and the Group did not recognise deferred tax assets in respect of unused tax losses of RMB243,585,000 (2021: RMB228,034,000), as it is not probable that future taxable profits against which the losses can be utilised will be available to the relevant tax entities. The tax losses of the Company do not expire under tax legislation. The remaining unrecognised tax losses of RMB20,609,000 will not expire until after 2023.

(c) Deferred tax liabilities not recognised

At 31 December 2022, no deferred tax liability was recognised on the taxable temporary differences in respect of the tax that would be payable on the distribution of the undistributed profits of certain subsidiaries of the Company amounting RMB1,772,180,000 (2021: RMB1,693,712,000), as the Group controls the dividend policy of these subsidiaries and it has been determined that it is probable that such profits will not be distributed in the foreseeable future.

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

23 DEFERRED INCOME

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

24 CAPITAL, RESERVES AND DIVIDENDS

(a) Movements in components of equity

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

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

	Share capital RMB'000 Note 24(c)	Translation reserve RMB'000 Note 24(d)(ii)	Retained profits RMB'000	Total equity RMB'000
At 1 January 2021	1,189,968	68,860	421,070	1,679,898
Loss for the year	–	–	(25,764)	(25,764)
Other comprehensive income	–	(38,115)	–	(38,115)
At 31 December 2021	1,189,968	30,745	395,306	1,616,019

	Share capital RMB'000 Note 24(c)	**Translation reserve RMB'000 Note 24(d)(ii)**	**Retained profits RMB'000**	**Total equity RMB'000**
At 1 January 2022	**1,189,968**	**30,745**	**395,306**	**1,616,019**
Loss for the year	**–**	**–**	**(11,212)**	**(11,212)**
Other comprehensive income	**–**	**148,771**	**–**	**148,771**
At 31 December 2022	**1,189,968**	**179,516**	**384,094**	**1,753,578**

(b) Dividends

There were no dividends payable to equity shareholders attributable to the previous financial year, and no dividends were approved and paid during 2022 and 2021.

24 CAPITAL, RESERVES AND DIVIDENDS *(Continued)*

(c) Share capital

	2022		2021	
	Number of shares	**Amounts RMB'000**	Number of shares	Amounts RMB'000
Ordinary shares issued and fully paid:				
At 1 January	**782,192,189**	**1,189,968**	782,192,189	1,189,968
Shares repurchased and cancelled	**–**	**–**	–	–
At 31 December	**782,192,189**	**1,189,968**	782,192,189	1,189,968

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

(i) There were no shares issued by the Company during 2022 and 2021.

(d) Nature and purpose of reserves

(i) ***Statutory reserves***

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

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

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

(ii) ***Translation reserve***

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

(iii) ***Other reserves***

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

24 CAPITAL, RESERVES AND DIVIDENDS *(Continued)*

(d) Nature and purpose of reserves *(Continued)*

(iv) Distributable reserves

At 31 December 2022, the aggregate amount of reserves available for distribution to equity shareholders of the Company was RMB384,094,000 (2021: RMB395,306,000).

25 FINANCIAL RISK MANAGEMENT AND FAIR VALUES

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

(a) Credit risk

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

In respect of trade and other receivables and contract assets, individual credit evaluations are performed on all customers requiring credit over a certain amount. These evaluations focus on the customer's past history of making payments when due and current ability to pay, and may take into account information specific to the customer as well as pertaining to the economic environment in which the customer operates. The Group requires certain customers to pay deposits upfront and the remaining trade receivables are due within 1-180 days from the date of billing. Normally, the Group does not obtain collateral from customers.

The Group has no significant concentration of credit risk in industries or countries in which the customers operate. Significant concentrations of credit risk primarily arise when the Group has significant exposure to individual customers. At 31 December 2022, 2.1% (2021: 4.4%) and 7.2% (2021: 18.4%) of the total trade and other receivables and contract assets was due from the Group's largest customer and the five largest customers respectively.

The Group measures loss allowances for trade receivables and contract assets at an amount equal to lifetime ECLs, which is calculated using a provision matrix. As the Group's historical credit loss experience does not indicate significantly different loss patterns for different customer segments, the loss allowance based on past due status is not further distinguished between the Group's different customer bases.

25 FINANCIAL RISK MANAGEMENT AND FAIR VALUES *(Continued)*

(a) Credit risk *(Continued)*

The following table provides information about the Group's exposure to credit risk and ECLs for trade receivables and contract assets:

	2022		
	Expected loss rate %	Gross carrying amount RMB'000	Loss allowance RMB'000
Current (not past due)	**1.00%**	**2,374,055**	**(23,740)**
Less than 1 year past due	**10.00%**	**43,546**	**(4,355)**
More than 1 year but less than 2 years past due	**65.00%**	**22,767**	**(14,799)**
More than 2 years but less than 3 years past due	**88.00%**	**3,187**	**(2,805)**
More than 3 years past due	**99.39%**	**117,393**	**(116,675)**
		2,560,948	**(162,374)**

	2021		
	Expected loss rate %	Gross carrying amount RMB'000	Loss allowance RMB'000
Current (not past due)	0.78%	1,899,773	(14,788)
Less than 1 year past due	7.00%	132,673	(9,287)
More than 1 year but less than 2 years past due	60.00%	7,662	(4,597)
More than 2 years but less than 3 years past due	80.00%	3,713	(2,970)
More than 3 years past due	97.37%	115,331	(112,296)
		2,159,152	(143,938)

Movement in the loss allowance account in respect of trade receivables and contract assets during the year is as follows:

	2022 RMB'000	2021 RMB'000
Balance at 1 January	**143,938**	127,794
Amounts written off during the year	**(35,220)**	–
Impairment losses recognised during the year	**53,656**	16,144
Balance at 31 December	**162,374**	143,938

25 FINANCIAL RISK MANAGEMENT AND FAIR VALUES *(Continued)*

(a) Credit risk *(Continued)*

The following significant changes in the gross carrying amounts of trade receivables and contract assets contributed to the increase in the loss allowance:

– increase in the gross carrying amounts of trade receivables and contract assets past due over 3 years, resulted in an increase in loss allowance of RMB4,379,000 (2021: RMB9,260,000).

(b) Liquidity risk

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

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

	2022 Contractual undiscounted cash flow				
	Within 1 year or on demand RMB'000	More than 1 year but less than 2 years RMB'000	More than 2 year but less than 3 years RMB'000	Total RMB'000	Balance sheet carrying amount RMB'000
Trade and other payables measured at amortised costs	1,924,246	–	–	1,924,246	1,924,246
Loans and borrowings	192,638	–	–	192,638	190,424
Lease liabilities	1,036	445	445	1,926	1,772
	2,117,920	445	445	2,118,810	2,116,442

	2021 Contractual undiscounted cash flow			
	Within 1 year or on demand RMB'000	More than 1 year but less than 2 years RMB'000	Total RMB'000	Balance sheet carrying amount RMB'000
Trade and other payables measured at amortised costs	1,577,167	–	1,577,167	1,577,167
Loans and borrowings	101,259	–	101,259	99,388
Lease liabilities	2,320	222	2,542	2,486
	1,680,746	222	1,680,968	1,679,041

25 FINANCIAL RISK MANAGEMENT AND FAIR VALUES *(Continued)*

(c) Interest rate risk

Interest rate risk is the risk that the fair value or future cash flows of a financial instrument will fluctuate because of changes in market interest rates. The Group's interest rate risk arises primarily from interest bearing long-term receivables, loans and borrowings that expose the Group to cash flow interest rate risk and fixed rates that expose the Group to fair value interest rate risk. The Group's interest rate profile as monitored by management is set out in (i) below.

(i) Interest rate profile

The following table, as reported to the management of the Group, details the interest rate risk profile of the Group's borrowings at the end of the reporting period:

	Notional amount	
	2022	2021
	RMB'000	RMB'000
Fixed rate borrowings:		
Lease liabilities	**1,772**	2,486
Bank loans	**118,014**	88,960
	119,786	91,446
Variable rate borrowings:		
Bank loans	**72,410**	10,428
Less: interest bearing long-term receivables	**54,222**	54,222
	18,188	(43,794)

(ii) Sensitivity analysis

At 31 December 2022, it is estimated that a general increase/decrease of 100 basis points in interest rates, with all other variables held constant, would have decreased/increased the Group's profit after tax and retained profits by approximately RMB155,000 (2021: increased/decreased RMB372,000).

The sensitivity analysis above relates to the exposure to cash flow interest rate risk arising from floating rate non-derivative instruments held by the Group at the end of the reporting period, and the impact on the Group's profit after tax (and retained profits) is estimated as an annualised impact on interest exposure or income of such a change in interest rates. The analysis is performed on the same basis for 2021.

25 FINANCIAL RISK MANAGEMENT AND FAIR VALUES *(Continued)*

(d) Currency risk

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

(i) Exposure to currency risk

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

	2022 Exposure to foreign currencies (expressed in RMB)			
	Singapore Dollars RMB'000	**Canadian Dollars RMB'000**	**United States Dollars RMB'000**	**Hong Kong Dollars RMB'000**
Trade and other receivables	**351**	**–**	**20,964**	**–**
Cash and cash equivalents	**1,171**	**–**	**–**	**1,960**
Trade and other payables	**(1,045)**	**–**	**–**	**(1,866)**
Net exposure arising from recognised assets and liabilities	**477**	**–**	**20,964**	**94**

	2021 Exposure to foreign currencies (expressed in RMB)			
	Singapore Dollars RMB'000	Canadian Dollars RMB'000	United States Dollars RMB'000	Hong Kong Dollars RMB'000
Trade and other receivables	313	11,492	10,762	–
Cash and cash equivalents	1,666	–	587	1,794
Trade and other payables	(555)	–	–	(1,708)
Net exposure arising from recognised assets and liabilities	1,424	11,492	11,349	86

25 FINANCIAL RISK MANAGEMENT AND FAIR VALUES *(Continued)*

(d) Currency risk *(Continued)*

(ii) Sensitivity analysis

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

	2022		2021	
	Increase/ (decrease) in foreign exchange rates	**Effect on profit after tax and retained profits RMB'000**	Increase/ (decrease) in foreign exchange rates	Effect on profit after tax and retained profits RMB'000
Singapore Dollars	**5%**	**20**	5%	59
	(5)%	**(20)**	(5)%	(59)
Canadian Dollars	**5%**	**–**	5%	477
	(5)%	**–**	(5)%	(477)
United States Dollars	**5%**	**891**	5%	482
	(5)%	**(891)**	(5)%	(482)
Hong Kong Dollars	**5%**	**4**	5%	4
	(5)%	**(4)**	(5)%	(4)

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

The sensitivity analysis assumes that the change in foreign exchange rates had been applied to re-measure those financial instruments held by the Group which expose the Group to foreign currency risk at the end of reporting period, including inter-company payables and receivables within the Group which are denominated in a currency other than the functional currencies of the lender or the borrower. The analysis excludes differences that would result from the translation of the financial statements of foreign operations into the Group's presentation currency. The analysis is performed on the same basis for 2021.

(e) Fair values

(i) Financial assets and liabilities measured at fair value

There were no financial instruments measured at fair value at the end of the reporting periods.

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

The carrying amounts of the Group's financial instruments carried at cost or amortised cost are not materially different from their fair value at 31 December 2022.

26 COMMITMENTS

Commitments outstanding at 31 December 2022 not provided for in the financial statements were as follows:

	2022 RMB'000	2021 RMB'000
Contracted for	214,564	247,168

27 MATERIAL RELATED PARTY TRANSACTIONS

(a) Name and relationship with related parties

During the years ended 31 December 2022 and 2021, transactions with the following parties are considered as related party transactions:

Name of parties
THTF* (同方股份有限公司)
Biyang Tongfang Thermal Power Co., Ltd.* (泌陽同方熱力有限公司)
Tsinghua Tongfang Artificial Environment Co., Ltd.* (同方人工環境有限公司)
Tongfang Industrial Co.,Ltd.* (同方工業有限公司)
Tongfang Kawasaki Advanced Energy-saving Machine Co., Ltd.* (同方節能裝備有限公司)

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

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

(b) Significant related party transactions

Particulars of significant related party transactions during the years ended 31 December 2022 and 2021 are as follows:

	2022 RMB'000	2021 RMB'000
Sales to THTF and its subsidiaries	226,532	196,189
Purchases from THTF and its subsidiaries	95,228	86,564
Receipt for miscellaneous products and services from THTF and its subsidiaries	28,024	10,755
Payments transferred by THTF to the Group	886,303	853,210
Payments transferred by the Group to THTF	582,355	501,268
Sales to CNNC and its subsidiaries	10,775	35,661
Purchases from CNNC and its subsidiaries	3,376	–

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

27 MATERIAL RELATED PARTY TRANSACTIONS *(Continued)*

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

At 31 December 2022 and 2021, the Group had the following significant related party balances:

	2022 RMB'000	2021 RMB'000
Trade and other receivables due from THTF and its subsidiaries	**363,530**	188,104
Trade and other payables due to THTF and its subsidiaries	**(98,936)**	(126,773)
Trade and other receivables due from CNNC and its subsidiaries	**9,103**	19,676
Trade and other payables due to CNNC and its subsidiaries	**(1,997)**	–

(d) Key management personnel remuneration

Remuneration for key management personnel of the Group, including amounts paid to the Company's executive directors as disclosed in note 8 and certain of the highest paid employees as disclosed in note 9, is as follows:

	2022 RMB'000	2021 RMB'000
Short term employee benefits	**2,181**	2,472

Total remuneration was included in "staff costs" (see note 6(b)).

(e) The related party transactions in respect of sales, purchases, payments transferred by THTF to the Group, payments transferred by the Group to THTF, and receipts of miscellaneous products and services above constitute continuing connected transactions as defined in Chapter 14A of the Listing Rules. The disclosures required by Chapter 14A of the Listing Rules are provided in the reports of the directors. The related party transaction in respect of financial assistance received from THTF constitutes a continuing connected transaction as defined in Chapter 14A of the Listing Rules, however, they are exempt from the disclosure requirements in Chapter 14A of the Listing Rules.

(f) Transactions with other state-controlled entities in the PRC

The controlling shareholder of the Company, THTF, is a state-controlled enterprise controlled by the PRC government. Apart from transactions with THTF and its subsidiaries and associate which were disclosed in note 27(a) above, the Group also has transactions with other state-controlled entities, included but not limited to the following:

- sales of products and provision of services;
- purchase of materials; and
- bank deposits and borrowings.

28 COMPANY-LEVEL STATEMENT OF FINANCIAL POSITION

	Note	31 December 2022 RMB'000	31 December 2021 RMB'000
Non-current assets			
Property, plant and equipment		**1,427**	661
Intangible assets		**4**	4
Investments in subsidiaries		**1,731,054**	1,584,683
		1,732,485	1,585,348
Current assets			
Trade and other receivables		**1,376**	1,785
Cash and cash equivalents		**40,505**	40,737
		41,881	42,522
Current liabilities			
Trade and other payables		**19,538**	11,480
Lease liabilities		**404**	371
		19,942	11,851
Net current assets		**21,939**	30,671
Total assets less current liabilities		**1,754,424**	1,616,019
Non – current liabilities			
Lease liabilities		**846**	–
		846	–
NET ASSETS		**1,753,578**	1,616,019
CAPITAL AND RESERVES	24		
Share capital		**1,189,968**	1,189,968
Reserves		**563,610**	426,051
TOTAL EQUITY		**1,753,578**	1,616,019

Approved and authorised for issue by the board of directors on 23 March 2023.

Zhao Xiaobo)
Qin Xuzhong) *Directors*
)

29 ACCOUNTING ESTIMATES AND JUDGEMENTS

Key sources of estimation uncertainty

The Group believes the following critical accounting policies involve the significant judgements and estimates used in the preparation of the financial statements.

Information about assumptions and estimation uncertainties that may have a significant risk of resulting in a material adjustment in the year ending 31 December 2022 are included in the following notes:

(i) Construction projects

As explained in policy note 2(t), revenue from construction projects are recognised over time. Such revenue and profit recognition on uncompleted projects is dependent on estimating the total outcome of the project, as well as the work done to date. Based on the Group's recent experience and the nature of the manufacturing and construction activities undertaken by the Group, the Group has made estimates of the point at which it considered the work was sufficiently advanced such that the outcome of the contract can be reasonably measured. Until this point is reached the related contract assets disclosed in note 16 do not include profit which the Group might eventually realise from the work done to date. In addition, actual outcomes in terms of total cost or revenue may be higher or lower than estimated at the end of the reporting period, which would affect the revenue and profit recognised in future years as an adjustment to the amounts recorded to date.

(ii) Valuation of contract assets and trade receivables

The management measures loss allowances on contract assets and trade receivables at amounts equal to lifetime ECL using a provision matrix which involved significant management judgement in estimating loss rate and adjusting factors that are specific to the debtors and an assessment of both the current and forecast industries in which they operate at the reporting date.

(iii) Impairment losses of non-current assets

In considering the impairment losses that may be required for certain of the Group's assets which include property, plant and equipment, lease prepayments and intangible assets, recoverable amount of the asset needs to be determined. The recoverable amount is the greater of the fair value less costs to sell and the value in use. It is difficult to precisely estimate selling price because quoted market prices for these assets may not be readily available. In determining the value in use, expected cash flow generated by the asset are discounted to their present value, which requires significant judgment relating to items such as level of revenue and amount of operating costs. The Group uses all readily available information in determining an amount that is reasonable approximation of recoverable amount, including estimates based on reasonable and supportable assumptions and projections of items such as revenue and amount of operating costs.

Information about other judgements made and estimates applied are included in the following notes:

(i) Net realisable value of inventories

Net realisable value of inventories is the estimated selling price in the ordinary course of business, less estimated costs of completion and distribution expenses. These estimates are based on the current market condition and historical experience of selling products of similar nature. It could change significantly as a result of competitor actions in response to changes in market conditions. Management reassesses these estimations at the end of the reporting period to ensure inventory is shown at the lower of cost and net realisable value.

29 ACCOUNTING ESTIMATES AND JUDGEMENTS *(Continued)*

Key sources of estimation uncertainty *(Continued)*

(ii) Depreciation and amortisation

Items of property, plant and equipment and intangible assets are depreciated or amortised on a straight-line basis over the estimated useful lives of the assets, after taking into account the estimated residual value. The management reviews the estimated useful lives of the assets regularly in order to determine the amount of depreciation or amortisation expense to be recorded during any reporting period. The useful lives are based on the Group's historical experience with similar assets and taking into account anticipated technological changes. The depreciation or amortisation expense for future periods is adjusted if there are significant changes from previous estimates.

(iii) Income tax

Determining income tax provisions involves judgement on the future tax treatment of certain transactions. The management carefully evaluates tax implications of transactions and tax provisions are set up accordingly. The tax treatment of these transactions is reconsidered periodically to take into account all changes in tax legislations. Deferred tax assets are recognised for deductible temporary differences and unused tax losses. As those deferred tax assets can only be recognised to the extent that it is probable that future taxable profit will be available against which they can be utilised, management's judgement is required to assess the probability of future taxable profits. Management's assessment is constantly reviewed and additional deferred tax assets are recognised if it becomes probable that future taxable profits will allow the deferred tax assets to be recovered.

Deferred tax liability was not recognised in respect of the withholding income tax that would be payable on the distribution of retained profits of the Company's subsidiaries as the Company considers that it is probable that such profits will not be distributed in the foreseeable future. Any changes in dividend policy may result in the recognition of the related deferred tax liabilities.

(iv) Development costs

Critical judgement by the Group's management is applied when deciding whether the recognition requirements for development costs have been met. This is necessary as the economic success of any product development is uncertain and may be subject to future technical problems at the time of recognition. Judgements are based on the best information available at the end of the reporting period. In addition, all internal activities related to the research and development of new products is continuously monitored by the Group management.

(Expressed in RMB unless otherwise indicated)

30 POSSIBLE IMPACT OF AMENDMENTS, NEW STANDARDS AND INTERPRETATIONS ISSUED BUT NOT YET EFFECTIVE DURING THE YEAR ENDED 31 DECEMBER 2022

Up to the date of issue of these financial statements, the HKICPA has issued a number of new or amended standards, which are not yet effective for the year ended 31 December 2022 and which have not been adopted in these financial statements. These developments include the following which may be relevant to the Group.

	Effective for accounting periods beginning on or after
Amendments to HKAS 1, *Presentation of financial statements: Classification of liabilities as current or non-current*	1 January 2023
Amendments to HKAS 1, *Presentation of financial statements* and HKFRS Practice Statement 2, *Making materiality judgements: Disclosure of accounting policies*	1 January 2023
Amendments to HKAS 8, Accounting policies, changes in accounting estimates and errors: *Definition of accounting estimates*	1 January 2023
Amendments to HKAS 12, Income taxes: *Deferred tax related to assets and liabilities arising from a single transaction*	1 January 2023

The Group is in the process of making an assessment of what the impact of these developments is expected to be in the period of initial application. So far it has concluded that the adoption of them is unlikely to have a significant impact on the consolidated financial statements.