



中國地熱能產業發展集團有限公司

CHINA GEOTHERMAL INDUSTRY DEVELOPMENT GROUP LIMITED

(Incorporated in the Cayman Islands with limited liability)

Stock Code: 8128



**TECHNOLOGY
AND RESOURCES LINKS**
Annual Report 2018



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This report will remain on the GEM website with the domain name of www.hkgem.com on the “Latest Company Announcement” page for at least 7 days from the date of publication and on the website of China Geothermal Industry Development Group Limited at www.cgsenergy.com.hk.

Contents

03	Corporate Information
04	Chairman's Statement
06	Management Discussion and Analysis
14	Biography of Directors and Senior Management
17	Report of the Directors
30	Corporate Governance Report
37	Independent Auditor's Report
42	Consolidated Statement of Profit or Loss
43	Consolidated Statement of Comprehensive Income
44	Consolidated Statement of Financial Position
46	Consolidated Statement of Changes in Equity
48	Consolidated Statement of Cash Flows
50	Notes to Financial Statements
159	Five-Year Financial Summary
160	List of Major Properties Held by the Group





Corporate Information

BOARD OF DIRECTORS

Executive directors

Xu Shengheng (Joint Chairman)
Wang Yan (Joint Chairman)
Chan Wai Kay Katherine (Deputy Chairman)
Wang Manquan (Chief Executive Officer)
Zang Yiran (Chief Financial Officer)
Dai Qi

Non-executive director

Yang Wei

Independent non-executive directors

Jia Wenzeng
Wu Desheng
Wu Qiang
Guo Qingui

REGISTERED OFFICE

P.O. Box 31119
Grand Pavilion
Hibiscus Way
802 West Bay Road
Grand Cayman KY1-1205
Cayman Islands

HEAD OFFICE AND PRINCIPAL PLACE OF BUSINESS IN HONG KONG

Units 3709-10, 37/F, The Center
99 Queen's Road Central
Central
Hong Kong

COMPLIANCE OFFICER

Xu Shengheng

COMPANY SECRETARY

Wong Lai Yuk

AUDIT COMMITTEE

Jia Wenzeng (*Chairman*)
Wu Desheng
Wu Qiang
Guo Qingui

REMUNERATION COMMITTEE

Wu Desheng (*Chairman*)
Wang Yan (*Deputy Chairman*)
Xu Shengheng (*Deputy Chairman*)
Jia Wenzeng
Wu Qiang
Guo Qingui

NOMINATION COMMITTEE

Xu Shengheng (*Chairman*)
Wang Yan (*Deputy Chairman*)
Jia Wenzeng
Wu Desheng
Wu Qiang
Guo Qingui

AUTHORISED REPRESENTATIVES

Xu Shengheng
Wong Lai Yuk

PRINCIPAL BANKER

Bank of China (Hong Kong) Limited
The Hongkong and Shanghai Banking Corporation Limited

CAYMAN ISLANDS PRINCIPAL SHARE REGISTRAR AND TRANSFER OFFICE

SMP Partners (Cayman) Limited
Royal Bank House 3rd Floor
24 Shedden Road, P.O.Box 1586
Grand Cayman KY1-1110
Cayman Islands

HONG KONG BRANCH SHARE REGISTRAR AND TRANSFER OFFICE

Computershare Hong Kong Investor Services Limited
Shops 1712-1716
17th Floor, Hopewell Centre
183 Queen's Road East
Hong Kong

LEGAL ADVISER

Keith Lam Lau & Chan
5th-7th Floors
The Chinese Club Building
21-22 Connaught Road Central
Hong Kong

AUDITOR

Ernst & Young
22/F, CITIC Tower
1 Tim Mei Avenue
Central, Hong Kong

STOCK CODE

8128

COMPANY WEBSITE

www.cgseenergy.com.hk

Chairman's Statement

Dear Shareholders,

On behalf of the board of directors (the "Board") of China Geothermal Industry Development Group Ltd. (the "Company"), I would like to report to the shareholders the final results of the Company and its subsidiaries (collectively referred to as the "Group") for the year ended 31 December 2018 (the "Review Period").

The Group's revenue for the year decreased by 49% to approximately HK\$396,793,000 (2017: HK\$778,153,000) and the Group recorded loss for the year of HK\$418,511,000 while a profit of HK\$3,962,000 was recorded for the previous year. Excluding the impact of the impairment of goodwill and other receivables of approximately HK\$207,402,000, the Group recorded an adjusted loss of approximately HK\$211,109,000. The primary cause for the decrease in revenue of the current year was due to the slows down of the domestic real estate market during the year resulting decrease in intelligent heating projects of the Group. To cope with the market changes in the new era, based on the judgment of development prospect of integrated heating and cooling emerging industry, from fourth quarter of last year to first quarter of this year, the Company has started 2019 management transformation and business model adjustment. Besides, for the new market development, the Company has made investment in a number of demonstrative projects in Zhangjiakou, Handan, Baodi, Tianjin and Zhangzi County, Shanxi Province. As a result, the Group's gross profit margin decreased during the period.

China is a low-and-medium temperature dominated geothermal resources country. The geothermal resources potential nationwide is about 8% of the world. According to the survey results in 2015 of China Geological Survey of the Ministry of Land and Resources, the annual recoverable resources of shallow geothermal energy of 336 cities at the prefecture level or above nationwide are equivalent to 700,000,000t standard coal, and the annual recoverable resources of hydrothermal geothermal energy are equivalent to 1,900,000,000t standard coal. In the Thirteenth Five-year Plan" and the "Notification on Accelerating the Development and Utilization of Shallow Geothermal Energy to Promote the Reduction and Replacement of Coal in the Northern Heating Area" issued in 2017, it is specified that the State will lay emphasis on the development and utilization of geothermal energy. In addition, in recent years, China positively responds to the severe haze problem, and performs the responsibility for emission reduction of the countries in the world, which gives strength for the fast development of geothermal energy industry.

The total area of architectural heating in the severe cold and cold northern parts of China is about 20,600,000,000m² (of which 14,100,000,000m² for cities and towns, and 6,500,000,000m² for the rural areas), and the coal fired heating area is 17,100,000,000m², accounting for about 83% of total heating area in the northern region. The annual heating coal consumption is about 400,000,000t standard coal, accounting for about 10% of total energy consumption of current year nationwide. If the shallow geothermal energy is utilized as the heating alternative energy for the northern region, more than 3 trillion huge potential markets will exist, including more than 1 trillion for rural markets. With the improvement of living standard, the hot-summer and cold-winter regions along the banks of the Yangtze River need both heating and cooling presently. Therefore, it is clear that the integrated heating and cooling industry has huge market potential in the new era.

On 3rd March of this year, "the Chinese Expert Panel has basically ascertained the causes for heavy atmospheric pollution in Beijing-Tianjin-Hebei Region currently; in terms of time, due to the influence of heating, the monthly average emission level of fine particles (PM2.5) and organic carbon, black carbon and other components in autumn and winter is 1.5-4 times of that in the non-heating season; the emission level of the abovementioned pollutants in autumn and winter is higher in Baoding and other cities which consume much bulk coal" was published. According to theory and practice, the shallow geothermal energy is the first choice for the alternative energy of heating in the north. Provision of heating for buildings with no combustion, zero emissions in the heating region is an effective approach to control the haze caused by heating. The management transformation of the Company in 2019 will center around budget, assessment and openness. Firstly, the improvement of social recognition about the renewable shallow geothermal energy is an alternative energy for heating and is also an energy-saving technology for cooling. Secondly, it is an assurance for design and reasonable quality construction and a guarantee for the operation of the integrated heating and cooling. Thirdly, it is to strengthen the formulation and implementation of enterprise standards and to enhance the implementation capability. Fourthly, it is to improve the assessment and incentive policies as well as its transparency so as to ensure fairness.





Chairman's Statement

The Group has always been focusing on research, exploration and development of shallow geothermal energy as alternative energy for building heating based on its original patented technology of "Single-well circulation geothermal energy collection technology" and the development of integrated heating and cooling with shallow geothermal energy emerging industry. We have strived to develop as an integrated heating and cooling with renewable shallow geothermal energy operation entity which integrates scientific research and development, design consultation, equipment manufacturing, engineering installation, operation and maintenance. The Company positions itself as the "smart heating/cooling system service provider",

In the face of rapid development opportunities and challenges, based on the market orientation and development of main business segments, the Group adjusts the composition of corporate division within the year, including establishing the direct selling and agency combined product channel network, so as to strengthen the sales and market development capacity of the Group. The Company will persistently consolidate the budget, assessment and openness, do a good job of management transformation, and constantly accelerate the regional cooperation, steadily develop the investment, construction and operation integrated shallow geothermal energy heating projects, and improve the operating and budget enforcement capacity of the Company, for the purpose of promoting the corporate performance and ensuring the profits.

It is estimated that the competition will further intensify while the promotion and application market of shallow geothermal energy is expanded. We should beef up the project cost control and promote the project management capacity in order to offset the effects on the business gross profit rate. Besides, the project investment expenses are high but the payback period is long, which causes certain pressure to the corporate capital. Moreover, this also hampers the development capacity of the Company. Therefore, the Company should enhance the supplemental funds, so as to support the project development. The project payback capacity will be positively promoted, and the proper financing will be taken into account to retain the operation capacity of the Company. To boost the future development of the Company, we should still make unremitting efforts, face the difficulties and make full use of the opportunities, and firmly stick to the sustainable development road of the Company while achieving good benefits.

I would like to take this opportunity to thank all the staff and directors for their contributions and efforts extended to the Group's development over the past year and sincerely thank all customers, business partners and shareholders for their trust and support to the Group.

With best regards,

Xu Shengheng

Joint Chairman of the Board

Management Discussion and Analysis

FINANCIAL HIGHLIGHTS

Revenue Allocation

	2018		2017	
	HK\$'000	%	HK\$'000	%
1. Shallow geothermal energy utilisation system				
Including: Planning and Design	6,267	2	4,453	1
Supply of renewable energy	49,509	12	73,886	9
Engineering construction	271,773	68	648,608	83
Operation and maintenance	21,791	5	13,523	2
Intelligent manufacturing	15,502	4	–	–
2. Air conditioning heat pump	14,439	4	23,906	3
3. Properties investment and development	17,512	5	13,777	2
Total revenue	396,793	100	778,153	100

For the year ended 31 December 2018

	2018 HK\$'000	2017 HK\$'000
Revenue	396,793	778,153
Gross profit	29,799	163,909
(Loss)/profit before tax	(419,067)	16,023
(Loss)/profit for the year	(418,511)	3,962
Research and development costs (included in the administrative expenses)	10,054	13,998
Impairment losses on trade and bills receivables, net	16,084	10,464
Impairment losses on contract assets/amounts due from customers for contract work, net	50,966	58,678
Impairment on goodwill	201,881	–

As at 31 December 2018

	2018 HK\$'000	2017 HK\$'000
Current assets	723,203	1,125,694
Total assets	2,493,664	3,100,265
Net current (liabilities)/assets	(590,281)	288,559
Total equity	1,084,862	1,687,030





Management Discussion and Analysis

FINANCIAL REVIEW

For the year ended 31 December 2018, the loss of the Group amounted to approximately HK\$418,511,000 and revenue amounted to HK\$396,793,000 as compared with the profit of the Group amounted to HK\$3,962,000 and revenue amounted to approximately HK\$778,153,000 for the year ended 31 December 2017. For more detailed information, please refer to the consolidated financial statements for the year ended 31 December 2018 and 2017.

OPERATIONAL RESULTS

Total revenue from operations for the year ended 31 December 2018 was approximately HK\$396,793,000 as compared with HK\$778,153,000 for the year ended 31 December 2017, representing a decrease of 49.0%. The decrease in revenue was mainly attributable to: (i) affected by the market, many of the contracts originally under negotiation were not realized; and (ii) affected by the slowdown in construction sector resulting delay on our construction progress of the project. The construction progress of the main building was delayed, thereby some of the Company's contract projects were postponed. Hence, the revenue declined during the year. During the year ended 31 December 2018, the Group recorded a net loss of approximately HK\$418,511,000 (including an impairment on goodwill and contract assets amounted to approximately HK\$201,881,000 and HK\$50,966,000 respectively) compared with a net profit of approximately HK\$3,962,000 for the year ended 31 December 2017.

GROSS PROFIT MARGIN

Gross profit from the Group's operations for the year ended 31 December 2018 was approximately HK\$29,799,000, represented the gross profit margin of 7.5% (2017: approximately HK\$163,909,000 represented the gross profit margin of 21.1%). The Group's gross profit margin had decreased by 13.6%. The decrease in gross profit margin of the Group was mainly due to the fact that since the fourth quarter of the year, the Group has invested in a number of demonstration projects in the Zhangjiakou area, Handan area, Tianjin Baodi and the Changzi County of Shanxi Province for the development of new markets. The Group's gross profit margin decreased during the year.

SELLING & DISTRIBUTION EXPENSES

Selling and distribution expenses for this year increased by approximately HK\$2,975,000, or 12.8% as compared with that of the year ended 31 December 2017. The selling and distribution expenses increased mainly due to the fact that the increase of temporary employees for the marketing and promoting the Group's projects in this year. In addition, domestic wage standards was also increased during the year.

ADMINISTRATIVE EXPENSES

Administrative expenses amounted to approximately HK\$112,326,000 (decreased by 2.9%) and HK\$115,669,000 for the years ended 31 December 2018 and 2017 respectively. The decrease in administrative expenses was mainly due to effective cost control by the Group. These included the decrease in research and development costs by HK\$3,944,000.

SHARE-BASED PAYMENT EXPENSES

During the year ended 31 December 2018, the Group incurred share-based payment expenses of approximately HK\$3,088,000 (2017: approximately HK\$9,546,000) which was due to the fact that the Group granted share options to directors, officers, employees and business partners which lead to the related expenses.

Management Discussion and Analysis

ORDER BOOK

As at 31 December 2018, the Group had contracts on hand of approximately HK\$290,092,000 (2017: approximately HK\$439,685,000).

SEGMENTAL INFORMATION

The Group's reportable and operating segment consists of shallow geothermal energy, air conditioning heat pump, property investment and development and securities investment and trading segments.

Shallow geothermal energy

The Group has always been committed to promote the development of non-combustion emerging industry of integrated heating and cooling with geothermal energy. It is the only enterprise in the country that possesses the business capabilities of design qualification, design capability, construction qualification, construction capability, operation and maintenance, main engine production and contract energy management. The Company is also the only patent holder of the original single-well circulation heat exchange energy collection technology and owns the largest number of patented technologies in the industry. Leveraging on existing resources and integrating supply chain service capabilities, the Group features various professional sectors. Currently, the Group has formed five major segments of planning and design, supply of renewable energy, intelligent manufacturing, engineering construction and operation and maintenance.

Air conditioning heat pump

The Group continued its air conditioning heat pump business this year and has expanded nearly 2,000 devices in the district of Shunyi and Huairou in Beijing and Qingxu in Shanxi. In the future, the Group will continue to develop such products and enrich the product line constantly to meet the individual needs of the customers.

Property investment and development

The Group has expanded its business to the self-built demonstration projects in Beijing, Dalian, Pizhou and Mianyang for promotion of the application of shallow geothermal energy as alternative energy for heating/cooling supply. The investment properties and the properties held for sale had applied the Group's HYY Single Well Circulation Heat Exchange Geothermal Energy Collection Technology for the heating/cooling supply to promote shallow geothermal energy as alternative green energy.

Securities investment and trading

The Group invested the idle fund for trading of securities and other types of investments in order to increase the Group's income. Further information regarding the Group's operating segments may be referred to note 4 to the financial statements of this report.

FINANCIAL RESOURCES AND LIQUIDITY

Net current liabilities of the Group as at 31 December 2018 was approximately HK\$590,281,000 (2017: net current assets of approximately HK\$288,559,000). The Group obtained a specific loan facility of approximately RMB179,500,000 (equivalent to approximately HK\$215,529,000) from Beijing Bank's coal-to-electricity specific borrowings during 2017. The loan bore interest at approximately 6% per annum and was fully repaid in August 2018 according to the loan agreement.





Management Discussion and Analysis

In 2016, the Group obtained entrusted loans in the principal amount of approximately RMB400,000,000 (equivalent to approximately HK\$456,517,000) from 中節能華禹基金管理有限公司, a related party connected to the Group, through Huishang Bank. The loan bears interest at 7% per annum and is repayable in 2019 according to the entrusted loan agreement. Hence, the balance was reclassified to current liabilities accordingly.

As at 31 December 2018, the Group had cash and cash equivalents of approximately HK\$72,934,000 (2017: approximately HK\$122,004,000). Cash and cash equivalents on the consolidated statement of financial position include funds available for general corporate purposes.

In view of the net current liabilities position, the Directors have given careful consideration to the future liquidity and performance of the Group and its available sources of finance in assessing whether the Group will have sufficient financial resources to continue as a going concern. In order to improve the Group's liquidity and cash flows to sustain the Group as a going concern, the Group implemented or is in the process of implementing the following measures:

- On 7 March 2019, the Company entered into the financial services agreement with China Energy Finance Company Limited ("Finance Company"), whereby Finance Company agreed to provide the deposit services, the settlement services, the loan and guarantee services and the other financial services to the Group for the period from 7 March 2019 to 31 December 2021. Finance Company would provide the loan and guarantee services to the member(s) of the Group in an aggregate amount of RMB1,000,000,000;
- In December 2017, the Company invested RMB143 million in an insurance company. This equity investment shall not be disposed by the Company within one year since the establishment of the insurance company before 28 February 2019. The fair value of this equity investment was HK\$180,324,000 as at 31 December 2018.

The Directors have reviewed the Group's cash flow forecast prepared by management which covers a period of twelve months from the end of the reporting period. They are of the opinion that, taking into account the above-mentioned plans and measures, the Group will have sufficient working capital to finance its operations and meet its financial obligations as and when they fall due in the foreseeable future. Accordingly, the Directors are of the opinion that it is appropriate to prepare the consolidated financial statements of the Group for the year ended 31 December 2018 on a going concern basis.

Should the going concern assumption be inappropriate, adjustments may have to be made to reflect the situation that assets may need to be realised at the amounts other than which they are currently recorded in the consolidated statement of financial position. In addition, the Group may have to provide for further liabilities that might arise, and to reclassify non-current assets and non-current liabilities as current assets and current liabilities.

CHARGES OF GROUP ASSETS

As at 31 December 2018, a pledged bank deposit amounted to HK\$1,549,000 was pledged for a shallow geothermal energy contract (2017: Nil).

EXPOSURE TO FLUCTUATION IN EXCHANGE RATES

The Company's reporting currency is in Hong Kong dollars and most of the trading transactions and cost incurred by the Group are principally denominated in Hong Kong dollars and Renminbi. The Group continued to adopt a conservative treasury policy by keeping most of the bank deposits in either Hong Kong dollars or Renminbi to minimise exposure to foreign exchange risks.

As at 31 December 2018, the Group had no foreign exchange contracts.

Management Discussion and Analysis

GEARING RATIO

The gearing ratio of the Group, based on total net debt (including interest-bearing bank borrowings, trade and bills payables, financial liabilities included in other payables and accruals, less cash and cash equivalents) to the equity (representing equity attributable to owners of the parent) plus net debt of the Group, was 49% as at 31 December 2018 (2017: 37%). The gearing ratio was increased due to the fact that the Group recognised certain impairment loss in respect of trade and bills receivables, contract assets and goodwill. This led to the decrease in the equity attributable to owners of the parent and hence the increase in the gearing ratio.

EMPLOYEES

As at 31 December 2018, the Group has approximately 650 employees (2017: approximately 660). The remuneration package of the employees is determined with reference to their performance, experience and their positions, duties and responsibilities in the Group. In addition, discretionary bonuses will be paid to staff based on individual and Group's performance.

SHARE OPTION SCHEME

The Company has a share option scheme that provides for the issuance of options to its directors, officers and employees. The detailed disclosures relating to the Company's share option scheme are set out in note 36 to the consolidated financial statements of this report.

At 31 December 2018 and 2017, the number of shares options had been granted and remained outstanding under the Share Option Scheme 2010 was 486,182,851, (representing approximately 12.07% of the shares of the Company).

CONTINGENT LIABILITIES

As at 31 December 2018, the Company did not provide any form of guarantees for any companies and was not liable to any material legal proceedings of which provision for contingent liabilities was required.

DIVIDEND

The Board does not recommend the payment of any final dividend for the year ended 31 December 2018 (2017: Nil).

CAPITAL STRUCTURE

As at 31 December 2018, the authorised share capital of the Company was US\$160,000,000 divided into 16,000,000,000 ordinary shares of US\$0.01 each and the issued share capital was 4,026,925,163 ordinary shares of US\$0.01 each.

CAPITAL COMMITMENT AND SUBSTANTIAL INVESTMENTS

Details of capital commitments are set out in note 42 to the consolidated financial statements of this report.





Management Discussion and Analysis

FUTURE PLANS FOR SUBSTANTIAL INVESTMENTS OF CAPITAL ASSETS

The Group expects that it will make significant capital expenditures on some of the build-operate-transfer (“BOT”) business. BOT business is currently the most common heating business model in the PRC. The Group will promote this model in order to develop heating projects.

MAJOR ACQUISITIONS AND DISPOSALS

There was no major acquisitions or disposal transactions during the year.

BUSINESS REVIEW

The Group has always been focusing on research, exploration and development of shallow geothermal energy as alternative energy for building heating based on its original patented technology of “Single-well circulation geothermal energy collection technology” and the development of integrated heating and cooling with shallow geothermal energy emerging industry. We have strived to develop as an integrated heating and cooling with renewable shallow geothermal energy operation entity which integrates scientific research and development, design consultation, equipment manufacturing, engineering installation, operation and maintenance. With its positioning as a “smart heating/cooling system service provider”, we have formed five major segments, namely intelligent heating (cooling) system engineering construction, supply of renewable energy (shallow geothermal energy), intelligent manufacturing (heating heat pump), planning and design, operation and maintenance of intelligent heating (cooling) system so as to enhance the capability for the development of entire industry chain.

Under the opportunities and challenges of rapid development and based on the market orientation for the development of various main business segments and responded to the new form of large-scale promotion, the Group has commenced the work of management transformation and adjustment of business model in 2019. The management transformation of the Company carried out in 2019 will be focusing on budget, assessment and disclosure: Firstly, the improvement of social recognition about the renewable shallow geothermal energy is an alternative energy for heating and is also an energy-saving technology for cooling; Secondly, it is an assurance for design and reasonable quality construction and a guarantee for the operation of the integrated heating and cooling. Thirdly, it is to strengthen the formulation and implementation of enterprise standards and to enhance the implementation capability. Fourthly, it is to improve the assessment and incentive policies as well as its transparency so as to ensure fairness.

The Group adjusted its organizational structure in terms of the composition of the Company’s business divisions, continuously strengthened the management transformation, and accelerated regional cooperation, including establishing a product channel network combining direct sales and agency, and improving the price system for agents based on the sales level so as to strengthen the Group’s sales and market development ability. At present, the Group has completed the establishment of relevant business divisions and a replicated and open business unit mechanism. The Company will focus on speeding up the scale to realize the development of shallow geothermal heating projects integrating investment, construction and operation. Improving the Company’s operational and budget execution capabilities in order to enhance the Company’s performance and ensure profitability for the year.

Management Discussion and Analysis

In 2018, the Company completed some major shallow geothermal energy heating projects including the construction of energy station of Citizen Service Center of Xiong'an New District, the Capital New Airport, the Yanqing Old County Village Coal-to-electricity project, the Shijingshan Insurance Industrial Park Phase II and the Yanqing Campus of Foreign Language School. Amongst of them, the construction of a 8,000KW distributed geothermal energy heating and cooling station which is a comprehensive energy application project of the Citizen Service Center of Xiong'an New District. Being the first large-scale comprehensive project in the high-profile Xiong'an New District as led by the China Energy Conservation and Environmental Protection Group and Ever Source Science and Technology Development Group Co., Ltd. ("HYY") carried out the construction has highlighted China's original single-well circulation heat exchange geothermal energy collection technology which will play a demonstration role in the commencement of large-scale construction of the Xiong'an New District this year.

Recently, the Group has invested in a number of demonstration projects in the Zhangjiakou area, Handan area, Tianjin Boarding area and the Changzi County of Shanxi Province for the development of new markets which has achieved good demonstration effect.

In the first half of 2018, HYY completed the construction of the heating heat pump production R&D base in Haidian District, Beijing which improved the research and development capabilities of the Group's heat pump products for heating and cooling and strengthened the production capacity of the Company's products. It has created favorable conditions for the Company to participate in major projects in the future and laid a solid foundation for promoting the Company's products in Beijing-Tianjin-Hebei and northern heating areas.

In this year, HYY and Beijing Digital Dafang Technology Co., Ltd. jointly built the "HYY Cloud Platform", the first online platform for shallow geothermal heating in China, which has been publicly released for its operation. The platform combined the new information technology of industrial software, cloud computing, big data, mobile Internet, Internet of Things with the field of geothermal energy has provided an open support services for the design, budget, procurement, construction, operation and maintenance of the project, and will obtain relevant income.

Major risks of operation

- It is expected that the market of promotion and application of shallow geothermal energy will expand while the competition will be further intensified. We must strengthen the cost control of the project and improve the project management capability and enhance the assessment, thus offsetting the impact on the business gross profit margin. We have established a bidding and contracting mechanism for the engineering department so as to accurately calculate the cost by category, and further reducing costs and increasing profits during the implementation process.
- The projects undertaken by the Group recorded a large amount of accounts receivable which affects the liquidity of the Company. It is proposed to set up a special unit to supervise the recovery of receivables so as to increase the cash flow for the Company.
- With the adjustment of the business model, the proportion of investment, construction and operation integration projects has increased, and its initial investment is relatively high, which has created pressure on the Company's funds, which also hinders the Company's ability to develop. The Company needs to strengthen the working capital to support the project development, therefore, we will actively enhance the recoverability of payment of project and consider making appropriate financing to maintain the Company's operational capabilities.





Management Discussion and Analysis

Business outlook

The total area of architectural heating in the severe cold and cold northern parts of China is about 20,600,000,000m² (of which 14,100,000,000m² for cities and towns, and 6,500,000,000m² for the rural areas), and the coal fired heating area is 17,100,000,000m², accounting for about 83% of total heating area in the northern region. The annual heating coal consumption is about 400,000,000t standard coal, accounting for about 10% of total energy consumption of current year nationwide. If the shallow geothermal energy is utilized as the heating alternative energy for the northern region, more than 3 trillion huge potential markets will exist, including more than 1 trillion for rural markets. With the improvement of living standard, the hot-summer and cold-winter regions along the banks of the Yangtze River need both heating and cooling presently. Therefore, it is clear that the heating and cooling integrated industry has huge market potential in the new era.

On 3rd March of this year, “the Chinese Expert Panel has basically ascertained the causes for heavy atmospheric pollution in Beijing-Tianjin-Hebei Region currently; in terms of time, due to the influence of heating, the monthly average emission level of fine particles (PM2.5) and organic carbon, black carbon and other components in autumn and winter is 1.5-4 times of that in the non-heating season; the emission level of the abovementioned pollutants in autumn and winter is higher in Baoding and other cities which consume much bulk coal” was published. Utilizing of clean energy to replace the bulk coal has become the top priority in controlling air pollution. The president Xi Jinping presided over the 14th meeting of the Central Financial Leadership Group on 21 December 2016 emphasized that “the promotion of clean heating in winters of Northern China is an important chapter of the revolution in energy generation and consumption, and the revolution of living style of rural livelihood. In January 2018, the six ministries issued the “Notification on Accelerating the Development and Utilization of Shallow Geothermal Energy to Promote the Reduction and Replacement of Coal in the Northern Heating Area”. Driven by the introduction of different national planning and policies as well as the national energy development strategy, the potential for the development of shallow geothermal energy industry is huge.

At present, the Ministry of Environmental Protection has stopped the rural “coal-to-gas” project, and the electric heating method has also made the heating costs for rural users too high. Shallow geothermal energy as an alternative energy for heating in the north with its characteristics of huge in reserve, clean and renewable is outstanding. The theory and practice have proved that shallow geothermal energy is preferred as an alternative energy for northern heating. Provision of heating for buildings with no combustion, zero emissions in the heating region is an effective way to control the smog caused by heating. The cost of power and electricity consumption of heating with shallow geothermal heating is one quarter of that of the electric heating and the operating cost is lower than that of burning coal.

It is expected that the shallow geothermal energy industry will enter the golden development period. We will combine the demand and applicability of geothermal energy heating in various regions, focusing on two poles (Beijing-Tianjin-Hebei region, Xiong’an New District construction) and the overall layout of “three-lines (surrounding regions of high-speed rail, highway and airport), one-Yangtze River and the upstream of Yellow River” vigorously develop the emerging industry of combustion-free integrated heating and cooling with shallow geothermal energy, and actively explore the market. Under the adjustments of the new management transformation for the budget, assessment and disclosure and the business model as well as relying on the management, technology and experience accumulated in the utilization and development of the shallow geothermal energy for 20 years, the shallow geothermal heating and cooling business model being simple replicated will lead the Company enter into another new milestone.

Biography of Directors and Senior Management

EXECUTIVE DIRECTORS

Mr. Xu Shengheng (“Mr. Xu”), aged 56, has been appointed as an executive Director since 6 February 2009. Mr. Xu is the joint chairman of the Board, an executive Director, the chairman of nomination committee, the deputy chairman of remuneration committee, the compliance officer and an authorised representative of the Company. Mr. Xu holds a doctoral degree of Geological Engineering in China University of Geosciences and a Master degree of Business Administration from the International EMBA from Hong Kong University of Science. Mr. Xu has long been engaged in the field of heating provision. Prior to year 2000, he mainly engaged in the combustion-based heating. Since year 2000, he is committed to non-combustion heating. The original single-well circulation heat exchange of renewable geothermal energy collection technology developed by Mr. Xu has realized the industrialization development and is the core technology of the integrated heating/cooling emerging industry of the Group. Mr. Xu is also a director of most of the subsidiaries of the Company.

Ms. Wang Yan (“Ms. Wang”), aged 47, has been appointed as an executive Director since 10 August 2018. Ms. Wang is the joint chairman of the Board, an executive Director, the deputy chairman of nomination committee and remuneration committee of the Company. Ms. Wang holds a bachelor’s degree in accounting and a master’s degree in engineering and is a senior economist. Ms. Wang began working in August 1992. From August 1992 to February 1998, she worked in China Arts and Crafts Exhibition Company. From February 1998 to July 2018, she worked in China Energy Conservation Investment Company Limited (subsequently renamed as China Energy Conservation and Environmental Protection Group, the parent company of the substantial shareholder of the Company) and served the positions of office manager, deputy director and director of the Human Resources Department and employee supervisor of its group. Since November 2014, she is a director of CECEP Valiant Co., Ltd. (a listed company in China with stock code: 002643.SZ).

Ms. Chan Wai Kay Katherine (“Ms. Chan”), aged 59, has been appointed as an executive Director since 6 February 2009. Ms. Chan is the deputy chairman of the Board and executive Director of the Company. She holds a Bachelor degree of Business Administration from the University of Southern California, USA. Ms. Chan has more than 20 years of experience in financial services industry and previously held various key positions in listed companies. Ms. Chan has profound practicing knowledge in company’s strategic planning and corporate management of listed companies. Ms. Chan is also a director of certain subsidiaries of the Company.

Mr. Wang Manquan (“Mr. Wang”), aged 56, has been appointed as an executive Director since 29 December 2016. Mr. Wang is the chief executive officer of the Company. Mr. Wang, a Senior Engineer, graduated from Beijing Municipal Committee of the CPC Party School with a bachelor’s degree in Business Management in 2007. He joined in Ever Source Science and Technology Development Group Co., Limited, a subsidiary of the Company, in 2001. Previously, Mr. Wang was the vice president of Ever Source Science and Technology Development Group Co., Ltd. and currently serves as the chief executive officer of the company and general manager of Ever Source Science and Technology Development Group Co., Ltd. Prior to joining in the Group, Mr. Wang served as the head of Beijing Haidian Sijiqing Heat Exchanger Factory. Mr. Wang has been engaged in leadership of project management for mechanical and electrical equipment installation for more than 15 years, and specializes in comprehensive application technology of geothermal energy heating system. He has extensive business management experience. Mr. Wang is also a director of certain subsidiaries of the Company.

Mr. Zang Yiran (“Mr. Zang”), aged 40, has been appointed as an executive Director since 24 August 2012. Mr. Zang is the chief financial officer of the Company. He graduated from Tianjin University of Finance & Economics with a Bachelor’s degree. He commenced his career in September 1999 and worked as a director in Responsibility Accounting Centre of the Capital Operation Department of Tianjin First Center Hospital, a Business Manager of Financial Management Department of China Energy Conservation Investment Corporation (“CECIC”), an assistant to the Director of Financial Management Department of CECIC, an assistant to the Director of Financial Management Department of CECEP, the Deputy General Manager for China Energy Conservation and Environmental Protection (Hong Kong) Investment Company Ltd (“CECEP (HK)”), a substantial shareholder of the Company. Mr. Zang is also a director of certain subsidiaries of the Company.





Biography of Directors and Senior Management

Mr. Dai Qi, aged 36, was appointed as a non executive Director on 12 August 2013 and was redesignated to executive Director of the Company since 29 December 2016. Mr. Dai graduated from Southwest Jiaotong University with a master's degree of management. Previously, he worked at Beijing Dongcheng Branch of Shenzhen Development Bank as a senior account executive and held positions with Strategic Management Department of CECIC and Strategic Management Department of China Energy Conservation and Environmental Protection Group. Besides, he acted as deputy general manager of Investment and Capital Operation Department of CECEP (HK). He has been acting as Administrative Director of the Company since September 2012. Mr. Dai is also currently the vice president of the Group and vice president of Ever Source Science and Technology Development Group Co., Ltd.

NON-EXECUTIVE DIRECTOR

Mr. Yang Wei ("Mr. Yang"), aged 35, has been appointed as the non-executive Director of the Company since 10 August 2018. Mr. Yang graduated from Beijing Normal University majoring in physics in 2007. He graduated from the University of Hong Kong in 2008 with a master's degree in economics, a economist. He began working in March 2009. He was the business manager of the Railway Construction Division of China Railway Materials Corporation, the secretary of the President Office of China Railway Materials Co., Ltd., and the secretary of the Office of China Energy Conservation and Environmental Protection Group. Since January 2015, he has been an assistant to the general manager of China Energy Conservation and Environmental Protection (Hong Kong) Investment Co., Ltd. Currently, he is the deputy general manager of China Energy Conservation and Environmental Protection (Hong Kong) Investment Co., Ltd., a substantial shareholder of the Company who holds 29.55% of the issued share capital of the Company, and concurrently serves as an executive director and the general manager of its associated company, China Energy Conservation Environmental Advisory Group Co., Ltd.

INDEPENDENT NON-EXECUTIVE DIRECTORS

Mr. Jia Wenzeng ("Mr. Jia"), aged 75, has been appointed as an independent non-executive Director of the Company since 25 March 2009. Mr. Jia is also the chairman of audit committee and members of nomination committee and remuneration committee. Mr. Jia had been working on financial management since 1963 with in-depth research and practice on corporate financial management. His dissertation was awarded a second prize in the National Examination Seminar for Economy Dissertation (全國經濟論文評選會) in 1992.

Wu Desheng ("Mr. Wu"), aged 79, has been appointed as an independent non-executive Director of the Company since 21 March 2012. Mr. Wu is also the chairman of remuneration committee and members of nomination committee and audit committee. Mr. Wu is the executive director of the China Committee of Heating, Ventilation and Air-Conditioning of Architectural Society of China, executive director of China Association of Refrigeration, honorary director of the Civil Engineering & Architectural Society of Beijing, the Education Supervisor and Adjunct Professor of Tsinghua University, Beijing University of Civil Engineering and Architecture and Xi'an Jiaotong University. Mr. Wu graduated with a Bachelor's degree from the Department of Civil Engineering of Tsinghua University in 1963.

He worked as a technician at the Design Institute for Glass Industry of the Ministry of Construction between 1963 and 1971. Since 1971, he has been serving in various positions at the Beijing Institute of Architectural Design, such as the Institute Head and Chief Engineer, and currently he is the Chief Consulting Engineer of the Beijing Institute of Architectural Design. Mr. Wu has obtained a number of awards, including the silver medal of the National Design Award and the National Labour Medal.

Mr. Wu Qiang ("Mr. Wu"), aged 59, has been appointed as an independent non-executive Director of the Company since 29 December 2016. Mr. Wu is also the members of remuneration committee, nomination committee and audit committee. Mr. Wu graduated from China University of Geosciences, Beijing in 1991 and obtained the doctoral degree in Engineering. Mr. Wu is currently a professor of China University of Mining & Technology, Beijing and a member of China Academy of Engineering. Mr. Wu was honored with the "Li Siguang Geological Science Award" and received many honorable titles including the leader of Chang Jiang Scholars Program of the Ministry of Education, one of ten winners of the first "Outstanding Postdoctoral Award of China", "National Outstanding Teacher" and the State-selected candidate of the first project of "Hundreds, Thousands, and Ten Thousands of Talents for the New Century" of the Ministry of Education. In addition, he is one of the recipients of special government allowance granted by the State Council. Mr. Wu is the deputy chairman of International Mine Water Association (IMWA), the president of national committee of IMWA China and one of the associate editor of Mine Water and the Environment, the SCI-indexed journal. He also serves as a member of China Association for Science and Technology, a member of Commission of Technology under State Administration of Work Safety and the head of "Expert Panel On Hydrogeology" under the State Administration of Coal Mine Safety.

Biography of Directors and Senior Management

Mr. Wu has published many books and over 300 academic articles. His works were honored with three Second Class Awards of National Science and Technology Progress Award, 10 first class awards of provincial award, while nearly 50 invention patents were granted by the United States, Hong Kong and China and 27 national software copyrights were granted. He worked as the chief editor for preparation of a number of reference books, such as national technology standards and manuals. The research team under his leadership was awarded Outstanding Innovation Team of the Ministry of Education and the “Team of Safety in Mines” of China Association for Science and Technology.

Mr. Guo Qingui (“Mr. Guo”), aged 46, has been appointed as an independent non-executive Director of the Company since 29 December 2016. Mr. Guo is also the members of remuneration committee, nomination committee and audit committee. Mr. Guo graduated from the School of Law of Zhengzhou University. Mr. Guo obtained the Master Degree of Peking University Law School in 2005 and the Executive Master of Business Administration (EMBA) degree from Tsinghua University School of Economics and Management in 2015. He was admitted as a lawyer in China in 1995. As a practicing lawyer in China, he served in Grandall Law Firm (Beijing), Zhong Lun Law Firm (Beijing) and King & Wood Mallesons. He currently serves as a managing partner and a lawyer of Zhongxin Law Firm in Beijing. Mr. Guo has been appointed as an independent director of Chifengjilong Gold Mining Co., Ltd., an A-share listed company in China with stock code: 600988, from November 2018.

SENIOR MANAGEMENT

Mr. He Yongping (“Mr. He”), aged 43, is an executive vice president of the Company, executive vice president and business manager of Ever Source Science and Technology Development Group Co., Limited and engineer of the Company. In 1999, he graduated from Harbin University of Civil Engineering and Architecture with a bachelor’s degree in heating ventilation and air conditioning engineering. In 2002, he joined Ever Source Science and Technology Development Group Co., Limited, a subsidiary of the Company. From 2002 to 2004, he worked as a designer and served as the deputy chief engineer of the Group from 2005 to 2008. From 2009 till now, he is the executive vice president of the Group. Mr. He has been engaged in the research, design and promotion of geothermal intelligent heating systems for more than 15 years. He specializes in the application and promotion of geothermal heating systems, and has extensive business experience in providing geothermal intelligent integrated solutions for customers.

Mr. Guan Xiuhu (“Mr. Guan”), aged 56, is an executive vice president of the Company, executive vice president and general manager of Regional Development Department of Ever Source Science and Technology Development Group Co., Limited. Mr. Guan is a professor-level senior engineer. In 1983, he graduated from Beijing University of Science and Technology with a bachelor’s degree in metal physics. In 2013, he joined the Company and its subsidiary Ever Source Science and Technology Development Group Co., Limited. Prior to joining the Group, Mr. Guan served as the director of the Beijing Institute of Powder Metallurgy, Director of the National Powder Metallurgy Quality Supervision and Inspection Center, Executive Deputy General Manager of Beijing Nuosi Taige Precision Technology Co., Ltd., and Deputy General Manager of Beijing Huaqing Group. Mr. Guan has long been engaged in the development and application of electromechanical equipment and geothermal energy. He specializes in the comprehensive application technology of geothermal energy heating systems and has extensive business management experience.

Mr. Jing Fuzhi (“Mr. Jing”), aged 61, is an executive vice president and chief investment officer of the Company and Ever Source Science and Technology Development Group Co., Limited. Mr. Jing holds a master’s degree in EMBA from Hong Kong University of Science and Technology. He joined the Company in 2014. Prior to joining, Mr. Jing served as Deputy Director of Planning and Investment Division of Beijing Economic Commission; Deputy General Manager of Beijing Industrial Investment Corporation; Director of Small and Medium Enterprises Division of Beijing Economic and Information Technology Committee; Mr. Jing has been engaged in investment work for 35 years and has participated in Beijing Hyundai Motor, SMIC, BOE and other major project investment and the establishment and management of the SME Pilot Fund in Beijing. He has extensive investment management experience.





Report of the Directors

The directors present their report and the audited financial statements of the Company and the Group for the year ended 31 December 2018.

PRINCIPAL ACTIVITIES

The principal activity of the Company is investment holding. Details of the principal activities of its subsidiaries are set out in note 1 to the financial statements.

An analysis of the Group's performance for the year ended 31 December 2018 by business segments are set out in note 4 to the financial statements.

RESULTS AND DIVIDENDS

The Group's loss for the year ended 31 December 2018 and the Group's financial position at that date are set out in the consolidated financial statements on pages 42 to 158.

The directors do not recommend the payment of any dividend for the year ended 31 December 2018.

CHANGE OF COMPANY NAME

The name of the Company was changed from "CHINA GROUND SOURCE ENERGY INDUSTRY GROUP LIMITED 中國地能產業集團有限公司" to "CHINA GEOTHERMAL INDUSTRY DEVELOPMENT GROUP LIMITED 中國地熱能產業發展集團有限公司" with effect from 22 May 2018.

USE OF PROCEEDS FROM THE RIGHTS ISSUE

The Group completed the rights issue on 18 July 2017 (the "Rights Issue") and obtained net proceeds, after expenses, of approximately HK\$112,000,000. As disclosed in the prospectus of the Rights Issue dated 26 June 2017, approximately 40%-50% of the net proceeds will be used on the payment of operational expenses and approximately 50%-60% of the net proceeds will be used on project-based related expenses. The proceeds not yet utilised was approximately HK\$62,714,000 as at 31 December 2017. Up to 31 December 2018, approximately HK\$52,000,000 was utilised for payment of general operational expenses and approximately HK\$60,000,000 was utilised for project-based related expenses.

BUSINESS REVIEW

A review of the business of the Group for the year ended 31 December 2018 and a discussion on the Group's future business development are provided in the "Management Discussion and Analysis" on pages 6 to 13. A summary of the Group's performance during the year ended 31 December 2018 is provided in the "Financial Highlights" and "Five-Year Financial Summary" set out on page 6 and 159 respectively of this annual report. In addition, the financial risk management objectives and policies of the Group can be referred in note 46 to the financial statements.

PROPERTY, PLANT AND EQUIPMENT

The Group's land and buildings were revalued as at 31 December 2018. The revaluation resulted in a gain over book values amounting to approximately HK\$5,360,000, which has been credited directly to the asset revaluation reserve.

Details of the movements during the year in the property, plant and equipment of the Group are set out in note 13 to the financial statements.

INVESTMENT PROPERTIES

The Group revalued all of its investment properties at the end of the year. The increase in fair value of investment properties, which has been credited directly to profit or loss, amounted to approximately HK\$11,204,000. Most of these investment properties will be developed as the Group's self-built demonstration leasing project with the application of shallow geothermal energy.

Report of the Directors

PROPERTIES

Details of the major properties held by the Group as at 31 December 2018 are set out on page 160 of the annual report.

SHARE CAPITAL AND SHARE OPTIONS

As at 31 December 2018, the authorised share capital of the Company was US\$160,000,000 divided into 16,000,000,000 ordinary shares of US\$0.01 each and the issued share capital was 4,026,925,163 ordinary shares of US\$0.01 each (the "Shares").

Details of movements in the Company's share capital and share option during the year, together with the reasons therefore, are set out in notes 35 and 36 respectively to the financial statements.

PRE-EMPTIVE RIGHTS

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

SUFFICIENCY OF PUBLIC FLOAT

Based on the information available to the Company and to the best knowledge of the directors of the Company, at least 25% of the Company's total issued share capital were held by the public as at the date of this report.

PURCHASE, REDEMPTION OR SALE OF LISTED SECURITIES OF THE COMPANY

During the year ended 31 December 2018, neither the Company, nor any of its subsidiaries purchased, redeemed or sold any of the Company's listed securities.

CHARITY DONATIONS

During the year, the Group did not make any charity donations.

RESERVES

Details of movements in the reserves of the Company and the Group during the year are set out in note 47 to the financial statements and in the consolidated statement of changes in equity, respectively.

DISTRIBUTABLE RESERVES OF THE COMPANY

The Company's share premium account is distributable to the shareholders of the Company provided that immediately following the date on which the dividend is proposed to be distributed, the Company will be in a position to pay off its debts as they fall due in the ordinary course of business. The share premium account may also be distributed in the form of fully paid bonus shares. As at 31 December 2018, the Company's reserve available for distribution amounted to approximately HK\$811,952,000 (2017: HK\$818,971,000) after net off the accumulated losses of the Company.





Report of the Directors

ENVIRONMENTAL POLICY

We are committed to building an environmental-friendly corporation that pays close attention to conserving natural resources. The Group encourages environmental protection and promotes awareness towards environmental protection to the employees. The Group adheres to the principle of recycling and reducing so as to minimize the environmental impact from our operation. Besides, being a corporation engaging in the business of research, development and promotion of shallow geothermal energy as alternative energy to provide heating for buildings, we have installed our Ground Energy Heat Pump Environmental System and/or Ground Energy Heating Devices in most of our offices in China for providing heating and cooling which has achieved great saving in electricity and thereby reducing pollution to the environment.

The Group will review its environmental practices from time to time and will consider implementing further eco-friendly measures and practices in the operation of the Group's businesses and enhance environmental sustainability.

COMPLIANCE WITH LAWS AND REGULATIONS

The Group recognises the importance of compliance with regulatory requirements and the risk of non-compliance with such requirements could lead to the termination of operating licences. The Group has been setting up system and allocating resources to ensure ongoing compliance with rules and regulations. The Group has complied, to the best of our knowledge, with the Securities and Futures Ordinance (the "SFO"), the GEM Listing Rules, the applicable employment ordinance both in China and Hong Kong, the local standards and regulations for our project works as well as other relevant rules and regulations during the year.

RELATIONSHIPS WITH EMPLOYEES, CUSTOMERS AND SUPPLIERS

Human resources are one of the greatest assets of the Group. The Group ensures all staff are reasonably remunerated and also continues to improve and regularly review and update its policies on remuneration and benefits, career development opportunities, training, occupational health and safety. The Group provides a healthy and safe workplace for all employees. No strikes and cases of fatality due to workplace accidents are found during the year.

The Group values views and opinions of all customers and collects them through various means and channels including making regular visits/phone calls/holding meetings. A specific service hotline is set up to timely deal with customers' enquiries and complaints so as to understand the customer needs and regularly analyze on customers' feedback. The Group also conducts comprehensive tests and checks to ensure quality products and services are offered to the customers.

The Group encompasses working relationships with suppliers to meet our customers' needs in an effective and efficient manner. The Group has set up a qualified suppliers database registering the suppliers which are met certain performance criteria and eligibility requirements to facilitate the procurement process. The Group's requirements and standards are also well-communicated to suppliers before the commencement of a project.

MAJOR CUSTOMERS AND SUPPLIERS

During the year, sales to the Group's five largest customers accounted for approximately 51% (2017: 60%) of the total sales for the year and sales to the largest customer included therein amounted to approximately 21% (2017: 41%). Purchases from the Group's five largest suppliers accounted for approximately 21% (2017: 47%) of the total purchases for the year and purchases from the largest supplier included therein amounted to approximately 15% (2017: 23%).

To the best knowledge of the directors, neither the directors, their associates, nor any shareholders who own more than 5% of the Company's issued share capital, had any beneficial interest in the Group's five largest customers and/or its five largest suppliers during the year.

Report of the Directors

DIRECTORS

The directors of the Company during the year were:

Executive directors:

Mr. Xu Shengheng (*Joint Chairman*)
Ms. Wang Yan (*Joint Chairman*) (*Appointed on 10 August 2018*)
Mr. An Yi (*Joint Chairman*) (*Resigned on 10 August 2018*)
Ms. Chan Wai Kay Katherine (*Deputy Chairman*)
Mr. Wang Manquan (*Chief Executive Officer*)
Mr. Zang Yiran (*Chief Financial Officer*)
Mr. Dai Qi

Non-executive directors:

Mr. Yang Wei (*Appointed on 10 August 2018*)
Mr. Zhao Youmin (*Resigned on 10 August 2018*)

Independent non-executive directors:

Mr. Jia Wenzeng
Mr. Wu Desheng
Mr. Wu Qiang
Mr. Guo Qingui

Note: In accordance with article 85 of the Company's articles of association, Ms. Wang Yan, Mr. Yang Wei, Mr. Wu Qiang and Mr. Guo Qingui will retire, and being eligible, offer themselves for re-election at the forthcoming annual general meeting.

The Company had received confirmation of independence from each of the independent non-executive director pursuant to Rule 5.09 of the GEM Listing Rules and the Company still considers that the independent non-executive directors to be independent.

BIOGRAPHY OF DIRECTORS AND SENIOR MANAGEMENT

Biographical details of the directors and senior management of the Company are set out on pages 14 to 16 of the annual report.

DIRECTORS' SERVICE CONTRACTS

No director proposed for re-election at the forthcoming annual general meeting has a service contract with the Company which is not determinable by the Company within one year without payment of compensation other than statutory compensation.

DIRECTORS' INTERESTS IN CONTRACTS OF SIGNIFICANCE

Save as disclosed in notes 8 and 43 to the financial statements, no director had a material interest, either directly or indirectly, in any contract of significance to the business of the Group to which the Company or any of its subsidiaries was a party during the year.





Report of the Directors

PERMITTED INDEMNITY

Pursuant to the Articles of Association, subject to the applicable laws and regulations, every Director shall be indemnified and secured harmless out of the assets and profits of the Company against all actions, costs, charges, losses, damages and expenses which they or any of them may incur or sustain in or about the execution of their duty in their offices. Such permitted indemnity provision has been in force throughout the year. The Company has arranged appropriate directors' and officers' liability insurance coverage for the directors and officers of the Group.

UPDATE ON DIRECTORS' INFORMATION

Pursuant to Rule 17.50A(1) of the GEM Listing Rules, the change in information of the Directors for the year ended 31 December 2018 is set out below:

- Mr. Xu Shengheng, an Executive Director, (i) was appointed as a Standing Committee member of the 13th National Committee of the Beijing City of Chinese People's Political Consultative Conference in January 2018; (ii) resigned as director of 北京恒有源地能熱源系統有限公司, a subsidiary of the Company, on 9 February 2018; (iii) his annual remuneration was adjusted to HK\$3.8 million from 14 May 2018.
- The annual remuneration of Mr. Wang Manquan, an Executive Director, was adjusted to HK\$1.62 million from 14 May 2018.
- Mr. Zang Yiran, an Executive Director, was appointed as director of 北京海興園供熱服務有限公司, a subsidiary of the Company, on 10 April 2018.
- The annual remuneration of Mr. Daiqi, an Executive Director, was adjusted to HK\$840,000 from 14 May 2018.
- Ms. Wang Yan was appointed as the joint chairman of the Board and the executive Director of the Company with effect from 10 August 2018 and her annual salary is HK\$2,016,000.
- Mr. Yang Wei was appointed as the non-executive Director of the Company with effect from 10 August 2018.
- Mr. Guo Qingui was appointed as independent director of ChifengJilong Gold Mining Co., Ltd., an A-share listed company in China with stock code: 600988, from November 2018.
- Mr. An Yi resigned as the joint chairman of the Board and the executive Director of the Company with effect from 10 August 2018
- Mr. Zhao Youmin resigned as the non-executive Director of the Company with effect from 10 August 2018.

Save as disclosed above and elsewhere in this report, there is no other information required to be disclosed pursuant to Rule 17.50A(1) of the GEM Listing Rules for the year ended 31 December 2018.

Report of the Directors

DIRECTORS' AND CHIEF EXECUTIVE'S INTERESTS OR SHORT POSITIONS IN THE SHARES AND UNDERLYING SHARES OF THE COMPANY AND ITS ASSOCIATED CORPORATION

As at 31 December 2018, the interests or short positions of the directors and the chief executive of the Company in the shares, underlying shares and debentures of the Company or its associated corporations (within the meaning of Part XV of the Securities and Futures Ordinance (the "SFO")) which will be required to be notified to the Company and the Stock Exchange pursuant to Divisions 7 and 8 of Part XV of the SFO (including interests and short position which they are taken or deemed to have taken under such provisions of the SFO), or which will be required to be entered into the register kept under Section 352 of the SFO or as otherwise notified to the Company and the Stock Exchange pursuant to Rules 5.46 to 5.67 of the GEM Listing Rules, were as follows:

(a) Long Positions and Short Positions in Shares and Equity Derivatives

Name of director	Capacity	Number of issued ordinary shares of US\$0.01 each in the Company held and the capacity		Approximate percentage of interests in shares	Interests under equity derivatives	Aggregate interests	Approximate percentage of the aggregate interests
		Interests in shares					
Mr. Xu Shengheng (Note 1)	Beneficial owner	711,646,600 (L)		17.67%	37,725,148 (L)	750,354,548 (L)	18.63%
	Interest of spouse	982,800 (L)		0.02%	–		
Ms. Chan Wai Kay Katherine (Note 2)	Beneficial owner	58,290,400 (L)		1.45%	43,788,119 (L)	116,182,119 (L)	2.89%
	Interest of spouse	14,103,600 (L)		0.35%	–		
Mr. Wang Manquan (Note 3)	Beneficial owner	716,800 (L)		0.02%	30,314,851 (L)	31,031,651 (L)	0.77%
Mr. Jia Wenzeng (Note 4)	Beneficial owner	–		–	4,827,920 (L)	4,827,920 (L)	0.12%
Mr. Wu Deheng (Note 5)	Beneficial owner	–		–	3,143,762 (L)	3,143,762 (L)	0.08%

(L): Long position, (S): Short position





Report of the Directors

DIRECTORS' AND CHIEF EXECUTIVE'S INTERESTS OR SHORT POSITIONS IN THE SHARES AND UNDERLYING SHARES OF THE COMPANY AND ITS ASSOCIATED CORPORATION (Continued)

(a) Long Positions and Short Positions in Shares and Equity Derivatives (Continued)

Notes:

1. Mr. Xu Shengheng ("Mr. Xu") is interested in 711,646,600 Shares and 37,725,148 Shares issuable pursuant to exercise of share options of the Company, details of such share options can be referred to part (b) of this section. Ms. Luk Hoi Man ("Ms. Luk"), the spouse of Mr. Xu, holds 982,800 Shares. Therefore, under the SFO, Mr. Xu is deemed to be interested in 982,800 Shares in which Ms. Luk is interested.
2. Ms. Chan Wai Kay Katherine ("Ms. Chan") is interested in 58,290,400 Shares and 43,788,119 Shares issuable pursuant to exercise of share options of the Company, details of such share options can be referred to part (b) of this section. Mr. Chow Ming Joe Raymond ("Mr. Chow"), spouse of Ms. Chan, holds 14,103,600 Shares. Under the SFO, Ms. Chan is deemed to be interested in 14,103,600 Shares in which Mr. Chow is interested.
3. Mr. Wang Manquan is interested 716,800 Shares and 30,314,851 Shares issuable pursuant to exercise of share options of the Company, details of such share options can be referred to part (b) of this section.
4. Mr. Jia Wenzeng is interested in 4,827,920 Shares issuable pursuant to exercise of share options of the Company, details of such share options can be referred to part (b) of this section.
5. Mr. Wu Desheng is interested in 3,143,762 Shares issuable pursuant to exercise of share options of the Company, details of such share options can be referred to part (b) of this section.

(b) Long Positions under Equity Derivatives

The Share Option Scheme

On 28 July 2010, the Company, by a shareholders' resolution, conditionally adopted a new share option scheme (the "Share Option Scheme") for a period of ten years from the date on which the Share Option Scheme became unconditional. On 7 August 2010, the Share Option Scheme became unconditional and effective. Pursuant to the Share Option Scheme, the board of directors was authorised, at its absolute discretion, to grant options to eligible participants, including directors of the Company or any of its subsidiaries, as defined in accordance with the terms of the Share Option Scheme, to subscribe for shares in the Company under the terms of the Share Option Scheme. As at 31 December 2018, the following directors of the Company were interested in the following options under the Share Option Scheme:

Name of director	Date of grant	Exercise period	As at	
			Exercise price per share HK\$	Number of share options outstanding
Mr. Xu Shengheng	9 September 2010	9 September 2010 to 8 September 2020	0.379	13,024,158
	8 December 2016	8 December 2016 to 31 December 2020	0.267	24,700,990
Ms. Chan Wai Kay Katherine	9 September 2010	9 September 2010 to 8 September 2020	0.379	19,087,129
	8 December 2016	8 December 2016 to 31 December 2020	0.267	24,700,990

Report of the Directors

DIRECTORS' AND CHIEF EXECUTIVE'S INTERESTS OR SHORT POSITIONS IN THE SHARES AND UNDERLYING SHARES OF THE COMPANY AND ITS ASSOCIATED CORPORATION *(Continued)*

(b) Long Positions under Equity Derivatives *(Continued)* The Share Option Scheme *(Continued)*

Name of director	Date of grant	Exercise period	As at	
			31 December 2018	
			Exercise price per share HK\$	Number of share options outstanding
Mr. Wang Manquan	9 September 2010	9 September 2011 to 8 September 2020	0.379	1,871,288
		9 September 2012 to 8 September 2020	0.379	1,871,288
		9 September 2013 to 8 September 2020	0.379	1,871,285
	8 December 2016	8 December 2016 to 31 December 2020	0.267	24,700,990
Mr. Jia Wenzeng	9 September 2010	9 September 2010 to 8 September 2020	0.379	1,684,158
		8 December 2016	8 December 2016 to 31 December 2020	0.267
Mr. Wu Desheng	8 December 2016	8 December 2016 to 31 December 2020	0.267	3,143,762

Save as disclosed above, as at 31 December 2018, none of the directors and chief executive of the Company or their associates had any interest or short position in the shares, underlying shares or debentures of the Company or any of its associated corporations (within the meaning of Part XV of the SFO) which were required to be notified to the Company and the Stock Exchange pursuant to Division 7 and 8 of Part XV of the SFO (including interests and short position which they were taken or deemed to have taken under such provisions of the SFO), or which were required to be entered into the register kept under Section 352 of the SFO or as otherwise notified to the Company and the Stock Exchange pursuant to Rules 5.46 to 5.67 of the GEM Listing Rules.

ARRANGEMENTS TO PURCHASE SHARES OR DEBENTURES

Save as disclosed in note 36 to the financial statements in respect of the share option scheme, at no time during the year were there rights to acquire benefits by means of the acquisition of shares in or debentures of the Company granted to any director or their respective spouse or minor children, or were any such rights exercised by them; or was the Company or any of its subsidiaries a party to any arrangement that would enable the directors to acquire such rights in any other corporate body.

SHARE OPTION SCHEME

The detailed disclosures relating to the Company's share option scheme are set out in note 36 to the financial statements.





Report of the Directors

EQUITY-LINKED AGREEMENTS

Save for the share option scheme of the Company as disclosed in the section headed “Share Option Scheme”, no equity-linked agreements were entered into by the Group, or existed during the year.

INTERESTS OF SUBSTANTIAL SHAREHOLDERS DISCLOSEABLE UNDER SFO

So far as is notified to the directors of the Company, as at 31 December 2018, shareholders (other than directors or chief executive of the Company) who had interests or short positions in the shares or underlying shares of the Company which would fall to be disclosed to the Company and the Stock Exchange under the provision of Divisions 2 and 3 of Part XV of the SFO or which were required pursuant to Section 336 of the SFO, to be entered into the register referred to therein, were as follows:

Long Positions and short positions in shares and equity derivatives

Name	Capacity	Number of issued ordinary shares of US\$0.01 each in the Company held and capacity		Percentage of interests in shares	Interests under equity derivatives	Aggregate interests	Percentage of aggregate interests
		Capacity	Interest in shares				
China Energy Conservation and Environmental Protection (Hong Kong) Investment Company Limited (Note 1)	Beneficial owner	1,190,000,000 (L)		29.55%	–	1,190,000,000 (L)	29.55%
China Energy Conservation and Environmental Protection Group (Note 1)	Interest of controlled corporation	1,190,000,000 (L)		29.55%	–	1,190,000,000 (L)	29.55%
Ms. Luk Hoi Man (Note 2)	Beneficial owner	982,800 (L)		0.02%	–	750,354,548 (L)	18.63%
	Interest of spouse	711,646,600 (L)		17.67%	37,725,148 (L)		

(L): Long position, (S): Short position

Notes:

- China Energy Conservation and Environmental Protection (Hong Kong) Investment Company Limited is a wholly-owned subsidiary of China Energy Conservation and Environmental Protection Group (“CECEP”), therefore, under the SFO, CECEP is deemed to be interested in 1,190,000,000 Shares.
- Ms. Luk Hoi Man (“Ms. Luk”), the spouse of Mr. Xu Shengheng (“Mr. Xu”), holds 982,800 Shares. Mr. Xu is interested in 711,646,600 Shares and 37,725,148 Shares issuable pursuant to exercise of share options of the Company. Therefore, under SFO, Ms. Luk is deemed to be interested in 711,646,600 Shares and 37,725,148 underlying shares issuable upon the exercise of the share options of the Company in which Mr. Xu is interested.

Save as disclosed above, as at 31 December 2018, the directors of the Company were not aware of any other person (other than directors or chief executive of the Company) who had an interest or short position in the shares or underlying shares of the Company which would fall to be disclosed to the Company and the Stock Exchange under the provisions of Divisions 2 and 3 of Part XV of the SFO or which were required pursuant to Section 336 of the SFO, to be entered into the register referred to therein.

Report of the Directors

CONNECTED TRANSACTIONS

(I) Continuing Connected Transactions not exempt from Independent Shareholders' Approval Requirements

The continuing connected transactions not exempt from independent shareholders' approval requirements under Rule 20.34 of the GEM Listing Rules undertaken by the Group during the period under review are set out below:

(1) Financial services agreement

On 24 March 2016, the Company entered into the financial services agreement with China Energy Finance Company Limited (中節能財務有限公司), ("Finance Company"), a wholly owned subsidiary of China Energy Conservation and Environmental Protection Group Company ("CECEP"), a deemed substantial shareholder of the Company, whereby Finance Company agreed to provide the deposit services, the settlement services, the loan and guarantee services and the other financial services to the member(s) of the Group. The term of the financial services agreement is from the date of the Independent Shareholders' approval of the financial services agreement to 31 December 2018.

The above continuing connected transaction in relation to the financial services agreement was approved by the independent shareholders of the Company at the annual general meeting of the Company held on 30 May 2016.

The annual caps for the Loan and Guarantee Services to be provided by Finance Company to the Group and the maximum daily deposit amount with Finance Company for the period from 1 January 2018 to 31 December 2018 (the "Relevant Period") were RMB1,070,000,000 and RMB250,000,000 respectively. The actual maximum amount of Loan and Guarantee Services for the Relevant Period was zero and the actual daily balance recorded for the Deposit Services for the Relevant Period was approximately RMB5,000.

(2) Sale and purchase framework agreement

On 4 May 2016, the Company entered into the sale and purchase framework agreement with China Energy Conservation and Environmental Protection Group ("CECEP"), a deemed substantial shareholder of the Company, whereby CECEP and its subsidiaries agreed to purchase and the Company and its subsidiaries agreed to supply of the products and provision of services. The term of the sale and purchase framework agreement is from the date of the Independent Shareholders' approval of the sale and purchase framework agreement to 31 December 2018.

The above continuing connected transaction in relation to the sale and purchase framework agreement was approved by the independent shareholders of the Company at the extraordinary general meeting of the Company held on 26 September 2016.

The annual caps for the supply of the Products and provision of Services by the Company and its subsidiaries under the Sale and Purchase Framework Agreement for the period from 1 January 2018 to 31 December 2018 (the "Period") was RMB80,000,000. The actual amount recorded for the supply of the Products and provision of Services by the Company and its subsidiaries to CECEP and its subsidiaries for the Period was approximately RMB43,907,000.





Report of the Directors

(II) Continuing Connected Transactions exempt from Independent Shareholders' Approval Requirements

The continuing connected transactions exempt from independent shareholders' approval requirements under Rule 20.99 of the GEM Listing Rules undertaken by the Group during the period under review are set out below:

On 26 June 2018, Ever Source Science and Technology Development Group Co., Ltd. (恒有源科技發展集團有限公司) ("HYY"), a wholly owned subsidiary of the Company, entered into the Sale and Purchase Framework Agreement with Sichuan Changhong Air Conditioning Co., Ltd. (四川長虹空調有限公司), ("Sichuan Changhong") which held 49% equity interests of Hong Yuan Ground Source Heating Device Technology Co., Ltd. (宏源地能熱寶技術有限公司), a subsidiary of the Company, therefore Sichuan Changhong is a connected person of the Company at the subsidiary level (as defined under the GEM Listing Rules). As the Board has approved the transaction contemplated under the Sale and Purchase Framework Agreement; and the independent non-executive Directors have confirmed that the terms of the transaction contemplated under the Sale and Purchase Framework Agreement are fair and reasonable, and that such transaction is entered into on normal commercial terms, and is in the interests of the Company and its Shareholders as a whole. As such, the transaction contemplated under the Sale and Purchase Framework Agreement is subject to the reporting and announcement requirements, but is exempted from the circular, independent financial advice and Shareholders' approval requirements under Rule 20.99 of the GEM Listing Rules.

Pursuant to the Sale and Purchase Framework Agreement, HYY and its associates intended to provide installation engineering services for air-conditioning home appliance products ("HYY Services") to Sichuan Changhong and its associates, and Sichuan Changhong and its associates intended to sell air-conditioning home appliance products ("Changhong Products") to HYY and its associates, for a term commencing from 26 June 2018, being the date of the Sale and Purchase Framework Agreement, to 31 December 2020.

The annual caps for the HYY Services provided by HYY or its associates to Sichuan Changhong or its associates under the Sale and Purchase Framework Agreement for the period from 26 June 2018 to 31 December 2018 (the "Period") was RMB65,990,000. The actual amount recorded for HYY Services provided by HYY or its associates to Sichuan Changhong or its associates for the Period was approximately RMB4,473,000.

The annual caps for the Changhong Products sold by Sichuan Changhong or its associates to HYY or its associates under the Sale and Purchase Framework Agreement for the period from 26 June 2018 to 31 December 2018 (the "Period") was RMB152,500,000. The actual amount recorded for Changhong Products sold by Sichuan Changhong or its associates to HYY or its associates for the Period was approximately RMB3,597,000.

The Company's auditor 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 HKICPA. The auditor has issued an unqualified letter containing their findings and conclusions accordingly. The letter stated that (i) the above continuing connected transactions have been approved by the Board; (ii) the transactions involving the provision of goods or services by the Group were, in all material respects, in accordance with the pricing policies of the Group; (iii) the transactions were entered into, in all material respects, in accordance with the relevant agreements governing such transactions; and (iv) the above continuing connected transactions did not exceed their respective annual caps as set out in the Company's respective circulars dated 13 May 2016 and 30 August 2016 and the Company's announcement dated 26 June 2018.

Report of the Directors

The independent non-executive Directors have confirmed the above continuing connected transactions in accordance with Rule 20.53 of the GEM Listing Rules that the continuing connected transactions entered into by the Group were in the ordinary and usual course of its business, on normal commercial terms or better, and in accordance with the terms of the relevant agreements governing such transactions that are fair and reasonable and in the interests of the shareholders as a whole.

(III) Exempted Connected Transactions

- (1) A loan agreement dated 13 September 2016 entered into between the Zhong Jie Neng Hua Yu Fund Management Company Limited (中節能華禹基金管理有限公司) (the "Fund Company"), a wholly owned subsidiary of CECEP, as lender, Huishang Bank Hefei Sui Qi Road branch (徽商銀行合肥濉溪路支行) ("Huishang Bank") as the lending agent of the Fund Company, and Ever Source Science and Technology Development Group Co., Ltd. (恒有源科技發展集團有限公司) ("HYY") (an indirect wholly owned subsidiary of the Company), as borrower for the granting of the 3-year term loan of RMB400 million (the "Loan"). The Loan constituted a connected transaction but is fully exempt under Rule 20.88 of the GEM Listing Rules.

On 15 September 2016, CECEP and HYY entered into the guarantee service agreement, pursuant to which, CECEP agreed to provide guarantee for the Loan granted to HYY by the Fund Company (through Huishang Bank as its lending agent) and HYY agreed to pay to CECEP the guarantee fee at the rate of 2% per annum on the amount of the Loan. The guarantee service agreement constituted a connected transaction for the Company under Chapter 20 of the GEM Listing Rules. During the year ended 31 December 2018, the guarantee fee amounted to approximately HK\$9,466,000 was recognised in the statement of profit or loss covering the period from 1 January 2018 to 31 December 2018. As the applicable percentage ratios of the guarantee fee payable by HYY to CECEP for the guarantee service under the guarantee service agreement is less than 5%, the guarantee service is exempt from the circular (including independent financial advice) and shareholders' approval requirements under Rule 20.74(2) of the GEM Listing Rules.

- (2) A lease agreement dated 14 May 2016 entered into between CHYY (USA), LLC., a wholly owned subsidiary of the Company, as tenant, and Mr. Xu Shengheng, the joint chairman and an executive Director of the Company, as landlord, for a lease of office space in 1050 North 252nd Street, Waterloo, Douglas County, Nebraska, 68130, USA at a monthly rental rate of US\$500 which was further renewed at the same terms and conditions for a term of 3 years on 6 September 2018. The lease agreement constituted a connected transaction for the Company under Chapter 20 of the GEM Listing Rules. During the year ended 31 December 2018, the rental paid to Mr. Xu pursuant to the lease agreement amounted to approximately HK\$47,000. As the applicable percentage ratios of the rental payable are less than 0.1% and the lease agreement was made on normal commercial terms, this connected transaction is fully exempt under Rule 20.74 (1) of the GEM Listing Rules.

Details of other significant related party transactions of the Group during the year ended 31 December 2018 are set out in note 43 to the financial statements.

REMUNERATION POLICY

The remuneration policy of the Group for rewarding its employees is based on their performance, qualifications and competence.

The emoluments of the Directors of the Company are decided by the Board upon the recommendation by Remuneration Committee, having regard to the Company's operating results, individual performance and comparable market statistics.

The Company has adopted a share option scheme as an incentive to the Directors and eligible employees. Details of the share option scheme are set out in note 36 to the financial statements of this report.





Report of the Directors

COMPETITION AND CONFLICT OF INTERESTS

None of the directors, the management shareholders or substantial shareholders of the Company or any of their respective associates has engaged in any business that competes or may compete with the business of the Group or has any other conflict of interests, with the Group.

AUDIT COMMITTEE

The Company has an audit committee (the “Audit Committee”) established with written terms of reference in compliance with the GEM Listing Rules. The primary duties of the Audit Committee are to review and supervise the financial reporting process, risk management and internal controls systems of the Group and to provide advice to the directors of the Company.

The Audit Committee comprises four independent non-executive directors of the Company, namely Mr. Jia Wenzeng (the chairman of the Audit Committee), Mr. Wu Desheng, Mr. Wu Qiang and Mr. Guo Qingui. The Audit Committee has reviewed the Group’s audited final results for the year ended 31 December 2018 and has provided advice and comments thereon. The Audit Committee held five meetings during the year.

CORPORATE GOVERNANCE

The Company’s Corporate Governance Report is set out on pages 30 to 36.

ENVIRONMENTAL, SOCIAL AND GOVERNANCE REPORT

The Environmental, Social and Governance Report of the Company prepared in accordance with Appendix 20 of the GEM Listing Rules will be published within three months after the publication of the annual report of the Company.

SECURITIES TRANSACTIONS BY DIRECTORS

The Company has not adopted its own code of conduct regarding securities transactions by directors, but having made specific enquiry of all directors, the Company reported that during the year, the directors have complied with the required standard of dealings as set out in Rules 5.48 to 5.67 of the GEM Listing Rules and its code of conduct regarding securities transactions by directors.

AUDITOR

Following the resignation of SHINEWING (HK) CPA LIMITED as auditor of the Company on 9 November 2017, Ernst & Young was appointed as the auditor of the Company on 8 December 2017 to fill in the vacancy. Save as disclosed above, there were no other changes in auditor of the Company during the past three years. The consolidated financial statements of the Company for the year ended 31 December 2018 were audited by Ernst & Young. A resolution will be proposed at the forthcoming AGM to re-appoint Ernst & Young as the auditor of the Company.

For and on behalf of the Board

Xu Shengheng

Joint Chairman & Executive Director

Hong Kong, 26 March 2019

Corporate Governance Report

The board of Directors of the Company (the “Board”) is pleased to present the corporate governance report for the year ended 31 December 2018.

The Company is committed to maintaining high standards of corporate governance to protect the interests of the shareholders of the Company. The Company had complied with most of the code provisions set out in the Corporate Governance Code (the “Code”) contained in Appendix 15 of the GEM Listing Rules throughout the year ended 31 December 2018 (the “Reporting Period”). This report describes the corporate governance standards and practices used by the Company to direct and manage its business affairs. It also explains the applications of the Code and deviations, if any.

DIRECTORS’ SECURITIES TRANSACTIONS

The Company has not adopted its own code of conduct regarding securities transactions by directors, but having made specific enquiry of all Directors, the Company was not aware of any non-compliance with the required standard of dealings as set out in Rules 5.48 to 5.67 of the GEM Listing Rules during the Reporting Period.

BOARD OF DIRECTORS

As at 31 December 2018, the Board comprised of eleven Directors including six executive Directors, namely Mr. Xu Shengheng, Ms. Wang Yan, Ms. Chan Wai Kay Katherine, Mr. Wang Manquan, Mr. Zang Yiran and Mr. Dai Qi, an non-executive Director namely Mr. Yang Wei and four independent non-executive Directors, namely, Mr. Jia Wenzeng, Mr. Wu Desheng, Mr. Wu Qiang and Mr. Guo Qingui.

The composition of the Board ensures a balance of expertise and experience appropriate to the requirements of the business of the Company and to the exercising of independent opinion. At least one of the independent non-executive Directors has appropriate professional qualifications, or accounting or related financial management expertise.

The Board of Directors is responsible for the overall strategic development of the Group. It also monitors the financial performance, internal control and risk management of the Group’s business operations. Executive Directors are responsible for running the Group and executing the strategies adopted by the Board. The Board delegates day-to-day activities to the management with department heads responsible for different aspects of the business. The Non-Executive Directors serve the relevant function of bringing independent judgement on the development, performance and risk management of the Group through their contributions in board meetings. They are also serving on Audit Committee, Remuneration Committee and Nomination Committee.

According to the Articles of Associations of the Company, at each annual general meeting, one third of the Directors for the time being, or their number is not three or a multiple of three, then the number nearest one-third, shall retire from office by rotation, provided that every Director shall be subject to retirement by rotation at least once every three years.

To the knowledge of the Directors, the Board members have no financial, business, family or other material/relevant relationships with each other.

The Board normally has four scheduled meetings a year at quarterly interval and meets as and when required to discuss the overall business, development strategy, operations and financial reporting of the Company. During the year ended 31 December 2018, a total of four regular Board meetings were held.

Board minutes are kept by the secretary of the Company (the “Secretary”) and are open for inspection by the Directors of the Company. Each Director of the Company is entitled to have access to Board papers and related materials and has unrestricted access to the advice and services of the Secretary, and has the liberty to seek external professional advice if required.





Corporate Governance Report

During the year ended 31 December 2018, four Board meetings were held. Details of the attendance of the Directors at the meetings of the Board and its respective committees, as well as the general meetings were as follows:

Name of Director	Board Meeting	Audit Committee Meeting	Remuneration Committee Meeting	Nomination Committee Meeting	General Meeting
<i>Executive Directors</i>					
Mr. Xu Shengheng	4/4	N/A	2/2	1/1	1/1
Ms. Wang Yan (<i>Appointed on 10 August 2018</i>)	1/1	N/A	N/A	N/A	N/A
Mr. An Yi (<i>Resigned on 10 August 2018</i>)	1/3	N/A	1/2	0/1	1/1
Ms. Chan Wai Kay Katherine	4/4	N/A	N/A	N/A	1/1
Mr. Wang Manquan	4/4	N/A	N/A	N/A	1/1
Mr. Zang Yiran	4/4	N/A	N/A	N/A	1/1
Mr. Dai Qi	4/4	N/A	N/A	N/A	1/1
<i>Non-executive Director</i>					
Mr. Yang Wei (<i>Appointed on 10 August 2018</i>)	1/1	N/A	N/A	N/A	N/A
Mr. Zhao Youmin (<i>Resigned on 10 August 2018</i>)	3/3	N/A	N/A	N/A	1/1
<i>Independent non-executive Directors</i>					
Mr. Jia Wenzeng	4/4	5/5	2/2	1/1	0/1
Mr. Wu Desheng	4/4	5/5	2/2	1/1	1/1
Mr. Wu Qiang	4/4	5/5	2/2	1/1	1/1
Mr. Guo Qingui	4/4	5/5	2/2	1/1	1/1

Code provision A.6.7 of the Code requires that independent non-executive directors and other non-executive directors shall attend general meetings and develop a balanced understanding of the views of shareholders.

Code provision E.1.2 of the Code requires that the chairman of the board should attend the annual general meeting. He should also invite the chairmen of the audit, remuneration, nomination and any other committees (as appropriate) to attend.

Due to his engagement in other business, Mr. Jia Wenzeng, an independent non-executive Director and the chairman of the Audit Committee, did not attend the annual general meeting held on 14 May 2018.

CHAIRMAN AND CHIEF EXECUTIVE OFFICER

Under code provision A.2.1 of the Code requires that the roles of chairman and chief executive should be separate and should not be performed by the same individual. During the Reporting Period, the role of chairman was jointly performed by Mr. An Yi for the period from 1 January 2018 to 10 August 2018, Ms. Wang Yan for period from 10 August 2018 to 31 December 2018 and Mr. Xu Shengheng for the year, all of them are joint chairman of the Board. Mr. Wang Manquan has been the chief executive officer during the year.

NON-EXECUTIVE DIRECTORS

Under the Code Provision A.4.1, all the non-executive Directors should be appointed for a specific term, subject to re-election. At present, each of Mr. Yang Wei, the non-executive Director, Mr. Jia Wenzeng, Mr. Wu Desheng, Mr. Wu Qiang and Mr. Guo Qingui, the independent non-executive Directors, have been appointed for a specific term and subject to re-election.

The Company has received, from each of the independent non-executive Directors, an annual confirmation of their independence pursuant to Rule 5.09 of the GEM Listing Rules. The Company considers that all of the independent non-executive Directors are independent.

DIRECTORS' AND OFFICERS' LIABILITIES

The Company has arranged for appropriate insurance covering the liabilities of the Directors that may arise out the corporate activities, which has been complied with Code Provision A.1.8. The insurance coverage will be reviewed on an annual basis.

Corporate Governance Report

CONTINUOUS PROFESSIONAL DEVELOPMENT

All Directors, including independent non-executive Directors, should keep abreast of their collective responsibilities as Directors and of the businesses and activities of the Group. The Group also provides briefings and other training to develop and refresh the Directors' knowledge and skills, and updates all Directors on the latest developments regarding the GEM Listing Rules and other applicable regulatory requirements to ensure compliance and to enhance their awareness of good corporate governance practices. During the year ended 31 December 2018, the Directors have confirmed that they have received the training as follows:

Name of Directors	Reading journals, written training materials and/or updates	Viewing the director training webcast published by Stock Exchange	Receiving training from the Company's lawyer
Mr. Xu Shengheng	✓	✓	✓
Ms. Wang Yan	✓	✓	✓
Ms. Chan Wai Kay Katherine	✓	✓	✓
Mr. Wang Manquan	✓	✓	✓
Mr. Zang Yiran	✓	✓	✓
Mr. Dai Qi	✓	✓	✓
Mr. Yang Wei	✓	✓	✓
Mr. Jia Wenzeng	✓	✓	✓
Mr. Wu Desheng	✓	✓	✓
Mr. Wu Qiang	✓	✓	✓
Mr. Guo Qingui	✓	✓	✓

REMUNERATION COMMITTEE

A remuneration committee was formed in May 2006 with specific written terms of reference which deal clearly with its authority and duties in accordance with the requirements of the Code. The remuneration committee is responsible for reviewing and developing the remuneration policies of the Directors and senior management. The remuneration committee in designing the remuneration packages would consider factors such as salaries paid by comparable companies, time commitment and responsibilities of the Directors and senior management. The remuneration committee presently consists of four independent non-executive Directors, namely Mr. Wu Desheng (chairman of remuneration committee), Mr. Jia Wenzeng, Mr. Wu Qiang and Mr. Guo Qingui and two executive Directors, namely Mr. Xu Shengheng and Ms. Wang Yan, both of them are the deputy chairman of remuneration committee. During the Reporting Period, two meetings were held by the remuneration committee, among other things, to review the remuneration of the Directors and propose the directors' salaries/fee paid to the appointed Director during the year. In consideration of the directors' remuneration, no director is involved in deciding his own remuneration.

NOMINATION COMMITTEE

A nomination committee was formed by the Company on 21 March 2012 with specific written terms of reference which has been adopted by the Company are consistent with the requirements of the Code. The primary duties of the nomination committee are, among others, to review the structure, size and composition (including the skills, knowledge and experience) and to identify individuals suitably qualified to become Board members and select or make recommendations to the Board on the selection of individuals nominated for directorships. The nomination committee presently consists of two executive Directors, namely Mr. Xu Shengheng (the chairman of nomination committee) and Ms. Wang Yan (the deputy chairman of nomination committee) and four independent non-executive Directors, namely Mr. Jia Wenzeng, Mr. Wu Desheng, Mr. Wu Qiang and Mr. Guo Qingui. During the Reporting Period, the nomination committee held one meeting, among other things, to consider and recommend the appointment of Directors to fill the casual vacancies in consideration of the board diversity policy of the Company, the composition of the Board and the background of the candidates.





Corporate Governance Report

BOARD DIVERSITY POLICY

The Board adopted the board diversity policy (“Board Diversity Policy”) in accordance with the requirement set out in the Code. Such policy aims to set out the approach to achieve diversity on the Board. All Board appointments shall be based on meritocracy, and candidates shall be considered against objective criteria, having due regard for the benefits of diversity on the Board. Selection of candidates shall be based on a range of diversity perspectives, including but not limited to, gender, age, cultural and educational background, ethnicity, professional experience, skills, knowledge and length of service. The ultimate decision shall be based on merit and contribution that the selected candidates shall bring to the Board. The Nomination Committee monitors, from time to time, the implementation of the policy, and reviews, as appropriate, the policy to ensure the effectiveness of the policy. The Nomination Committee will continue to give adequate consideration to these measurable objectives when making recommendations of candidates for appointment to the Board.

AUDITOR’S REMUNERATION

The audit works of the Group for the year ended 31 December 2018 were performed by Ernst & Young. The total fee paid/payable in respect of the statutory audit and non-audit services provided by external auditor during the Reporting Period are set out below:

Services rendered	Fee paid/payable for the year ended 31 December 2018 <i>HK\$ '000</i>
Audit services	3,431
Non-audit services	226
	<hr/>
Total audit fee payable for the Reporting Period	3,657

AUDIT COMMITTEE

The Company established an audit committee with written terms of reference in compliance with the GEM Listing Rules. The primary duties of the audit committee are, among others, to review and supervise the financial reporting processes, risk management and internal control systems of the Group and to provide advice and comments to the Board accordingly.

The audit committee currently consists of four independent non-executive Directors, namely Mr. Jia Wenzeng (chairman of the audit committee), Mr. Wu Desheng, Mr. Wu Qiang and Mr. Guo Qingui.

During the Reporting Period, five meetings were held to consider and review, among others, the following matters:

- 1) the quarterly, interim and annual reports of the Company before submission to the Board and the impact of the changes in accounting policies and practices and compliance of the relevant accounting standards, the GEM Listing Rules;
- 2) the re-appointment of external auditor and the proposed audit fee;
- 3) meeting with auditors to discuss the audit plan and scope of work before commencement of the audit work;
- 4) review and discuss with auditors regarding the audited results and audit findings, including the deficiencies in internal control that are identified during the audit; and
- 5) review the risk management and internal control systems of the Group.

Corporate Governance Report

RESPECTIVE RESPONSIBILITIES OF DIRECTORS AND AUDITOR

The Directors acknowledged their responsibility for the preparation of the financial statements, which give a true and fair view of the financial position, financial performance and cash flows of the Group. The Auditor are responsible to form an independent opinion based on the audit, on the financial statements prepared by the Directors and report the opinion solely to the shareholders of the Company.

COMPANY SECRETARY

Ms. Wong Lai Yuk, the company secretary of the Group, is an associate member of The Hong Kong Institute of Chartered Secretaries in Hong Kong. Ms. Wong joined the Group in December 2001. During the Reporting Period, Ms. Wong (who is an employee of the Company) has duly complied with the relevant professional training requirement under Rule 5.15 of the GEM Listing Rules.

CORPORATE GOVERNANCE FUNCTIONS

The Board as a whole is responsible for performing the corporate governance duties including:

- (a) to develop and review the Company's policies and practices on corporate governance;
- (b) to review and monitor the training and continuous professional development of Directors and senior management;
- (c) to review and monitor the Company's policies and practices in compliance with legal and regulatory requirements; and
- (d) to review the Company's compliance with the code and disclosure in the Corporate Governance Report.

INTERNAL CONTROLS AND RISK MANAGEMENT

It is the responsibility of the Board to ensure that a sound and effective risk management and internal control system is in place for safeguarding the interests of the Shareholders and oversee management in design, implementation and monitoring of the risk management and internal control systems. Such systems are designed to manage the Group's risk rather than to eliminate the risk of failure to achieve business objectives of the Group, and can only provide reasonable assurance and not absolute assurance against material misstatement or loss.

The Group's risk management and internal control structure include a management structure with clearly defined lines of responsibility and limits of authority. The Group has comprehensive policies and guidelines in governing and controlling the daily operational and business activities and transactions. The Group adopted a three-line risk management approach to identify, analyze, assess, mitigate and handle risks. The first line of defence is that our department staff/frontline employees who must understand that their roles and responsibilities to identify, assess and monitor risks associated with their scope of works and transactions and should strictly follow internal control measures in their day-to-day transactions. The Group will enhance the compliance of internal control procedures by providing training and guidelines to department staff/frontline employees. The second line of defence is the Group's management that provides independent oversight of the internal control and risk management activities of the first line of defence. They are mainly responsible for ensuring and maintaining effective internal controls and for executing risk and control procedures, guiding the development and implementation of internal policies and procedures and ensuring that activities are consistent with goals and objectives of the Group and to better monitor and minimize the risks. As the final line of defence, the audit committee of the Company, with the advices and opinions from the external professional party (such as the external auditor) and review by the internal audit function, ensures that the first and second lines of defence are effective.

During the Reporting Period, the Company has put continuous effort in enhancing the control and management system and reinforcing the supervision efforts, so as to ensure that the Company can withstand changes in its operations and other external influences on its financial and operation.





Corporate Governance Report

Major works performed during the reporting period to enhance the internal control and risk management are as follow:

- The Board has reviewed, analyzed and compared the overall results performance to the budget quarterly with specific financial indicators in order to monitor the execution of the business plan in terms of revenue, cost, profit, funding etc. and ensure the efficient use of business resources.
- Trainings were provided by the auditors to financial staff to enhance the reporting procedures and financial updates.
- Account receivables team was set up to specially follow up long overdue payments and regular meetings were held to co-ordinate the different departments including sales persons to collect payments.
- The management has further revised the internal control procedures in response to the daily operational needs.
- The Group has emphasized the importance of work safety. Procedures for carrying site work is in place and proper training on work safety would be provided to workers and site inspection would be made regularly.
- The internal audit team of the Group provided reports directly to the Audit Committee on a regular basis, for their work performed, audit results and observations of internal control and risk management systems.
- Appropriate action was taken in response to the deficiencies in internal control as well as business and financial risks as identified and recommendations made by Directors.

The management of the Group believes that risk management and internal control systems were effective and adequate and provided such confirmation to the audit committee of the Company for the year. Furthermore, the audit committee has also independently reviewed the risk management and internal control systems of the Group and provided comments thereon.

HANDLING AND DISSEMINATION OF INSIDE INFORMATION

The Company has maintained internal guidelines for ensuring that inside information is disseminated to the public in an equal and timely manner in accordance with the applicable laws and regulations. Senior executives of the legal, corporate affairs and financial control functions of the Group are delegated with responsibilities to control and monitor the proper procedures to be observed on the disclosure of inside information. Access to inside information is at all times confined to relevant senior executives and confined on “need-to-know” basis. Blackout period and securities dealing restrictions notification will be sent to the relevant directors. Reminders will be given to employees possessing of inside information for preservation of confidentiality and restriction of dealing of securities of the Company. Relevant personnel and other professional parties involved are reminded to preserve confidentiality of the inside information until it is publicly disclosed.

COMMUNICATIONS WITH SHAREHOLDERS AND INVESTORS

The Company considers that effective communication with shareholders is essential for enhancing investor relations and investor understanding of the Group’s business performance and strategies. The Company also recognizes the importance of transparency and timely disclosure of corporate information, which will enable shareholders and investors to make the best investment decisions.

The disclosure of the Group’s information in a reasonable and time manner by the Board is to facilitate the shareholders as well as the investors to have better understanding in relation to the business performance, operations and strategies of the Group. Through our website at www.cgsenergy.com.hk which allow the Company’s potential and existing investors as well as the public to assess and acquire the up-to-date company and financial information.

Shareholders are provided with contact details of the Company, such as fax number, email address and postal address, in order to enable them to make any query that they may have with respect to the Company. They can also send their enquiries to the Board through these means. The contact details of the Company are provided in the annual report and the Company’s website.

Corporate Governance Report

The Board welcomes views of shareholders and encourages them to attend general meetings to raise any concerns they might have with the Board or the management directly. Board members and appropriate senior staff of the Group are available at the meetings to answer any questions raised by shareholders.

PROCEDURES FOR SHAREHOLDERS TO CONVENE AN EXTRAORDINARY GENERAL MEETING

To safeguard shareholders' interests and rights, separate resolutions are proposed at shareholders' meetings on each substantial issue, including the election of individual Directors, for shareholders' consideration and voting. Besides, pursuant to the Articles of Association, any one or more Shareholder(s) holding at the date of deposit of the requisition not less than one-tenth of the paid up capital of the Company carrying the right of voting at general meetings of the Company shall at all times have the right, by written requisition to the Board or the Secretary of the Company, to require an extraordinary general meeting to be called by the Board for the transaction of any business specified in such requisition.

Shareholders may send written enquiries to the Company for putting forward any enquiries or proposals to the Board of the Company. Contact details are as follows:

Address: Units 3709-10, 37/F, The Center,
99 Queen's Road Central,
Central, Hong Kong
Fax: 852-37539833
E-mail: info@cgsenergy.com.hk

For the avoidance of doubt, shareholder(s) must deposit and send the original duly signed written requisition, notice or statement, or enquiry (as the case may be) to the above address and provide their full name, contact details and identification in order to give effect thereto. Shareholders' information may be disclosed as required by law.

CONSTITUTIONAL DOCUMENTS

The name of the Company was changed from "CHINA GROUND SOURCE ENERGY INDUSTRY GROUP LIMITED 中國地能產業集團有限公司" to "CHINA GEOTHERMAL INDUSTRY DEVELOPMENT GROUP LIMITED 中國地熱能產業發展集團有限公司" on 22 May 2018. Save as above, during the Reporting Period, there were no changes in any of the Company's constitutional documents.





Independent Auditor's Report



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TO THE SHAREHOLDERS OF
CHINA GEOTHERMAL INDUSTRY DEVELOPMENT GROUP LIMITED
(Incorporated in the Cayman Islands with limited liability)

OPINION

We have audited the consolidated financial statements of China Geothermal Industry Development Group Limited (the "Company") and its subsidiaries (the "Group") set out on pages 42 to 158, which comprise the consolidated statement of financial position as at 31 December 2018, and the consolidated statement of profit or loss, the consolidated statement of comprehensive income, the consolidated statement of changes in equity and the consolidated statement of cash flows for the year then ended, and notes to the consolidated financial statements, including a summary of significant accounting policies.

In our opinion, the consolidated financial statements give a true and fair view of the consolidated financial position of the Group as at 31 December 2018, and of its consolidated financial performance and its consolidated cash flows for the year then ended in accordance with Hong Kong Financial Reporting Standards ("HKFRSs") issued by the Hong Kong Institute of Certified Public Accountants ("HKICPA") and have been properly prepared in compliance with the disclosure requirements of the Hong Kong Companies Ordinance.

BASIS FOR OPINION

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

KEY AUDIT MATTERS

Key audit matters are those matters that, in our professional 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. For each matter below, our description of how our audit addressed the matter is provided in that context.

We have fulfilled the responsibilities described in the *Auditor's responsibilities for the audit of the consolidated financial statements* section of our report, including in relation to these matters. Accordingly, our audit included the performance of procedures designed to respond to our assessment of the risks of material misstatement of the consolidated financial statements. The results of our audit procedures, including the procedures performed to address the matters below, provide the basis for our audit opinion on the accompanying consolidated financial statements.

Independent Auditor's Report

KEY AUDIT MATTERS *(Continued)*

Key audit matter	How our audit addressed the key audit matter
<i>Revenue recognition on shallow geothermal energy contracts</i>	
<p>The Group recognises revenue from shallow geothermal energy contracts over time, using an input method which is to recognise revenue based on the proportion of actual costs incurred relative to the estimated total costs in fulfilling the relevant performance obligations. The input method involves the use of management's significant judgements and estimates, including estimates of total contract revenues, total contract costs, remaining costs to completion and contract risks. In addition, revenue, cost of sales and gross profit realised on such contracts can vary from the Group's original estimates because of changes in conditions.</p> <p>The significant accounting judgements and estimates and disclosures for the revenue recognition on shallow geothermal energy contracts are included in notes 3 and 5 to the consolidated financial statements.</p>	<p>We obtained material shallow geothermal energy contracts to check the contract revenues and to review the key contract terms. We assessed the contract costs incurred by sample testing supporting documents, such as payment vouchers, supporting suppliers' invoices and contracts, and performing cut-off testing procedures. We assessed the reliability of estimates made by management in the determination of estimated total contract costs by reviewing the preparation, examination and modification process, sample testing key cost elements to material contracts, reviewing the modification of material contracts for any update on estimated total contract costs and the accuracy of prior year's budgets. We re-calculated the performance progress, based on accumulative actual costs incurred to the estimated total contract costs and the revenues recognised on a sampling basis. In addition, we performed analytical review procedures on the gross margins of major contracts of the Group.</p>
<i>Impairment of trade receivables and contract assets</i>	
<p>As at 31 December 2018, the Group had trade receivables and contract assets of HK\$143,691,000 and HK\$270,760,000, respectively.</p> <p>The impairment allowance of trade receivables and contract assets for expected credit losses is recognised based on management's assessment, which involves the use of significant judgements and accounting estimates including current situations of the customers, historical payment records, existence of disputes and future economic conditions.</p> <p>The significant accounting judgements and estimates and disclosures for the impairment of trade receivables and contract assets are included in notes 3, 22 and 24 to the consolidated financial statements.</p>	<p>We assessed management's accounting estimates relevant to the impairment allowance of trade receivables and contract assets for expected credit losses by discussing the application of simplified approach in calculating expected credit losses with management, evaluating customers' financial position, especially for those with significant overdue balances and checking public available information, assessing the grouping of various customer segments and the historical observed loss rates, checking the historical and post year end payment records.</p>





Independent Auditor's Report

KEY AUDIT MATTERS *(Continued)*

Key audit matter	How our audit addressed the key audit matter
<i>Fair values of investment properties and leasehold land and buildings</i>	
<p>As at 31 December 2018, the Group had significant amounts of investment properties and leasehold land and buildings that were measured at fair value using significant unobservable inputs (Level 3 in the fair value hierarchy). Management engaged an independent external valuer with relevant qualifications to perform the valuation of such properties.</p> <p>The valuation depends on a range of estimates and assumptions, such as the analysis of the economic environment and future trend of the regions where the investment properties and leasehold land and buildings are located, construction cost to complete, anticipated rentals in the future and the discount rates. The changes in estimates and assumptions would result in changes in the fair values of the investment properties and leasehold land and buildings.</p> <p>The significant accounting judgements and estimates and further details about the fair values of investment properties and leasehold land and buildings are included in notes 3, 13 and 14 to the consolidated financial statements.</p>	<p>We assessed the objectivity, independence and competence of the independent external valuer engaged by management. We reviewed and assessed the valuation method, assumptions as well as the key valuation inputs applied, such as lease term, current average rentals, anticipated rentals in the future, lease area, estimated construction costs and the discount rates, with the assistance from our internal valuation specialists. Our procedures included, among others, discussions with management and the external valuer about anticipated rentals in the future, assessing the estimates by management in the determination of estimated construction costs, checking input data against the current signed rental contracts, historical and market data and benchmarking discount rate to companies in similar industries. We further reviewed the presentation and disclosures in the consolidated financial statements on the fair values of investment properties and leasehold land and buildings.</p>
<i>Impairment of goodwill</i>	
<p>Management is required to test goodwill for impairment on an annual basis and the process involves significant management judgements and estimates. As at 31 December 2018, the Group recorded goodwill before impairment provision of approximately HK\$465,760,000 which was allocated to an individual cash-generating unit, the "shallow geothermal energy" segment. Due to the deterioration of the performance of the "shallow geothermal energy" segment in 2018, the assessment of the recoverability of goodwill resulted in an impairment provision of HK\$201,881,000 in the current year. The assessment process and sensitivity analysis, which were performed by management with the assistance from an independent external valuer, were difficult and complex and required management judgements and were affected by expected future market conditions.</p> <p>The significant accounting judgements and estimates and disclosures of goodwill are included in notes 3 and 16 to the consolidated financial statements.</p>	<p>We assessed the objectivity, independence and competence of the independent external valuer engaged by management. We have involved our internal valuation specialists to assist us in the evaluation of the key assumptions used in the impairment analyses, such as EBIT ratio, long-term growth rates and the discount rate. Our procedures included testing the assumptions used in the cash flow forecast by checking uncompleted signed contracts, discussing with management about potential contracts and assessing the accuracy of previous forecasts by comparison with the actual performance. We also performed sensitivity analyses around key drivers of the cash flow forecasts and discussed with management on the outcomes of the assessment. We further assessed the adequacy of the disclosures regarding goodwill.</p>

Independent Auditor's Report

OTHER INFORMATION INCLUDED IN THE ANNUAL REPORT

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

In preparing the consolidated financial statements, the directors of the Company 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 of the Company either intend to liquidate the Group or to cease operations or have no realistic alternative but to do so.

The directors of the Company 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. Our 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 HKSAAs 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 HKSAAs, 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.





Independent Auditor's Report

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

- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Group's internal control.
- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by the directors.
- Conclude on the appropriateness of the directors' use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Group's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the consolidated financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the Group to cease to continue as a going concern.
- Evaluate the overall presentation, structure and content of the consolidated financial statements, including the disclosures, and whether the consolidated financial statements represent the underlying transactions and events in a manner that achieves fair presentation.
- Obtain sufficient appropriate audit evidence regarding the financial information of the entities or business activities within the Group to express an opinion on the consolidated financial statements. We are responsible for the direction, supervision and performance of the group audit. We remain solely responsible for our audit opinion.

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

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

From the matters communicated with 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 Yee Chung Man.

Ernst & Young
Certified Public Accountants

Hong Kong
26 March 2019

Consolidated Statement of Profit or Loss

Year ended 31 December 2018

	Notes	2018 HK\$'000	2017 HK\$'000
REVENUE	5	396,793	778,153
Cost of sales		(366,994)	(614,244)
Gross profit		29,799	163,909
Other income and gains	5	10,210	37,777
Selling and distribution expenses		(26,277)	(23,302)
Administrative expenses		(112,326)	(115,669)
Impairment losses on trade and bills receivables, net	6	(16,084)	–
Impairment losses on prepayments, deposits and other receivables, net	6	(5,521)	–
Impairment losses on contract assets, net	6	(50,966)	–
Finance costs	7	(46,590)	(48,568)
Fair value changes on investment properties	14	11,204	25,900
Other expenses		(203,140)	(17,227)
Share of profits and losses of:			
A joint venture		458	276
Associates		(6,746)	2,473
Share-based payment expenses	36	(3,088)	(9,546)
(LOSS)/PROFIT BEFORE TAX	6	(419,067)	16,023
Income tax credit/(expense)	10	556	(12,061)
(LOSS)/PROFIT FOR THE YEAR		(418,511)	3,962
Attributable to:			
Owners of the parent		(410,297)	10,533
Non-controlling interests		(8,214)	(6,571)
		(418,511)	3,962
(LOSS)/EARNINGS PER SHARE ATTRIBUTABLE TO ORDINARY EQUITY HOLDERS OF THE PARENT	12		
Basic and diluted (expressed in HK\$ cents)		(10.19)	0.30





Consolidated Statement of Comprehensive Income

Year ended 31 December 2018

	Notes	2018 HK\$ '000	2017 HK\$ '000
(LOSS)/PROFIT FOR THE YEAR		(418,511)	3,962
OTHER COMPREHENSIVE (LOSS)/INCOME			
Other comprehensive (loss)/income that may be reclassified to profit or loss in subsequent periods:			
Available-for-sale investments:			
Changes in fair value		–	(5,188)
Reclassification adjustment for losses included in the consolidated statement of profit or loss			
– impairment loss		–	6,189
		–	1,001
Exchange differences:			
Exchange differences on translation of foreign operations		(49,317)	86,610
Share of other comprehensive (loss)/income of a joint venture		(389)	536
Share of other comprehensive (loss)/income of associates		(801)	1,542
Net other comprehensive (loss)/income that may be reclassified to profit or loss in subsequent periods		(50,507)	89,689
Other comprehensive (loss)/income that will not to be reclassified to profit or loss in subsequent periods:			
Gains on property revaluation	13	5,360	14,912
Equity investments designated at fair value through other comprehensive income:			
Changes in fair value		(19,209)	–
Income tax effect		4,823	–
		(14,386)	–
Net other comprehensive (loss)/income that will not to be reclassified to profit or loss in subsequent periods		(9,026)	14,912
OTHER COMPREHENSIVE (LOSS)/INCOME FOR THE YEAR, NET OF TAX		(59,533)	104,601
TOTAL COMPREHENSIVE (LOSS)/INCOME FOR THE YEAR		(478,044)	108,563
Attributable to:			
Owners of the parent		(468,646)	109,619
Non-controlling interests		(9,398)	(1,056)
		(478,044)	108,563

Consolidated Statement of Financial Position

31 December 2018

	Notes	2018 HK\$'000	2017 HK\$'000
NON-CURRENT ASSETS			
Property, plant and equipment	13	318,590	349,935
Investment properties	14	663,958	601,607
Deposits paid for acquisitions of land use rights	15	100,566	105,802
Goodwill	16	263,879	465,760
Investment in a joint venture	17	7,647	7,578
Investments in associates	18	49,824	40,594
Equity investments designated at fair value through other comprehensive income	19	238,974	–
Available-for-sale investments	19	–	99,932
Deferred tax assets	34	41,529	30,324
Long-term prepayments	25	933	176,631
Contract assets	22	18,825	–
Trade receivables	24	65,736	96,408
Total non-current assets		1,770,461	1,974,571
CURRENT ASSETS			
Inventories	20	56,880	40,950
Properties held for sale	21	90,780	95,507
Trade and bills receivables	24	78,773	103,310
Prepayments, deposits and other receivables	25	169,167	245,687
Contract assets	22	251,935	–
Amounts due from customers for contract work	23	–	514,962
Amount due from a joint venture	27	745	202
Financial assets at fair value through profit or loss	28	209	3,072
Time deposits	29	231	–
Pledged deposits	29	1,549	–
Cash and cash equivalents	29	72,934	122,004
Total current assets		723,203	1,125,694
CURRENT LIABILITIES			
Trade and bills payables	30	473,641	381,705
Other payables and accruals	31	138,417	162,525
Contract liabilities	22	56,510	–
Amounts due to customers for contract work	23	–	12,290
Amounts due to associates	27	8,779	18,644
Amounts due to related companies	26	25,445	11,203
Interest-bearing bank borrowings	32	456,517	89,693
Tax payable		154,175	161,075
Total current liabilities		1,313,484	837,135
NET CURRENT (LIABILITIES)/ASSETS		(590,281)	288,559
TOTAL ASSETS LESS CURRENT LIABILITIES		1,180,180	2,263,130





Consolidated Statement of Financial Position

31 December 2018

	Notes	2018 HK\$'000	2017 HK\$'000
TOTAL ASSETS LESS CURRENT LIABILITIES		1,180,180	2,263,130
NON-CURRENT LIABILITIES			
Other payables and accruals	31	10,472	9,547
Interest-bearing bank borrowings	32	–	480,286
Deferred income	33	10,021	10,542
Deferred tax liabilities	34	74,825	75,725
Total non-current liabilities		95,318	576,100
Net assets		1,084,862	1,687,030
EQUITY			
Equity attributable to owners of the parent			
Share capital	35	313,793	313,793
Reserves	37	737,601	1,313,417
		1,051,394	1,627,210
Non-controlling interests		33,468	59,820
Total equity		1,084,862	1,687,030

Chan Wai Kay Katherine
Director

Zang Yiran
Director

Consolidated Statement of Changes in Equity

Year ended 31 December 2018

Notes	Attributable to owners of the parent												Total equity
	Share capital	Share premium	Statutory reserve	Asset		Special reserve	Capital reserve	Share option reserve	Exchange fluctuation reserve	Retained profits	Total	Non-controlling interests	
				revaluation reserve	Contributed surplus								
HK\$ '000	HK\$ '000	HK\$ '000	HK\$ '000	HK\$ '000	HK\$ '000	HK\$ '000	HK\$ '000	HK\$ '000	HK\$ '000	HK\$ '000	HK\$ '000	HK\$ '000	HK\$ '000
At 1 January 2017	223,990	881,489	2,935	28,086	154,381	2,975	31,811	36,483	(59,420)	93,117	1,395,847	45,455	1,441,302
Profit/(loss) for the year	-	-	-	-	-	-	-	-	-	10,533	10,533	(6,571)	3,962
Other comprehensive income/(loss) for the year:													
Changes in fair value of available-for-sale investments, net of tax	-	-	-	-	-	-	1,001	-	-	-	1,001	-	1,001
Exchange differences related to foreign operations	-	-	-	-	-	-	-	-	81,095	-	81,095	5,515	86,610
Gain on property revaluation	13	-	-	14,912	-	-	-	-	-	-	14,912	-	14,912
Share of other comprehensive income of a joint venture	-	-	-	-	-	-	-	-	536	-	536	-	536
Share of other comprehensive income of associates	-	-	-	-	-	-	-	-	1,542	-	1,542	-	1,542
Total comprehensive income/(loss) for the year	-	-	-	14,912	-	-	1,001	-	83,173	10,533	109,619	(1,056)	108,563
Issue of shares	35	89,803	25,252	-	-	-	-	-	-	-	115,055	-	115,055
Share issue expenses	-	(2,857)	-	-	-	-	-	-	-	-	(2,857)	-	(2,857)
Equity-settled share option arrangements	36	-	-	-	-	-	-	9,546	-	-	9,546	-	9,546
Disposal of subsidiaries	-	-	-	-	-	-	-	-	-	-	-	15,421	15,421
At 31 December 2017	313,793	903,884*	2,935*	42,998*	154,381*	2,975*	32,812*	46,029*	23,753*	103,650*	1,627,210	59,820	1,687,030



Consolidated Statement of Changes in Equity

Year ended 31 December 2018

	Attributable to owners of the parent													
	Notes	Share capital HK\$'000	Share premium HK\$'000	Statutory reserve HK\$'000	Asset revaluation reserve HK\$'000	Contributed surplus HK\$'000	Special reserve HK\$'000	Capital reserve HK\$'000	Share option reserve HK\$'000	Exchange fluctuation reserve HK\$'000	Retained profits	Non-controlling interests HK\$'000	Total equity HK\$'000	
											(Accumulated losses)			Total
At 31 December 2017		313,793	903,884	2,935	42,998	154,381	2,975	32,812	46,029	23,753	103,650	1,627,210	59,820	1,687,030
Effect of adoption of HKFRS 9	2.2	-	-	-	-	-	-	(4,977)	-	-	(105,867)	(110,844)	(16,368)	(127,212)
Effect of adoption of HKFRS 15	2.2	-	-	-	-	-	-	-	-	-	-	-	-	-
At 1 January 2018		313,793	903,884	2,935	42,998	154,381	2,975	27,835	46,029	23,753	(2,217)	1,516,366	43,452	1,559,818
Loss for the year		-	-	-	-	-	-	-	-	-	(410,297)	(410,297)	(8,214)	(418,511)
Other comprehensive income/(loss) for the year:														
Changes in fair value of equity														
investments at fair value through other comprehensive income, net of tax		-	-	-	-	-	-	(14,386)	-	-	-	(14,386)	-	(14,386)
Exchange differences related to foreign operations		-	-	-	-	-	-	-	-	(48,133)	-	(48,133)	(1,184)	(49,317)
Gain on property revaluation	13	-	-	-	5,360	-	-	-	-	-	-	5,360	-	5,360
Share of other comprehensive loss of a joint venture		-	-	-	-	-	-	-	-	(389)	-	(389)	-	(389)
Share of other comprehensive loss of associates		-	-	-	-	-	-	-	-	(801)	-	(801)	-	(801)
Total comprehensive income/(loss) for the year		-	-	-	5,360	-	-	(14,386)	-	(49,323)	(410,297)	(468,646)	(9,398)	(478,044)
Equity-settled share option arrangements	36	-	-	-	-	-	-	-	3,088	-	-	3,088	-	3,088
Disposal of equity interests in a subsidiary without loss of control		-	586	-	-	-	-	-	-	-	-	586	(586)	-
At 31 December 2018		313,793	904,470*	2,935*	48,358*	154,381*	2,975*	13,449*	49,117*	(25,570)*	(412,514)*	1,051,394	33,468	1,084,862

* These reserve accounts comprise the consolidated reserves of HK\$737,601,000 (2017: HK\$1,313,417,000) in the consolidated statement of financial position.

Consolidated Statement of Cash Flows

Year ended 31 December 2018

	Notes	2018 HK\$ '000	2017 HK\$ '000
CASH FLOWS FROM OPERATING ACTIVITIES			
(Loss)/profit before tax:		(419,067)	16,023
Adjustments for:			
Finance costs	7	46,590	48,568
Interest income	5	(3,914)	(782)
Loss/(gain) on disposal of items of property, plant and equipment	6	536	(6,535)
Loss on disposal of available-for-sale investments	6	–	463
Gain on disposal of subsidiaries	5	–	(24,236)
Dividend income from equity investments at fair value through other comprehensive income/available-for-sale investments	5	(4,141)	(2,433)
Depreciation of property, plant and equipment	6	16,217	17,666
Fair value change on financial assets at fair value through profit or loss	5	(283)	(661)
Dividend income from financial assets at fair value through profit or loss	5	–	(5)
Loss on uncertainty in respect of collectability of contract assets/ amounts due from customers for contract work, net	6	50,966	58,678
Changes in fair value of investment properties	6	(11,204)	(25,900)
Impairment loss recognised in respect of trade and bills receivables, net	6	16,084	10,464
Impairment loss recognised in respect of prepayments, deposits and other receivables, net	6	(5,521)	–
Impairment loss recognised in respect of available-for-sale investments		–	6,189
Impairment loss recognised in respect of goodwill	6	201,881	–
Share-based payment expenses	36	3,088	9,546
Share of profits and losses of associates		6,746	(2,473)
Share of profits and losses of a joint venture		(458)	(276)
		(102,480)	104,296
(Increase)/decrease in inventories		(18,063)	24,713
(Increase)/decrease in trade and bills receivables		(29,364)	35,903
Decrease/(increase) in prepayments, deposits and other receivables		64,907	(75,629)
Decrease in contract assets		41,616	–
Increase in amounts due from customers for contract work		–	(229,091)
Increase in pledged deposits		(1,549)	–
Increase in time deposits		(231)	–
Decrease in an amount due from a related company		–	570
Increase in trade and bills payables		111,810	148,109
Increase in other payables and accruals		20,396	34,325
(Decrease)/increase in amounts due to associates		(8,894)	18,644
Increase in amounts due to related companies		5,706	–
Increase in contract liabilities		23,393	–
Decrease in amounts due to customers for contract work		–	(943)
Cash generated from operations		107,247	60,897
Income tax paid		(264)	(2,282)
Net cash flows from operating activities		106,983	58,615





Consolidated Statement of Cash Flows

Year ended 31 December 2018

	Notes	2018 HK\$ '000	2017 HK\$ '000
Net cash flows from operating activities		106,983	58,615
CASH FLOWS FROM INVESTING ACTIVITIES			
Interest received		1,697	782
Dividend income from equity investments at fair value through other comprehensive income/available-for-sale investments		4,141	2,433
Dividend income from financial assets at fair value through profit or loss		–	5
Purchases of items of property, plant and equipment		(5,880)	(7,456)
Purchases of financial assets at fair value through profit or loss		–	(2,346)
Disposal of financial assets at fair value through profit or loss		2,986	–
Proceeds on disposal of items of property, plant and equipment		8,531	12,640
Deposit paid for acquisitions of land use rights		–	(19,024)
Prepayments paid for an investment	25	–	(171,690)
Development costs paid for investment properties under construction or development	14	(22,514)	(21,933)
Repayment from associates		–	7,018
Disposal of subsidiaries		582	20,004
Investments in associates		(16,777)	–
Net cash flows used in investing activities		(27,234)	(179,567)
CASH FLOWS FROM FINANCING ACTIVITIES			
New bank borrowings		–	215,529
Proceeds from issue of shares	35	–	115,055
Share issue expenses		–	(2,857)
Repayment of bank borrowings	38	(89,693)	(125,836)
Repayment to a joint venture		–	(1,393)
Interest paid		(37,124)	(37,365)
Net cash flows (used in)/from financing activities		(126,817)	163,133
NET (DECREASE)/INCREASE IN CASH AND CASH EQUIVALENTS		(47,068)	42,181
Cash and cash equivalents at beginning of year		122,004	73,931
Effect of foreign exchange rate changes, net		(2,002)	5,892
CASH AND CASH EQUIVALENTS AT END OF YEAR		72,934	122,004
ANALYSIS OF BALANCES OF CASH AND CASH EQUIVALENTS			
Cash and bank balances	29	64,804	117,021
Cash held at non-bank financial institutions	29	8,130	4,983
Cash and cash equivalents as stated in the consolidated statement of financial position and consolidated statement of cash flows		72,934	122,004

Notes to Financial Statements

31 December 2018

1. CORPORATE AND GROUP INFORMATION

The Company was incorporated in the Cayman Islands as an exempted company with limited liability and its shares are listed on the GEM of The Stock Exchange of Hong Kong Limited (the "Stock Exchange"). The addresses of the registered office and principal place of business of the Company are disclosed in the "Corporate Information" section to the annual report.

During the year, the Group was involved in the following principal activities:

- Provision, installation and maintenance of shallow geothermal energy utilisation system
- Trading of air conditioning heat pump products
- Investment in properties for their potential rental income
- Trading of securities and other types of investments

Information about subsidiaries

Particulars of the Company's principal subsidiaries are as follows:

Name	Place of incorporation/ registration and business	Issued ordinary/ registered share capital	Percentage of equity attributable to the Company		Principal activities
			Direct	Indirect	
CGSE Ever Source Group Limited (i)	British Virgin Islands	US dollars ("US\$") 166,667	100	–	Investment holding and trading of securities
Beijing Enterprises Source (Beijing) Ever Company Limited* (i)(ii) ("北京北控恒有源 科技發展有限公司")	People's Republic of China ("PRC")	US\$ 3,000,000	–	100	Technical know-how holding
Beijing Ever Source Property Management Limited* (i)(iii) ("北京恒有源物業管理 有限公司")	PRC	Renminbi ("RMB") 3,000,000	–	100	Property management and technical support service
Ever Source Science & Technology Development Group Co., Ltd.* (i)(ii) ("恒有源科技發展集團有限公司")	PRC	RMB 239,188,502	–	100	Production and sales of geothermal energy systems
Beijing Ever Source Environmental System Installation Limited* (i)(iii) ("北京恒有源環境系統設備 安裝工程有限公司")	PRC	RMB 50,000,000	–	100	Installation of energy systems
Heng Run Feng Reality (Dalian) Company Ltd.* (i)(ii) ("恒潤豐置業(大連)有限公司")	PRC	US\$ 12,000,000	–	100	Property investment and development
Hong Yuan Ground Source Heating Device Technology Co., Ltd* (i)(iii) ("宏源地能熱費技術有限公司")	PRC	RMB 50,000,000	–	51	Sale of air conditioning heat pump products





Notes to Financial Statements

31 December 2018

1. CORPORATE AND GROUP INFORMATION *(Continued)*

Information about subsidiaries *(Continued)*

- * The English names of the companies registered in the PRC represent the best efforts of management of the Company in directly translating the Chinese names of the companies as no English names have been registered.
- (i) Not audited by Ernst & Young, Hong Kong or another member firm of the Ernst & Young global network.
 - (ii) The subsidiaries are wholly-foreign-owned enterprises established in the PRC.
 - (iii) The subsidiaries are registered as companies with limited liability under PRC law.

The above table lists the subsidiaries of the Company which, in the opinion of the directors, principally affected the results for the year or formed a substantial portion of the net assets of the Group. To give details of other subsidiaries would, in the opinion of the directors, result in particulars of excessive length.

2.1 BASIS OF PREPARATION

These financial statements have been prepared in accordance with Hong Kong Financial Reporting Standards (the “HKFRSs”) (which include all Hong Kong Financial Reporting Standards, Hong Kong Accounting Standards (the “HKASs”) and Interpretations) issued by the Hong Kong Institute of Certified Public Accountants (the “HKICPA”), accounting principles generally accepted in Hong Kong and the disclosure requirements of the Hong Kong Companies Ordinance. They have been prepared under the historical cost convention, except for investment properties, leasehold land and buildings classified as property, plant and equipment, and equity investments which have been measured at fair value. These financial statements are presented in Hong Kong dollars and all values are rounded to the nearest thousand except when otherwise indicated.

Going concern basis

During the year ended 31 December 2018, the Group incurred a consolidated net loss of HK\$418,511,000 and had a consolidated accumulated losses of HK\$412,514,000. As at 31 December 2018, the Group had net current liabilities of HK\$590,281,000.

In view of the net current liabilities position, the directors have given careful consideration to the future liquidity and performance of the Group and its available sources of finance in assessing whether the Group will have sufficient financial resources to continue as a going concern. In order to improve the Group’s liquidity and cash flows to sustain the Group as a going concern, the Group implemented or is in the process of implementing the following measures:

- On 7 March 2019, the Company entered into the financial services agreement with China Energy Finance Company Limited (“Finance Company”), whereby Finance Company agreed to provide the deposit services, the settlement services, the loan and guarantee services and the other financial services to the Group for the period from 7 March 2019 to 31 December 2021. Finance Company would provide the loan and guarantee services to the member(s) of the Group in an aggregate amount of RMB1,000,000,000.
- In December 2017, the Company invested RMB143 million in an insurance company. This equity investment shall not be disposed by the Company within one year since the establishment of the insurance company before 28 February 2019. The fair value of this equity investment was HK\$180,324,000 as at 31 December 2018.

Notes to Financial Statements

31 December 2018

2.1 BASIS OF PREPARATION *(Continued)*

Going concern basis *(Continued)*

The directors have reviewed the Group's cash flow forecast prepared by management which covers a period of twelve months from the end of the reporting period. They are of the opinion that, taking into account the above-mentioned plans and measures, the Group will have sufficient working capital to finance its operations and meet its financial obligations as and when they fall due in the foreseeable future. Accordingly, the directors are of the opinion that it is appropriate to prepare the consolidated financial statements of the Group for the year ended 31 December 2018 on a going concern basis.

Should the going concern assumption be inappropriate, adjustments may have to be made to reflect the situation that assets may need to be realised at the amounts other than which they are currently recorded in the consolidated statement of financial position. In addition, the Group may have to provide for further liabilities that might arise, and to reclassify non-current assets and non-current liabilities as current assets and current liabilities.

Basis of consolidation

The consolidated financial statements include the financial statements of the Group for the year ended 31 December 2018. A subsidiary is an entity (including a structured entity), directly or indirectly, controlled by the Company. Control is achieved when the Group is exposed, or has rights, to variable returns from its involvement with the investee and has the ability to affect those returns through its power over the investee (i.e., existing rights that give the Group the current ability to direct the relevant activities of the investee).

When the Company has, directly or indirectly, less than a majority of the voting or similar rights of an investee, the Group considers all relevant facts and circumstances in assessing whether it has power over an investee, including:

- (a) the contractual arrangement with the other vote holders of the investee;
- (b) rights arising from other contractual arrangements; and
- (c) the Group's voting rights and potential voting rights.

The financial statements of the subsidiaries are prepared for the same reporting period as the Company, using consistent accounting policies. The results of subsidiaries are consolidated from the date on which the Group obtains control, and continue to be consolidated until the date that such control ceases.

Profit or loss and each component of other comprehensive income are attributed to the owners of the parent of the Group and to the non-controlling interests, even if this results in the non-controlling interests having a deficit balance. All intra-group assets and liabilities, equity, income, expenses and cash flows relating to transactions between members of the Group are eliminated in full on consolidation.





Notes to Financial Statements

31 December 2018

2.1 BASIS OF PREPARATION *(Continued)*

Basis of consolidation *(Continued)*

The Group reassesses whether or not it controls an investee if facts and circumstances indicate that there are changes to one or more of the three elements of control described above. A change in the ownership interest of a subsidiary, without a loss of control, is accounted for as an equity transaction.

If the Group loses control over a subsidiary, it derecognises (i) the assets (including goodwill) and liabilities of the subsidiary, (ii) the carrying amount of any non-controlling interest and (iii) the cumulative translation differences recorded in equity; and recognises (i) the fair value of the consideration received, (ii) the fair value of any investment retained and (iii) any resulting surplus or deficit in profit or loss. The Group's share of components previously recognised in other comprehensive income is reclassified to profit or loss or retained profits, as appropriate, on the same basis as would be required if the Group had directly disposed of the related assets or liabilities.

2.2 CHANGES IN ACCOUNTING POLICIES AND DISCLOSURES

The Group has adopted the following new and revised HKFRSs for the first time for the current year's financial statements.

Amendments to HKFRS 2	<i>Classification and Measurement of Share-based Payment Transactions</i>
Amendments to HKFRS 4	<i>Applying HKFRS 9 Financial Instruments with HKFRS 4 Insurance Contracts</i>
HKFRS 9	<i>Financial Instruments</i>
HKFRS 15	<i>Revenue from Contracts with Customers</i>
Amendments to HKFRS 15	<i>Clarifications to HKFRS 15 Revenue from Contracts with Customers</i>
Amendments to HKAS 40	<i>Transfers of Investment Property</i>
HK(IFRIC)-Int 22	<i>Foreign Currency Transactions and Advance Consideration</i>
<i>Annual Improvements 2014-2016 Cycle</i>	<i>Amendments to HKFRS 1 and HKAS 28</i>

Except for the amendments to HKFRS 4 and *Annual Improvements 2014-2016 Cycle*, which are not relevant to the preparation of the Group's financial statements, the nature and the impact of the new and revised HKFRSs are described below:

Notes to Financial Statements

31 December 2018

2.2 CHANGES IN ACCOUNTING POLICIES AND DISCLOSURES *(Continued)*

- (a) Amendments to HKFRS 2 address three main areas: the effects of vesting conditions on the measurement of a cash-settled share-based payment transaction; the classification of a share-based payment transaction with net settlement features for withholding a certain amount in order to meet an employee's tax obligation associated with the share-based payment; and accounting where a modification to the terms and conditions of a share-based payment transaction changes its classification from cash-settled to equity-settled. The amendments clarify that the approach used to account for vesting conditions when measuring equity-settled share-based payments also applies to cash-settled share-based payments. The amendments introduce an exception so that a share-based payment transaction with net share settlement features for withholding a certain amount in order to meet the employee's tax obligation is classified in its entirety as an equity-settled share-based payment transaction when certain conditions are met. Furthermore, the amendments clarify that if the terms and conditions of a cash-settled share-based payment transaction are modified, with the result that it becomes an equity-settled share-based payment transaction, the transaction is accounted for as an equity-settled transaction from the date of the modification. The amendments have had no impact on the financial position or performance of the Group as the Group does not have any cash-settled share-based payment transactions and has no share-based payment transactions with net settlement features for withholding tax.
- (b) HKFRS 9 *Financial Instruments* replaces HKAS 39 *Financial Instruments: Recognition and Measurement* for annual periods beginning on or after 1 January 2018, bringing together all three aspects of the accounting for financial instruments: classification and measurement, impairment and hedge accounting.

The Group has recognised the transition adjustments against the applicable opening balances in equity at 1 January 2018. Therefore, the comparative information was not restated and continues to be reported under HKAS 39.

Classification and measurement

The following information sets out the impacts of adopting HKFRS 9 on the statement of financial position, including the effect of replacing HKAS 39's incurred credit loss calculations with HKFRS 9's expected credit losses ("ECLs").

A reconciliation between the carrying amounts under HKAS 39 and the balances reported under HKFRS 9 as at 1 January 2018 is as follows:





Notes to Financial Statements

31 December 2018

2.2 CHANGES IN ACCOUNTING POLICIES AND DISCLOSURES (Continued)

(b) (Continued)

Classification and measurement (Continued)

	Notes	Category	HKAS 39 measurement				HKFRS 9 measurement	
			Amount HK\$'000	Re-	ECL HK\$'000	Other HK\$'000	Amount HK\$'000	Category
				classification HK\$'000				
Financial assets								
Cash and cash equivalents		L&R ³	122,004	-	-	-	122,004 AC ⁴	
Trade and bills receivables	(ii)	L&R	150,650	-	(10,897)	-	139,753 AC	
Financial assets included in prepayments, deposits and other receivables		L&R	180,720	-	(3,374)	-	177,346 AC	
Amount due from a joint venture		L&R	202	-	-	-	202 AC	
Equity investments designated at fair value through other comprehensive income		N/A	-	99,932	-	-	99,932 FVOCI ¹ (equity)	
From: Available-for-sale investments	(i)			99,932	-	-		
Available-for-sale investments		AFS ²	99,932	(99,932)	-	-	- N/A	
To: Equity investments designated at fair value through other comprehensive income	(i)			(99,932)	-	-		
Financial assets at fair value through profit or loss		FVPL ⁵	3,072	-	-	-	3,072 FVPL (mandatory)	
			556,580	-	(14,271)	-	542,309	
Other assets								
Contract assets	(ii)		564,030	-	(117,674)	-	446,356	
Deferred tax assets			30,324	-	3,057	1,676	35,057	
			594,354	-	(114,617)	1,676	481,413	

Notes to Financial Statements

31 December 2018

2.2 CHANGES IN ACCOUNTING POLICIES AND DISCLOSURES (Continued)

(b) (Continued)

Classification and measurement (Continued)

	Notes	HKAS 39 measurement			HKFRS 9 measurement		
		Category	Amount HK\$'000	Re- classification HK\$'000	ECL HK\$'000	Other HK\$'000	Amount HK\$'000
Financial liabilities							
Trade and bills payables		AC	381,705	-	-	-	381,705 AC
Financial liabilities included in							
other payables and accruals		AC	135,270	-	-	-	135,270 AC
Amounts due to associates		AC	18,644	-	-	-	18,644 AC
Amounts due to related							
companies		AC	11,203	-	-	-	11,203 AC
Interest-bearing bank							
borrowings		AC	569,979	-	-	-	569,979 AC
			1,116,801	-	-	-	1,116,801
Other liabilities							
Contract liabilities	(ii)		34,936	-	-	-	34,936
Deferred tax liabilities			75,725	-	-	-	75,725
			110,661	-	-	-	110,661

¹ FVOCI: Financial assets at fair value through other comprehensive income

² AFS: Available-for-sale investments

³ L&R: Loans and receivables

⁴ AC: Financial assets or financial liabilities at amortised cost

⁵ FVPL: Financial assets at fair value through profit or loss





Notes to Financial Statements

31 December 2018

2.2 CHANGES IN ACCOUNTING POLICIES AND DISCLOSURES (Continued)

(b) (Continued)

Classification and measurement (Continued)

Notes:

- (i) The Group has elected the option to irrevocably designate certain of its previous available-for-sale equity investments as equity investments at fair value through other comprehensive income.
- (ii) The gross carrying amounts of the trade and bills receivables, the contract assets and the contract liabilities under the column "HKAS 39 measurement – Amount" represent the amounts after adjustments for the adoption of HKFRS 15 but before the measurement of ECLs. Further details of the adjustments for the adoption of HKFRS 15 are included in note 2.2(c) to the financial statements.

Impairment

The following table reconciles the aggregate opening impairment allowances under HKAS 39 to the ECL allowances under HKFRS 9. Further details are disclosed in notes 22, 24 and 25 to the financial statements.

	Impairment allowances under HKAS 39 at 31 December		ECL allowances under HKFRS 9 at 1 January 2018
	2017	Re-measurement	
	<i>HK\$ '000</i>	<i>HK\$ '000</i>	<i>HK\$ '000</i>
Trade and bills receivables	74,155	10,897	85,052
Contract assets	225,627	117,674	343,301
Financial assets included in prepayments, deposits and other receivables	5,009	3,374	8,383
	304,791	131,945	436,736

Notes to Financial Statements

31 December 2018

2.2 CHANGES IN ACCOUNTING POLICIES AND DISCLOSURES (Continued)

(b) (Continued)

Impact on reserves and retained profits/(accumulated losses)

The impact of transition to HKFRS 9 on reserves and retained profits/(accumulated losses) is as follows:

	Reserves and retained profits/(accumulated losses) HK\$'000
Capital reserve under HKFRS 9 (available-for-sale investment revaluation reserve under HKAS 39)	
Balance as at 31 December 2017 under HKAS 39	32,812
Reversal of impairment losses under HKAS 39 for equity investments designated at fair value through other comprehensive income previously classified as available-for-sale investments	(6,653)
Deferred tax in relation to the above	1,676
Balance as at 1 January 2018 under HKFRS 9	27,835
Retained profits/(Accumulated losses) and non-controlling interests	
Balance as at 31 December 2017 under HKAS 39	163,470
Recognition of expected credit losses for contract assets under HKFRS 9	(117,674)
Recognition of expected credit losses for trade receivables under HKFRS 9	(10,897)
Recognition of expected credit losses for financial assets included in prepayments, deposits and other receivables under HKFRS 9	(3,374)
Deferred tax in relation to the above	3,057
Reversal of impairment losses under HKAS 39 for equity investments designated at fair value through other comprehensive income previously classified as available-for-sale investments	6,653
Balance as at 1 January 2018 under HKFRS 9	41,235

(c) HKFRS 15 and its amendments replace HKAS 11 *Construction Contracts*, HKAS 18 *Revenue* and related interpretations and it applies, with limited exceptions, to all revenue arising from contracts with customers. HKFRS 15 establishes a new five-step model to account for revenue arising from contracts with customers. Under HKFRS 15, revenue is recognised at an amount that reflects the consideration to which an entity expects to be entitled in exchange for transferring goods or services to a customer. The principles in HKFRS 15 provide a more structured approach for measuring and recognising revenue. The standard also introduces extensive qualitative and quantitative disclosure requirements, including disaggregation of total revenue, information about performance obligations, changes in contract asset and liability account balances between periods and key judgements and estimates. The disclosures are included in notes 3 and 5 to the financial statements. As a result of the application of HKFRS 15, the Group has changed the accounting policy with respect to revenue recognition in note 2.4 to the financial statements.





Notes to Financial Statements

31 December 2018

2.2 CHANGES IN ACCOUNTING POLICIES AND DISCLOSURES *(Continued)*

(c) *(Continued)*

The Group has adopted HKFRS 15 using the modified retrospective method of adoption. Under this method, the standard can be applied either to all contracts at the date of initial application or only to contracts that are not completed at this date. The Group has elected to apply the standard to contracts that are not completed as at 1 January 2018.

No transitional adjustment was recognised to the opening balance of retained profits as at 1 January 2018. The comparative information was not restated and continues to be reported under HKAS 11, HKAS 18 and related interpretations.

The Group's principal activities consist of sale, installation and maintenance of shallow geothermal energy utilisation system and sale of air conditioning heat pump products. The expected impacts arising from the adoption of HKFRS 15 on the Group are summarised as follows:

(i) ***Sale, installation and maintenance of shallow geothermal energy utilisation system***

The Group concludes that sale, installation and maintenance of shallow geothermal energy utilisation system satisfies the performance obligation over time because the Group's performance creates or enhances an asset that the customer controls as the asset is created or enhanced. The Group recognises revenue using input methods to measure the process towards complete satisfaction of a performance obligation. Therefore, the adoption of HKFRS 15 does not have material impact on the Group's financial statements.

(ii) ***Sale of air conditioning heat pump products***

The Group determines the revenue from such products is recognised at a point in time when a customer obtains control of a promised asset and the Group satisfies a performance, which is consistent with previous revenue recognition policy. Therefore, the adoption of HKFRS 15 does not have material impact on the Group's financial statements.

(iii) ***Presentation and disclosure***

As required by HKFRS 15, the Group disaggregates revenue recognised from contracts with customers into categories that depict how the nature, amount, timing and uncertainty of revenue and cash flows are affected by economic factors. The Group also discloses information about the relationship between the disclosure of disaggregated revenue and revenue information disclosed for each reportable segment. Refer to note 5 for the disclosure on disaggregated revenue.

Notes to Financial Statements

31 December 2018

2.2 CHANGES IN ACCOUNTING POLICIES AND DISCLOSURES (Continued)

(c) (Continued)

(iii) *Presentation and disclosure (Continued)*

Set out below are the amounts by which each financial statement line item was affected as at 1 January 2018 as a result of the adoption of HKFRS 15:

Assets	Notes	Increase/(decrease)
Amounts due from customers for contract work	(i)	(514,962)
Contract assets	(i)	564,030
Trade and bills receivables	(i)	(49,068)
		-

Liabilities	Notes	Increase/(decrease)
Amounts due to customers for contract work	(i)	(12,290)
Contract liabilities	(i),(ii)	34,936
Other payables and accruals	(ii)	(22,646)
		-

Set out below are the amounts by which each financial statement line item was affected as at 31 December 2018 and for the year ended 31 December 2018 as a result of the adoption of HKFRS 15. The adoption of HKFRS 15 has had no impact on profit or loss and other comprehensive income or on the Group's operating, investing and financing cash flows. The first column shows the amounts recorded under HKFRS 15 and the second column shows what the amounts would have been had HKFRS 15 not been adopted:



Notes to Financial Statements

2.2 CHANGES IN ACCOUNTING POLICIES AND DISCLOSURES (Continued)

(c) (Continued)

Consolidated statement of financial position as at 31 December 2018:

	Notes	Amounts prepared under		Increase/ (decrease) HK\$ '000
		HKFRS 15 HK\$ '000	Previous HKFRS HK\$ '000	
Amounts due from customers for				
contract work	(i)	–	218,480	(218,480)
Contract assets	(i)	270,760	–	270,760
Trade and bills receivables	(i)	144,509	196,789	(52,280)
Total assets		2,493,664	2,493,664	–
Other payables and accruals	(ii)	148,889	169,252	(20,363)
Amounts due to customers for				
contract work	(i)	–	36,147	(36,147)
Contract liabilities	(i),(ii)	56,510	–	56,510
Total liabilities		1,408,802	1,408,802	–
Net assets		1,084,862	1,084,862	–
Accumulated losses	(i),(ii)	(412,514)	(412,514)	–
Non-controlling interests	(i),(ii)	33,468	33,468	–
Total equity		1,084,862	1,084,862	–

(i) **Sale, installation and maintenance of shallow geothermal energy utilisation system**

Before the adoption of HKFRS 15, contract costs were recognised as an asset provided it was probable that they would be recovered. Such costs represented an amount due from the customers and were recorded as amounts due from customers for contract work in the statement of financial position before the construction services were billed to customers; billing in excess of costs were recognised as amounts due to customers for contract work in the statement of financial position. Upon the adoption of HKFRS 15, a contract asset or a contract liability is recognised when the Group performs by transferring goods or services to customers and the Group's right to consideration is conditional. Accordingly, the Group reclassified HK\$514,962,000 from amounts due from customers for contract work to contract assets and HK\$12,290,000 from amounts due to customers for contract work to contract liabilities as at 1 January 2018.

Notes to Financial Statements

31 December 2018

2.2 CHANGES IN ACCOUNTING POLICIES AND DISCLOSURES (Continued)

(c) (Continued)

(i) **Sales, installation and maintenance of shallow geothermal energy utilisation system (Continued)**

Before the adoption of HKFRS 15, retention receivables arising from construction contracts, that were conditional on the satisfaction of the service quality by the customers over a certain period as stipulated in the contracts, were included in trade and bills receivables. Upon adoption of HKFRS 15, retention receivables are reclassified to contract assets. Accordingly, the Group reclassified HK\$49,068,000 from trade and bills receivables to contract assets as at 1 January 2018.

As at 31 December 2018, the adoption of HKFRS 15 resulted in a decrease in trade and bills receivables of HK\$52,280,000, a decrease in amounts due from customers for contract work and amounts due to customers for contract work of HK\$218,480,000 and HK\$36,147,000, respectively and an increase in contract assets and contract liabilities of HK\$270,760,000 and HK\$56,510,000, respectively.

(ii) **Consideration received from customers in advance**

Before the adoption of HKFRS 15, the Group recognised consideration received from customers in advance as other payables and accruals. Under HKFRS 15, the amount is classified as contract liabilities.

Therefore, upon adoption of HKFRS 15, the Group reclassified HK\$22,646,000 from other payables and accruals to contract liabilities as at 1 January 2018 in relation to the consideration received from customers in advance as at 1 January 2018.

As at 31 December 2018, under HKFRS 15, HK\$20,363,000 was reclassified from other payables and accruals to contract liabilities in relation to the consideration received from customers in advance for the sale of air conditioning heat pump products and the sale, installation and maintenance of shallow geothermal energy utilisation system.

- (d) Amendments to HKAS 40 clarify when an entity should transfer property, including property under construction or development, into or out of investment property. The amendments state that a change in use occurs when the property meets, or ceases to meet, the definition of investment property and there is evidence of the change in use. A mere change in management's intentions for the use of a property does not provide evidence of a change in use. The amendments have had no impact on the financial position or performance of the Group.
- (e) HK(IFRIC)-Int 22 provides guidance on how to determine the date of the transaction when applying HKAS 21 to the situation where an entity receives or pays advance consideration in a foreign currency and recognises a non-monetary asset or liability. The interpretation clarifies that the date of the transaction for the purpose of determining the exchange rate to use on initial recognition of the related asset, expense or income (or part of it) is the date on which an entity initially recognises the non-monetary asset (such as a prepayment) or non-monetary liability (such as deferred income) arising from the payment or receipt of the advance consideration. If there are multiple payments or receipts in advance of recognising the related item, the entity must determine the transaction date for each payment or receipt of the advance consideration. The interpretation has had no impact on the Group's financial statements as the Group's accounting policy for the determination of the exchange rate applied for initial recognition of non-monetary assets or non-monetary liabilities is consistent with the guidance provided in the interpretation.





Notes to Financial Statements

31 December 2018

2.3 ISSUED BUT NOT YET EFFECTIVE HONG KONG FINANCIAL REPORTING STANDARDS

The Group has not applied the following new and revised HKFRSs, that have been issued but are not yet effective, in these financial statements.

Amendments to HKFRS 3	<i>Definition of a Business</i> ²
Amendments to HKFRS 9	<i>Prepayment Features with Negative Compensation</i> ¹
Amendments to HKFRS 10 and HKAS 28 (2011)	<i>Sale or Contribution of Assets between an Investor and its Associate or Joint Venture</i> ⁴
HKFRS 16	<i>Leases</i> ¹
HKFRS 17	<i>Insurance Contracts</i> ³
Amendments to HKAS 1 and HKAS 8	<i>Definition of Material</i> ²
Amendments to HKAS 19	<i>Plan Amendment, Curtailment or Settlement</i> ¹
Amendments to HKAS 28	<i>Long-term Interests in Associates and Joint Ventures</i> ¹
HK(IFRIC)-Int 23	<i>Uncertainty over Income Tax Treatments</i> ¹
<i>Annual Improvements 2015-2017 Cycle</i>	Amendments to HKFRS 3, HKFRS 11, HKAS 12 and HKAS 23 ¹

¹ Effective for annual periods beginning on or after 1 January 2019

² Effective for annual periods beginning on or after 1 January 2020

³ Effective for annual periods beginning on or after 1 January 2021

⁴ No mandatory effective date yet determined but available for adoption

Further information about those HKFRSs that are expected to be applicable to the Group is described below:

Amendments to HKFRS 3 clarify and provide additional guidance on the definition of a business. The amendments clarify that for an integrated set of activities and assets to be considered a business, it must include, at a minimum, an input and a substantive process that together significantly contribute to the ability to create output. A business can exist without including all of the inputs and processes needed to create outputs. The amendments remove the assessment of whether market participants are capable of acquiring the business and continue to produce outputs. Instead, the focus is on whether acquired inputs and acquired substantive processes together significantly contribute to the ability to create outputs. The amendments have also narrowed the definition of outputs to focus on goods or services provided to customers, investment income or other income from ordinary activities. Furthermore, the amendments provide guidance to assess whether an acquired process is substantive and introduce an optional fair value concentration test to permit a simplified assessment of whether an acquired set of activities and assets is not a business. The Group expects to adopt the amendments prospectively from 1 January 2020.

Amendments to HKFRS 10 and HKAS 28 (2011) address an inconsistency between the requirements in HKFRS 10 and in HKAS 28 (2011) in dealing with the sale or contribution of assets between an investor and its associate or joint venture. The amendments require a full recognition of a gain or loss when the sale or contribution of assets between an investor and its associate or joint venture constitutes a business. For a transaction involving assets that do not constitute a business, a gain or loss resulting from the transaction is recognised in the investor's profit or loss only to the extent of the unrelated investor's interest in that associate or joint venture. The amendments are to be applied prospectively. The previous mandatory effective date of amendments to HKFRS 10 and HKAS 28 (2011) was removed by the HKICPA in January 2016 and a new mandatory effective date will be determined after the completion of a broader review of accounting for associates and joint ventures. However, the amendments are available for adoption now.

Notes to Financial Statements

31 December 2018

2.3 ISSUED BUT NOT YET EFFECTIVE HONG KONG FINANCIAL REPORTING STANDARDS *(Continued)*

HKFRS 16 replaces HKAS 17 *Leases*, HK(IFRIC)-Int 4 *Determining whether an Arrangement contains a Lease*, HK(SIC)-Int 15 *Operating Leases – Incentives* and HK(SIC)-Int 27 *Evaluating the Substance of Transactions Involving the Legal Form of a Lease*. The standard sets out the principles for the recognition, measurement, presentation and disclosure of leases and requires lessees to recognise assets and liabilities for most leases. The standard includes two elective recognition exemptions for lessees – leases of low-value assets and short-term leases. At the commencement date of a lease, a lessee will recognise a liability to make lease payments (i.e., the lease liability) and an asset representing the right to use the underlying asset during the lease term (i.e., the right-of-use asset). The right-of-use asset is subsequently measured at cost less accumulated depreciation and any impairment losses unless the right-of-use asset meets the definition of investment property in HKAS 40, or relates to a class of property, plant and equipment to which the revaluation model is applied. The lease liability is subsequently increased to reflect the interest on the lease liability and reduced for the lease payments. Lessees will be required to separately recognise the interest expense on the lease liability and the depreciation expense on the right-of-use asset. Lessees will also be required to remeasure the lease liability upon the occurrence of certain events, such as change in the lease term and change in future lease payments resulting from a change in an index or rate used to determine those payments. Lessees will generally recognise the amount of the remeasurement of the lease liability as an adjustment to the right-of-use asset. Lessor accounting under HKFRS 16 is substantially unchanged from the accounting under HKAS 17. Lessors will continue to classify all leases using the same classification principle as in HKAS 17 and distinguish between operating leases and finance leases. HKFRS 16 requires lessees and lessors to make more extensive disclosures than under HKAS 17. Lessees can choose to apply the standard using either a full retrospective or a modified retrospective approach. The Group will adopt HKFRS 16 from 1 January 2019. The Group plans to adopt the transitional provisions in HKFRS 16 to recognise the cumulative effect of initial adoption as an adjustment to the opening balance of retained earnings at 1 January 2019 and will not restate the comparatives. In addition, the Group plans to apply the new requirements to contracts that were previously identified as leases applying HKAS 17 and measure the lease liability at the present value of the remaining lease payments, discounted using the Group's incremental borrowing rate at the date of initial application. The right-of-use asset will be measured at the amount of the lease liability, adjusted by the amount of any prepaid or accrued lease payments relating to the lease recognised in the statement of financial position immediately before the date of initial application. The Group plans to use the exemptions allowed by the standard on lease contracts whose lease terms end within 12 months as of the date of initial application. During 2018, the Group has performed a detailed assessment on the impact of adoption of HKFRS 16 and the expected change in accounting policy will have no material impact on the Group's financial statements.

Amendments to HKAS 1 and HKAS 8 provide a new definition of material. The new definition states that information is material if omitting, misstating or obscuring it could reasonably be expected to influence decisions that the primary users of general purpose financial statements make on the basis of those financial statements. The amendments clarify that materiality will depend on the nature or magnitude of information. A misstatement of information is material if it could reasonably be expected to influence decisions made by the primary users. The Group expects to adopt the amendments prospectively from 1 January 2020. The amendments are not expected to have any significant impact on the Group's financial statements.



2.3 ISSUED BUT NOT YET EFFECTIVE HONG KONG FINANCIAL REPORTING STANDARDS *(Continued)*

Amendments to HKAS 28 clarify that the scope exclusion of HKFRS 9 only includes interests in an associate or joint venture to which the equity method is applied and does not include long-term interests that in substance form part of the net investment in the associate or joint venture, to which the equity method has not been applied. Therefore, an entity applies HKFRS 9, rather than HKAS 28, including the impairment requirements under HKFRS 9, in accounting for such long-term interests. HKAS 28 is then applied to the net investment, which includes the long-term interests, only in the context of recognising losses of an associate or joint venture and impairment of the net investment in the associate or joint venture. The Group expects to adopt the amendments on 1 January 2019 and will assess its business model for such long-term interests based on the facts and circumstances that exist on 1 January 2019 using the transitional requirements in the amendments. The Group also intends to apply the relief from restating comparative information for prior periods upon adoption of the amendments.

HK(IFRIC) – Int 23 addresses the accounting for income taxes (current and deferred) when tax treatments involve uncertainty that affects the application of HKAS 12 (often referred to as “uncertain tax positions”). The interpretation does not apply to taxes or levies outside the scope of HKAS 12, nor does it specifically include requirements relating to interest and penalties associated with uncertain tax treatments. The interpretation specifically addresses (i) whether an entity considers uncertain tax treatments separately; (ii) the assumptions an entity makes about the examination of tax treatments by taxation authorities; (iii) how an entity determines taxable profits or tax losses, tax bases, unused tax losses, unused tax credits and tax rates; and (iv) how an entity considers changes in facts and circumstances. The interpretation is to be applied retrospectively, either fully retrospectively without the use of hindsight or retrospectively with the cumulative effect of application as an adjustment to the opening equity at the date of initial application, without the restatement of comparative information. The Group expects to adopt the interpretation from 1 January 2019. The interpretation is not expected to have any significant impact on the Group’s financial statements.

2.4 SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Investments in associates and a joint venture

An associate is an entity in which the Group has a long term interest of generally not less than 20% of the equity voting rights and over which it is in a position to exercise significant influence. Significant influence is the power to participate in the financial and operating policy decisions of the investee, but is not control or joint control over those policies.

A joint venture is a type of joint arrangement whereby the parties that have joint control of the arrangement have rights to the net assets of the joint venture. Joint control is the contractually agreed sharing of control of an arrangement, which exists only when decisions about the relevant activities require the unanimous consent of the parties sharing control.

The Group’s investments in associates and the joint venture are stated in the consolidated statement of financial position at the Group’s share of net assets under the equity method of accounting, less any impairment losses. Adjustments are made to bring into line any dissimilar accounting policies that may exist.

The Group’s share of the post-acquisition results and other comprehensive income of associates and the joint venture is included in the consolidated statement of profit or loss and consolidated other comprehensive income, respectively. In addition, when there has been a change recognised directly in the equity of the associate or the joint venture, the Group recognises its share of any changes, when applicable, in the consolidated statement of changes in equity. Unrealised gains and losses resulting from transactions between the Group and its associates or the joint venture are eliminated to the extent of the Group’s investments in the associates or the joint venture, except where unrealised losses provide evidence of an impairment of the assets transferred. Goodwill arising from the acquisition of associates or the joint venture is included as part of the Group’s investments in associates or the joint venture.

Notes to Financial Statements

31 December 2018

2.4 SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES *(Continued)*

Investments in associates and a joint venture *(Continued)*

If an investment in an associate becomes an investment in a joint venture or vice versa, the retained interest is not remeasured. Instead, the investment continues to be accounted for under the equity method. In all other cases, upon loss of significant influence over the associate or joint control over the joint venture, the Group measures and recognises any retained investment at its fair value. Any difference between the carrying amount of the associate or joint venture upon loss of significant influence or joint control and the fair value of the retained investment and proceeds from disposal is recognised in profit or loss.

When an investment in an associate or a joint venture is classified as held for sale, it is accounted for in accordance with HKFRS 5 *Non-current Assets Held for Sale and Discontinued Operations*.

Business combinations and goodwill

Business combinations are accounted for using the acquisition method. The consideration transferred is measured at the acquisition date fair value which is the sum of the acquisition date fair values of assets transferred by the Group, liabilities assumed by the Group to the former owners of the acquiree and the equity interests issued by the Group in exchange for control of the acquiree. For each business combination, the Group elects whether to measure the non-controlling interests in the acquiree that are present ownership interests and entitle their holders to a proportionate share of net assets in the event of liquidation at fair value or at the proportionate share of the acquiree's identifiable net assets. All other components of non-controlling interests are measured at fair value. Acquisition-related costs are expensed as incurred.

When the Group acquires a business, it assesses the financial assets and liabilities assumed for appropriate classification and designation in accordance with the contractual terms, economic circumstances and pertinent conditions as at the acquisition date. This includes the separation of embedded derivatives in host contracts of the acquiree.

If the business combination is achieved in stages, the previously held equity interest is remeasured at its acquisition date fair value and any resulting gain or loss is recognised in profit or loss.

Any contingent consideration to be transferred by the acquirer is recognised at fair value at the acquisition date. Contingent consideration classified as an asset or liability is measured at fair value with changes in fair value recognised in profit or loss. Contingent consideration that is classified as equity is not remeasured and subsequent settlement is accounted for within equity.

Goodwill is initially measured at cost, being the excess of the aggregate of the consideration transferred, the amount recognised for non-controlling interests and any fair value of the Group's previously held equity interests in the acquiree over the identifiable net assets acquired and liabilities assumed. If the sum of this consideration and other items is lower than the fair value of the net assets acquired, the difference is, after reassessment, recognised in profit or loss as a gain on bargain purchase.

After initial recognition, goodwill is measured at cost less any accumulated impairment losses. Goodwill is tested for impairment annually or more frequently if events or changes in circumstances indicate that the carrying value may be impaired. The Group performs its annual impairment test of goodwill as at 31 December. For the purpose of impairment testing, goodwill acquired in a business combination is, from the acquisition date, allocated to each of the Group's cash-generating units, or groups of cash-generating units, that are expected to benefit from the synergies of the combination, irrespective of whether other assets or liabilities of the Group are assigned to those units or groups of units.





Notes to Financial Statements

31 December 2018

2.4 SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES *(Continued)*

Business combinations and goodwill *(Continued)*

Impairment is determined by assessing the recoverable amount of the cash-generating unit (group of cash-generating units) to which the goodwill relates. Where the recoverable amount of the cash-generating unit (group of cash-generating units) is less than the carrying amount, an impairment loss is recognised. An impairment loss recognised for goodwill is not reversed in a subsequent period.

Where goodwill has been allocated to a cash-generating unit (or group of cash-generating units) and part of the operation within that unit is disposed of, the goodwill associated with the operation disposed of is included in the carrying amount of the operation when determining the gain or loss on the disposal. Goodwill disposed of in these circumstances is measured based on the relative value of the operation disposed of and the portion of the cash-generating unit retained.

Fair value measurement

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

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

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

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

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

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

Notes to Financial Statements

31 December 2018

2.4 SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES *(Continued)*

Impairment of non-financial assets

Where an indication of impairment exists, or when annual impairment testing for an asset is required (other than investment properties, properties held for sale under development, inventories and financial assets), the asset's recoverable amount is estimated. An asset's recoverable amount is the higher of the asset's or cash-generating unit's value in use and its fair value less costs of disposal, and is determined for an individual asset, unless the asset does not generate cash inflows that are largely independent of those from other assets or groups of assets, in which case the recoverable amount is determined for the cash-generating unit to which the asset belongs.

An impairment loss is recognised only if the carrying amount of an asset exceeds its recoverable amount. 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. An impairment loss is charged to the statement of profit or loss in the period in which it arises, unless the asset is carried at a revalued amount in which case the impairment loss is accounted for in accordance with the relevant accounting policy for the revalued asset.

An assessment is made at the end of each reporting period as to whether there is an indication that previously recognised impairment losses may no longer exist or may have decreased. If such an indication exists, the recoverable amount is estimated. A previously recognised impairment loss of an asset other than goodwill is reversed only if there has been a change in the estimates used to determine the recoverable amount of that asset, but not to an amount higher than the carrying amount that would have been determined (net of any depreciation/amortisation) had no impairment loss been recognised for the asset in prior years. A reversal of such an impairment loss is credited to the statement of profit or loss in the period in which it arises, unless the asset is carried at a revalued amount, in which case the reversal of the impairment loss is accounted for in accordance with the relevant accounting policy for that revalued asset.

Related parties

A party is considered to be related to the Group if:

- (a) ***the party is a person or a close member of that person's family and that person***
 - (i) has control or joint control over the Group;
 - (ii) has significant influence over the Group; or
 - (iii) is a member of the key management personnel of the Group or of a parent of the Group;

or





Notes to Financial Statements

31 December 2018

2.4 SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES *(Continued)*

Related parties *(Continued)*

(b) ***the party is an entity where any of the following conditions applies:***

- (i) the entity and the Group are members of the same group;
- (ii) one entity is an associate or joint venture of the other entity (or of a parent, subsidiary or fellow subsidiary of the other entity);
- (iii) the entity and the Group are joint ventures of the same third party;
- (iv) one entity is a joint venture of a third entity and the other entity is an associate of the third entity;
- (v) the entity is a post-employment benefit plan for the benefit of employees of either the Group or an entity related to the Group;
- (vi) the entity is controlled or jointly controlled by a person identified in (a);
- (vii) a person identified in (a)(i) 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); and
- (viii) 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 parent of the Group.

Property, plant and equipment and depreciation

Property, plant and equipment, other than construction in progress, are stated at cost or valuation less accumulated depreciation and any impairment losses. When an item of property, plant and equipment is classified as held for sale or when it is part of a disposal group classified as held for sale, it is not depreciated and is accounted for in accordance with HKFRS 5. The cost of an item of property, plant and equipment comprises its purchase price and any directly attributable costs of bringing the asset to its working condition and location for its intended use.

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

Valuations are performed frequently enough to ensure that the fair value of a revalued asset does not differ materially from its carrying amount. Changes in the values of property, plant and equipment are dealt with as movements in the asset revaluation reserve. If the total of this reserve is insufficient to cover a deficit, on an individual asset basis, the excess of the deficit is charged to the statement of profit or loss. Any subsequent revaluation surplus is credited to the statement of profit or loss to the extent of the deficit previously charged. An annual transfer from the asset revaluation reserve to retained profits is made for the difference between the depreciation based on the revalued carrying amount of an asset and the depreciation based on the asset's original cost. On disposal of a revalued asset, the relevant portion of the asset revaluation reserve realised in respect of previous valuations is transferred to retained profits as a movement in reserves.

Notes to Financial Statements

31 December 2018

2.4 SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES *(Continued)*

Property, plant and equipment and depreciation *(Continued)*

Depreciation is calculated on the straight-line basis to write off the cost of each item of property, plant and equipment to its residual value over its estimated useful life. The principal annual rates used for this purpose are as follows:

Categories	Estimated useful lives
Leasehold land and buildings	50 years or over the lease terms, whichever is shorter
Leasehold improvements	5 years or over the lease terms, whichever is shorter
Plant and machinery	8 to 20 years
Computer equipment	4 to 8 years
Office equipment, furniture and fixtures	4 to 5 years
Motor vehicles	5 to 8 years

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

An item of property, plant and equipment including any significant part initially recognised is derecognised upon disposal or when no future economic benefits are expected from its use or disposal. Any gain or loss on disposal or retirement recognised in the statement of profit or loss in the year the asset is derecognised is the difference between the net sales proceeds and the carrying amount of the relevant asset.

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

Investment properties

Investment properties are interests in land and buildings (including the leasehold interest under an operating lease for a property which would otherwise meet the definition of an investment property) held to earn rental income and/or for capital appreciation, rather than for use in the production or supply of goods or services or for administrative purposes; or for sale in the ordinary course of business. Such properties are measured initially at cost, including transaction costs. Subsequent to initial recognition, investment properties are stated at fair value, which reflects market conditions at the end of the reporting period.

Gains or losses arising from changes in the fair values of investment properties are included in the statement of profit or loss in the year in which they arise.

Any gains or losses on the retirement or disposal of an investment property are recognised in the statement of profit or loss in the year of the retirement or disposal.





Notes to Financial Statements

31 December 2018

2.4 SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES *(Continued)*

Investment properties *(Continued)*

For a transfer from investment properties to owner-occupied properties or inventories, the deemed cost of a property for subsequent accounting is its fair value at the date of change in use. If a property occupied by the Group as an owner-occupied property becomes an investment property, the Group accounts for such property in accordance with the policy stated under "Property, plant and equipment and depreciation" up to the date of change in use, and any difference at that date between the carrying amount and the fair value of the property is accounted for as a revaluation in accordance with the policy stated under "Property, plant and equipment and depreciation" above. For a transfer from inventories to investment properties, any difference between the fair value of the property at that date and its previous carrying amount is recognised in the statement of profit or loss.

Intangible assets (other than goodwill)

Intangible assets acquired separately are measured on initial recognition at cost. The cost of intangible assets acquired in a business combination is the fair value at the date of acquisition. The useful lives of intangible assets are assessed to be either finite or indefinite. Intangible assets with finite lives are subsequently amortised over the useful economic life and assessed for impairment whenever there is an indication that the intangible asset may be impaired. The amortisation period and the amortisation method for an intangible asset with a finite useful life are reviewed at least at each financial year end.

Research and development costs

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

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

Leases

Leases that transfer substantially all the rewards and risks of ownership of assets to the Group, other than legal title, are accounted for as finance leases. At the inception of a finance lease, the cost of the leased asset is capitalised at the present value of the minimum lease payments and recorded together with the obligation, excluding the interest element, to reflect the purchase and financing. Assets held under capitalised finance leases, including prepaid land lease payments under finance leases, are included in property, plant and equipment, and depreciated over the shorter of the lease terms and the estimated useful lives of the assets. The finance costs of such leases are charged to the statement of profit or loss so as to provide a constant periodic rate of charge over the lease terms.

Leases where substantially all the rewards and risks of ownership of assets remain with the lessor are accounted for as operating leases. Where the Group is the lessor, assets leased by the Group under operating leases are included in non-current assets, and rentals receivable under the operating leases are credited to the statement of profit or loss on the straight-line basis over the lease terms. Where the Group is the lessee, rentals payable under operating leases net of any incentives received from the lessor are charged to the statement of profit or loss on the straight-line basis over the lease terms.

Notes to Financial Statements

31 December 2018

2.4 SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES *(Continued)*

Properties held for sale

Properties held for sale are stated at the lower of cost and net realisable value. The cost of properties held for sale comprises specifically identified cost, including the acquisition cost of land, aggregate cost of development, materials and supplies, wages and other direct expenses capitalised. Net realisable value represents the estimated selling price, based on prevailing market conditions, less estimated costs of completion and costs to be incurred in selling the property.

Prepaid land lease payments

Prepaid land lease payments under operating leases are initially stated at cost and subsequently recognised on the straight-line basis over the lease terms.

When the lease payments cannot be allocated reliably between the land and buildings elements, the entire lease payments are included in the cost of the land and buildings as a finance lease in property, plant and equipment.

Investments and other financial assets (policies under HKFRS 9 applicable from 1 January 2018)

Initial recognition and measurement

Financial assets are classified, at initial recognition, as subsequently measured at amortised cost, fair value through other comprehensive income, and fair value through profit or loss.

The classification of financial assets at initial recognition depends on the financial asset's contractual cash flow characteristics and the Group's business model for managing them. With the exception of trade receivables that do not contain a significant financing component or for which the Group has applied the practical expedient of not adjusting the effect of a significant financing component, the Group initially measures a financial asset at its fair value, plus in the case of a financial asset not at fair value through profit or loss, transaction costs. Trade receivables that do not contain a significant financing component or for which the Group has applied the practical expedient are measured at the transaction price determined under HKFRS 15 in accordance with the policies set out for "Revenue recognition (applicable from 1 January 2018)" below.

In order for a financial asset to be classified and measured at amortised cost or fair value through other comprehensive income, it needs to give rise to cash flows that are solely payments of principal and interest ("SPPI") on the principal amount outstanding.

The Group's business model for managing financial assets refers to how it manages its financial assets in order to generate cash flows. The business model determines whether cash flows will result from collecting contractual cash flows, selling the financial assets, or both.

All regular way purchases and sales of financial assets are recognised on the trade date, that is, the date that the Group commits to purchase or sell the asset. Regular way purchases or sales are purchases or sales of financial assets that require delivery of assets within the period generally established by regulation or convention in the marketplace.





Notes to Financial Statements

31 December 2018

2.4 SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES *(Continued)*

Investments and other financial assets (policies under HKFRS 9 applicable from 1 January 2018) *(Continued)*

Subsequent measurement

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

Financial assets at amortised cost (debt instruments)

The Group measures financial assets at amortised cost if both of the following conditions are met:

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

Financial assets at amortised cost are subsequently measured using the effective interest method and are subject to impairment. Gains and losses are recognised in the statement of profit or loss when the asset is derecognised, modified or impaired.

Financial assets designated at fair value through other comprehensive income (equity investments)

Upon initial recognition, the Group can elect to classify irrevocably its equity investments as equity investments designated at fair value through other comprehensive income when they meet the definition of equity under HKAS 32 *Financial Instruments: Presentation* and are not held for trading. The classification is determined on an instrument-by-instrument basis.

Gains and losses on these financial assets are never recycled to the statement of profit or loss. Dividends are recognised as other income in the statement of profit or loss when the right of payment has been established, it is probable that the economic benefits associated with the dividend will flow to the Group and the amount of the dividend can be measured reliably, except when the Group benefits from such proceeds as a recovery of part of the cost of the financial asset, in which case, such gains are recorded in other comprehensive income. Equity investments designated at fair value through other comprehensive income are not subject to impairment assessment.

Notes to Financial Statements

31 December 2018

2.4 SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES *(Continued)*

Investments and other financial assets (policies under HKFRS 9 applicable from 1 January 2018) *(Continued)*

Subsequent measurement (Continued)

Financial assets at fair value through profit or loss

Financial assets at fair value through profit or loss include financial assets held for trading, financial assets designated upon initial recognition at fair value through profit or loss, or financial assets mandatorily required to be measured at fair value. Financial assets are classified as held for trading if they are acquired for the purpose of selling or repurchasing in the near term. Derivatives, including separated embedded derivatives, are also classified as held for trading unless they are designated as effective hedging instruments. Financial assets with cash flows that are not solely payments of principal and interest are classified and measured at fair value through profit or loss, irrespective of the business model. Notwithstanding the criteria for debt instruments to be classified at amortised cost or at fair value through other comprehensive income, as described above, debt instruments may be designated at fair value through profit or loss on initial recognition if doing so eliminates, or significantly reduces, an accounting mismatch.

Financial assets at fair value through profit or loss are carried in the statement of financial position at fair value with net changes in fair value recognised in the statement of profit or loss.

This category includes derivative instruments and equity investments which the Group had not irrevocably elected to classify at fair value through other comprehensive income. Dividends on equity investments classified as financial assets at fair value through profit or loss are also recognised as other income in the statement of profit or loss when the right of payment has been established, it is probable that the economic benefits associated with the dividend will flow to the Group and the amount of the dividend can be measured reliably.

A derivative embedded in a hybrid contract, with a financial liability or non-financial host, is separated from the host and accounted for as a separate derivative if the economic characteristics and risks are not closely related to the host; a separate instrument with the same terms as the embedded derivative would meet the definition of a derivative; and the hybrid contract is not measured at fair value through profit or loss. Embedded derivatives are measured at fair value with changes in fair value recognised in the statement of profit or loss. Reassessment only occurs if there is either a change in the terms of the contract that significantly modifies the cash flows that would otherwise be required or a reclassification of a financial asset out of the fair value through profit or loss category.

A derivative embedded within a hybrid contract containing a financial asset host is not accounted for separately. The financial asset host together with the embedded derivative is required to be classified in its entirety as a financial asset at fair value through profit or loss.





Notes to Financial Statements

31 December 2018

2.4 SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES *(Continued)*

Investments and other financial assets (policies under HKAS 39 applicable before 1 January 2018)

Initial recognition and measurement

Financial assets are classified, at initial recognition, as financial assets at fair value through profit or loss, loans and receivables and available-for-sale financial investments, or as derivatives designated as hedging instruments in an effective hedge, as appropriate. When financial assets are recognised initially, they are measured at fair value plus transaction costs that are attributable to the acquisition of the financial assets, except in the case of financial assets recorded at fair value through profit or loss.

All regular way purchases and sales of financial assets are recognised on the trade date, that is, the date that the Group commits to purchase or sell the asset. Regular way purchases or sales are purchases or sales of financial assets that require delivery of assets within the period generally established by regulation or convention in the marketplace.

Subsequent measurement

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

Financial assets at fair value through profit or loss

Financial assets at fair value through profit or loss include financial assets held for trading and financial assets designated upon initial recognition as at fair value through profit or loss. Financial assets are classified as held for trading if they are acquired for the purpose of sale in the near term. Derivatives, including separated embedded derivatives, are also classified as held for trading unless they are designated as effective hedging instruments as defined by HKAS 39.

Financial assets at fair value through profit or loss are carried in the statement of financial position at fair value with positive net changes in fair value presented as other income and gains and negative net changes in fair value presented as finance costs in the statement of profit or loss. These net fair value changes do not include any dividends or interest earned on these financial assets, which are recognised in accordance with the policies set out for "Revenue recognition (applicable before 1 January 2018)" below.

Financial assets designated upon initial recognition as at fair value through profit or loss are designated at the date of initial recognition and only if the criteria in HKAS 39 are satisfied.

Derivatives embedded in host contracts are accounted for as separate derivatives and recorded at fair value if their economic characteristics and risks are not closely related to those of the host contracts and the host contracts are not held for trading or designated as at fair value through profit or loss. These embedded derivatives are measured at fair value with changes in fair value recognised in the statement of profit or loss. Reassessment only occurs if there is either a change in the terms of the contract that significantly modifies the cash flows that would otherwise be required or a reclassification of a financial asset out of the fair value through profit or loss category.

Notes to Financial Statements

31 December 2018

2.4 SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES *(Continued)*

Investments and other financial assets (policies under HKAS 39 applicable before 1 January 2018) *(Continued)*

Subsequent measurement (Continued)

Loans and receivables

Loans and receivables are non-derivative financial assets with fixed or determinable payments that are not quoted in an active market. After initial measurement, such assets are subsequently measured at amortised cost using the effective interest rate method less any allowance for impairment. Amortised cost is calculated by taking into account any discount or premium on acquisition and includes fees or costs that are an integral part of the effective interest rate. The effective interest rate amortisation is included in other income and gains in the statement of profit or loss. The loss arising from impairment is recognised in the statement of profit or loss in finance costs for loans and in other expenses for receivables.

Available-for-sale financial investments

Available-for-sale financial investments are non-derivative financial assets in listed and unlisted equity investments and debt securities. Equity investments classified as available for sale are those which are neither classified as held for trading nor designated as at fair value through profit or loss. Debt securities in this category are those which are intended to be held for an indefinite period of time and which may be sold in response to needs for liquidity or in response to changes in market conditions.

After initial recognition, available-for-sale financial investments are subsequently measured at fair value, with unrealised gains or losses recognised as other comprehensive income in the available-for-sale investment revaluation reserve until the investment is derecognised, at which time the cumulative gain or loss is recognised in the statement of profit or loss in other income, or until the investment is determined to be impaired, when the cumulative gain or loss is reclassified from the available-for-sale investment revaluation reserve to the statement of profit or loss in other gains or losses. Interest and dividends earned whilst holding the available-for-sale financial investments are reported as interest income and dividend income, respectively and are recognised in the statement of profit or loss as other income in accordance with the policies set out for "Revenue recognition (applicable before 1 January 2018)" below.

When the fair value of unlisted equity investments cannot be reliably measured because (a) the variability in the range of reasonable fair value estimates is significant for that investment or (b) the probabilities of the various estimates within the range cannot be reasonably assessed and used in estimating fair value, such investments are stated at cost less any impairment losses.





Notes to Financial Statements

31 December 2018

2.4 SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES *(Continued)*

Investments and other financial assets (policies under HKAS 39 applicable before 1 January 2018) *(Continued)*

Subsequent measurement *(Continued)*

Available-for-sale financial investments *(Continued)*

The Group evaluates whether the ability and intention to sell its available-for-sale financial assets in the near term are still appropriate. When, in rare circumstances, the Group is unable to trade these financial assets due to inactive markets, the Group may elect to reclassify these financial assets if management has the ability and intention to hold the assets for the foreseeable future or until maturity.

For a financial asset reclassified from the available-for-sale category, the fair value carrying amount at the date of reclassification becomes its new amortised cost and any previous gain or loss on that asset that has been recognised in equity is amortised to profit or loss over the remaining life of the investment using the effective interest rate. Any difference between the new amortised cost and the maturity amount is also amortised over the remaining life of the asset using the effective interest rate. If the asset is subsequently determined to be impaired, then the amount recorded in equity is reclassified to the statement of profit or loss.

Derecognition of financial assets (policies under HKFRS 9 applicable from 1 January 2018 and policies under HKAS 39 applicable before 1 January 2018)

A financial asset (or, where applicable, a part of a financial asset or part of a group of similar financial assets) is primarily derecognised (i.e., removed from the Group's consolidated statement of financial position) when:

- the rights to receive cash flows from the asset have expired; or
- The Group has transferred its rights to receive cash flows from the asset or has assumed an obligation to pay the received cash flows in full without material delay to a third party under a "pass-through" arrangement; and either (a) the Group has transferred substantially all the risks and rewards of the asset, or (b) the Group has neither transferred nor retained substantially all the risks and rewards of the asset, but has transferred control of the asset.

When the Group has transferred its rights to receive cash flows from an asset or has entered into a pass-through arrangement, it evaluates if, and to what extent, it has retained the risk and rewards of ownership of the asset. When it has neither transferred nor retained substantially all the risks and rewards of the asset nor transferred control of the asset, the Group continues to recognise the transferred asset to the extent of the Group's continuing involvement. In that case, the Group also recognises an associated liability. The transferred asset and the associated liability are measured on a basis that reflects the rights and obligations that the Group has retained.

Continuing involvement that takes the form of a guarantee over the transferred asset is measured at the lower of the original carrying amount of the asset and the maximum amount of consideration that the Group could be required to repay.

Notes to Financial Statements

31 December 2018

2.4 SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES *(Continued)*

Impairment of financial assets (policies under HKFRS 9 applicable from 1 January 2018)

The Group recognises an allowance for ECLs for all debt instruments not held at fair value through profit or loss. ECLs are based on the difference between the contractual cash flows due in accordance with the contract and all the cash flows that the Group expects to receive, discounted at an approximation of the original effective interest rate. The expected cash flows will include cash flows from the sale of collateral held or other credit enhancements that are integral to the contractual terms.

General approach

ECLs are recognised in two stages. For credit exposures for which there has not been a significant increase in credit risk since initial recognition, ECLs are provided for credit losses that result from default events that are possible within the next 12 months (a 12-month ECL). For those credit exposures for which there has been a significant increase in credit risk since initial recognition, a loss allowance is required for credit losses expected over the remaining life of the exposure, irrespective of the timing of the default (a lifetime ECL).

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

The Group considers a financial asset in default when contractual payments are 90 days past due. However, in certain cases, the Group may also consider a financial asset to be in default when internal or external information indicates that the Group is unlikely to receive the outstanding contractual amounts in full before taking into account any credit enhancements held by the Group. A financial asset is written off when there is no reasonable expectation of recovering the contractual cash flows.

Financial assets at amortised cost are subject to impairment under the general approach and they are classified within the following stages for measurement of ECLs except for trade receivables and contract assets which apply the simplified approach as detailed below.

- Stage 1 – Financial instruments for which credit risk has not increased significantly since initial recognition and for which the loss allowance is measured at an amount equal to 12-month ECLs
- Stage 2 – Financial instruments for which credit risk has increased significantly since initial recognition but that are not credit-impaired financial assets and for which the loss allowance is measured at an amount equal to lifetime ECLs
- Stage 3 – Financial assets that are credit-impaired at the reporting date (but that are not purchased or originated credit-impaired) and for which the loss allowance is measured at an amount equal to lifetime ECLs





Notes to Financial Statements

31 December 2018

2.4 SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES *(Continued)*

Impairment of financial assets (policies under HKFRS 9 applicable from 1 January 2018)

(Continued)

Simplified approach

For trade receivables and contract assets that do not contain a significant financing component or when the Group applies the practical expedient of not adjusting the effect of a significant financing component, the Group applies the simplified approach in calculating ECLs. Under the simplified approach, the Group does not track changes in credit risk, but instead recognises a loss allowance based on lifetime ECLs at each reporting date. The Group has established a provision matrix that is based on its historical credit loss experience, adjusted for forward-looking factors specific to the debtors and the economic environment.

For trade receivables and contract assets that contain a significant financing component and lease receivables, the Group chooses as its accounting policy to adopt the simplified approach in calculating ECLs with policies as described above.

Impairment of financial assets (policies under HKAS 39 applicable before 1 January 2018)

The Group assesses at the end of each reporting period whether there is objective evidence that a financial asset or a group of financial assets is impaired. An impairment exists if one or more events that occurred after the initial recognition of the asset have an impact on the estimated future cash flows of the financial asset or the group of financial assets that can be reliably estimated. Evidence of impairment may include indications that a debtor or a group of debtors is experiencing significant financial difficulty, default or delinquency in interest or principal payments, the probability that they will enter bankruptcy or other financial reorganisation and observable data indicating that there is a measurable decrease in the estimated future cash flows, such as changes in arrears or economic conditions that correlate with defaults.

Financial assets carried at amortised cost

For financial assets carried at amortised cost, the Group first assesses whether impairment exists individually for financial assets that are individually significant, or collectively for financial assets that are not individually significant. If the Group determines that no objective evidence of impairment exists for an individually assessed financial asset, whether significant or not, it includes the asset in a group of financial assets with similar credit risk characteristics and collectively assesses them for impairment. Assets that are individually assessed for impairment and for which an impairment loss is, or continues to be, recognised are not included in a collective assessment of impairment.

The amount of any impairment loss identified is measured as the difference between the asset's carrying amount and the present value of estimated future cash flows (excluding future credit losses that have not yet been incurred). The present value of the estimated future cash flows is discounted at the financial asset's original effective interest rate (i.e., the effective interest rate computed at initial recognition).

The carrying amount of the asset is reduced through the use of an allowance account and the loss is recognised in the statement of profit or loss. Interest income continues to be accrued on the reduced carrying amount using the rate of interest used to discount the future cash flows for the purpose of measuring the impairment loss. Loans and receivables together with any associated allowance are written off when there is no realistic prospect of future recovery and all collateral has been realised or has been transferred to the Group.

Notes to Financial Statements

31 December 2018

2.4 SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES *(Continued)*

Impairment of financial assets (policies under HKAS 39 applicable before 1 January 2018)

(Continued)

Financial assets carried at amortised cost *(Continued)*

If, in a subsequent period, the amount of the estimated impairment loss increases or decreases because of an event occurring after the impairment was recognised, the previously recognised impairment loss is increased or reduced by adjusting the allowance account. If a write-off is later recovered, the recovery is credited to other expenses in the statement of profit or loss.

Assets carried at cost

If there is objective evidence that an impairment loss has been incurred on an unquoted equity instrument that is not carried at fair value because its fair value cannot be reliably measured, or on a derivative asset that is linked to and must be settled by delivery of such an unquoted equity instrument, the amount of the loss is measured as the difference between the asset's carrying amount and the present value of estimated future cash flows discounted at the current market rate of return for a similar financial asset. Impairment losses on these assets are not reversed.

Available-for-sale financial investments

For available-for-sale financial investments, the Group assesses at the end of each reporting period whether there is objective evidence that an investment or a group of investments is impaired.

If an available-for-sale asset is impaired, an amount comprising the difference between its cost (net of any principal payment and amortisation) and its current fair value, less any impairment loss previously recognised in the statement of profit or loss, is removed from other comprehensive income and recognised in the statement of profit or loss.

In the case of equity investments classified as available for sale, objective evidence would include a significant or prolonged decline in the fair value of an investment below its cost. "Significant" is evaluated against the original cost of the investment and "prolonged" against the period in which the fair value has been below its original cost. Where there is evidence of impairment, the cumulative loss – measured as the difference between the acquisition cost and the current fair value, less any impairment loss on that investment previously recognised in the statement of profit or loss – is removed from other comprehensive income and recognised in the statement of profit or loss. Impairment losses on equity instruments classified as available for sale are not reversed through the statement of profit or loss. Increases in their fair value after impairment are recognised directly in other comprehensive income.

The determination of what is "significant" or "prolonged" requires judgement. In making this judgement, the Group evaluates, among other factors, the duration or extent to which the fair value of an investment is less than its cost.

Financial liabilities (policies under HKFRS 9 applicable from 1 January 2018 and HKAS 39 applicable before 1 January 2018)

Initial recognition and measurement

Financial liabilities are classified, at initial recognition, as loans and borrowings, payables, as appropriate.

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

The Group's financial liabilities include trade and bills payables, other payables and accruals, amount due to associates and related companies and interest-bearing bank borrowings.





Notes to Financial Statements

31 December 2018

2.4 SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES *(Continued)*

Financial liabilities (policies under HKFRS 9 applicable from 1 January 2018 and HKAS 39 applicable before 1 January 2018) *(Continued)*

Subsequent measurement

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

Loans and borrowings

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

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

Derecognition of financial liabilities (policies under HKFRS 9 applicable from 1 January 2018 and HKAS 39 applicable before 1 January 2018)

A financial liability is derecognised when the obligation under the liability is discharged or cancelled, or expires.

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

Offsetting of financial instruments (policies under HKFRS 9 applicable from 1 January 2018 and HKAS 39 applicable before 1 January 2018)

Financial assets and financial liabilities are offset and the net amount is reported in the statement of financial position if there is a currently enforceable legal right to offset the recognised amounts and there is an intention to settle on a net basis, or to realise the assets and settle the liabilities simultaneously.

Treasury shares

Own equity instruments which are reacquired and held by the Company or the Group (treasury shares) are recognised directly in equity at cost. No gain or loss is recognised in the statement of profit or loss on the purchase sale, issue or cancellation of the Group's own equity instruments.

Inventories

Inventories are stated at the lower of cost and net realisable value. Cost is determined on the first-in, first-out basis and, in the case of work in progress and finished goods, comprises direct materials, direct labour and an appropriate proportion of overheads. Net realisable value is based on estimated selling prices less any estimated costs to be incurred to completion and disposal.

Notes to Financial Statements

31 December 2018

2.4 SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES *(Continued)*

Cash and cash equivalents

For the purpose of the consolidated statement of cash flows, cash and cash equivalents comprise cash on hand and demand deposits, and short-term highly liquid investments that are readily convertible into known amounts of cash, are subject to an insignificant risk of changes in value, and have a short maturity of generally within three months when acquired, less bank overdrafts which are repayable on demand and form an integral part of the Group's cash management.

For the purpose of the consolidated statement of financial position, cash and cash equivalents comprise cash on hand and at banks, including term deposits, and assets similar in nature to cash, which are not restricted as to use.

Provisions

A provision is recognised when a present obligation (legal or constructive) has arisen as a result of a past event and it is probable that a future outflow of resources will be required to settle the obligation, provided that a reliable estimate can be made of the amount of the obligation.

When the effect of discounting is material, the amount recognised for a provision is the present value at the end of the reporting period of the future expenditures expected to be required to settle the obligation. The increase in the discounted present value amount arising from the passage of time is included in finance costs in the statement of profit or loss.

The Group provides for warranties in relation to the sale of certain industrial products and the provision of construction services for general repairs of defects occurring during the warranty period. Provisions for these assurance-type warranties granted by the Group are recognised based on sales volume and past experience of the level of repairs and returns, discounted to their present values as appropriate.

Income tax

Income tax comprises current and deferred tax. Income tax relating to items recognised outside profit or loss is recognised outside profit or loss, either in other comprehensive income or directly in equity.

Current tax assets and liabilities are measured at the amount expected to be recovered from or paid to the taxation authorities, based on tax rates (and tax laws) that have been enacted or substantively enacted by the end of the reporting period, taking into consideration interpretations and practices prevailing in the countries in which the Group operates.

Deferred tax is provided, using the liability method, on all temporary differences at the end of the reporting period between the tax bases of assets and liabilities and their carrying amounts for financial reporting purposes.

Deferred tax liabilities are recognised for all taxable temporary differences, except:

- when the deferred tax liability arises from the initial recognition of goodwill or an asset or liability in a transaction that is not a business combination and, at the time of the transaction, affects neither the accounting profit nor taxable profit or loss; and
- in respect of taxable temporary differences associated with investments in subsidiaries, associates and the joint venture, when the timing of the reversal of the temporary differences can be controlled and it is probable that the temporary differences will not reverse in the foreseeable future.





Notes to Financial Statements

31 December 2018

2.4 SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES *(Continued)*

Income tax *(Continued)*

Deferred tax assets are recognised for all deductible temporary differences, the carryforward of unused tax credits and any unused tax losses. Deferred tax assets are recognised to the extent that it is probable that taxable profit will be available against which the deductible temporary differences, the carryforward of unused tax credits and unused tax losses can be utilised, except:

- when the deferred tax asset relating to the deductible temporary differences arises from the initial recognition of an asset or liability in a transaction that is not a business combination and, at the time of the transaction, affects neither the accounting profit nor taxable profit or loss; and
- in respect of deductible temporary differences associated with investments in subsidiaries, associates and the joint venture, deferred tax assets are only recognised to the extent that it is probable that the temporary differences will reverse in the foreseeable future and taxable profit will be available against which the temporary differences can be utilised.

The carrying amount of deferred tax assets is reviewed at the end of each reporting period and reduced to the extent that it is no longer probable that sufficient taxable profit will be available to allow all or part of the deferred tax asset to be utilised. Unrecognised deferred tax assets are reassessed at the end of each reporting period and are recognised to the extent that it has become probable that sufficient taxable profit will be available to allow all or part of the deferred tax asset to be recovered.

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

Deferred tax assets and deferred tax liabilities are offset if and only if the Group has a legally enforceable right to set off current tax assets and current tax liabilities and the deferred tax assets and deferred tax liabilities relate to income taxes levied by the same taxation authority on either the same taxable entity or different taxable entities which intend either to settle current tax liabilities and assets on a net basis, or to realise the assets and settle the liabilities simultaneously, in each future period in which significant amounts of deferred tax liabilities or assets are expected to be settled or recovered.

Government grants

Government grants are recognised at their fair value where there is reasonable assurance that the grant will be received and all attaching conditions will be complied with. When the grant relates to an expense item, it is recognised as income on a systematic basis over the periods that the costs, which it is intended to compensate, are expensed.

Where the grant relates to an asset, the fair value is credited to a deferred income account and is released to the statement of profit or loss over the expected useful life of the relevant asset by equal annual instalments or deducted from the carrying amount of the asset and released to the statement of profit or loss by way of a reduced depreciation charge.

Notes to Financial Statements

31 December 2018

2.4 SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES *(Continued)*

Revenue recognition (applicable from 1 January 2018)

Revenue from contracts with customers

Revenue from contracts with customers is recognised when control of goods or services is transferred to the customers at an amount that reflects the consideration to which the Group expects to be entitled in exchange for those goods or services.

When the consideration in a contract includes a variable amount, the amount of consideration is estimated to which the Group will be entitled in exchange for transferring the goods or services to the customer. The variable consideration is estimated at contract inception and constrained until it is highly probable that a significant revenue reversal in the amount of cumulative revenue recognised will not occur when the associated uncertainty with the variable consideration is subsequently resolved.

When the contract contains a financing component which provides the customer a significant benefit of financing the transfer of goods or services to the customer for more than one year, revenue is measured at the present value of the amount receivable, discounted using the discount rate that would be reflected in a separate financing transaction between the Group and the customer at contract inception. When the contract contains a financing component which provides the Group a significant financial benefit for more than one year, revenue recognised under the contract includes the interest expense accreted on the contract liability under the effective interest method. For a contract where the period between the payment by the customer and the transfer of the promised goods or services is one year or less, the transaction price is not adjusted for the effects of a significant financing component, using the practical expedient in HKFRS 15.

(a) Sale of industrial products

Revenue from the sale of industrial products is recognised at the point in time when control of the asset is transferred to the customer, generally on delivery of the industrial products.

Some contracts for the sale of industrial products provide customers with rights of return which gives rise to variable consideration. For contracts which provide a customer with a right to return the goods within a specified period, the expected value method is used to estimate the goods that will not be returned because this method best predicts the amount of variable consideration to which the Group will be entitled. The requirements in HKFRS 15 on constraining estimates of variable consideration are applied in order to determine the amount of variable consideration that can be included in the transaction price. For goods that are expected to be returned, instead of revenue, a refund liability is recognised. A right-of-return asset (and the corresponding adjustment to cost of sales) is also recognised for the right to recover products from a customer.





Notes to Financial Statements

31 December 2018

2.4 SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES *(Continued)*

Revenue recognition (applicable from 1 January 2018) *(Continued)*

Revenue from contracts with customers (Continued)

(b) Construction services

Revenue from the provision of construction services is recognised over time, using an input method to measure progress towards complete satisfaction of the service, because the Group's performance creates or enhances an asset that the customer controls as the asset is created or enhanced. The input method recognises revenue based on the proportion of the actual costs incurred relative to the estimated total costs for satisfaction of the construction services.

Claims to customers are amounts that the Group seeks to collect from the customers as reimbursement of costs and margins for scope of works not included in the original construction contract. Claims are accounted for as variable consideration and constrained until it is highly probable that a significant revenue reversal in the amount of cumulative revenue recognised will not occur when the associated uncertainty with the variable consideration is subsequently resolved. The Group uses the expected value method to estimate the amounts of claims because this method best predicts the amount of variable consideration to which the Group will be entitled.

Revenue from other sources

Rental income is recognised on a time proportion basis over the lease terms.

Other income

Interest income is recognised on an accrual basis using the effective interest method by applying the rate that exactly discounts the estimated future cash receipts over the expected life of the financial instrument or a shorter period, when appropriate, to the net carrying amount of the financial asset.

Dividend income is recognised when the shareholders' right to receive payment has been established, it is probable that the economic benefits associated with the dividend will flow to the Group and the amount of the dividend can be measured reliably.

Revenue recognition (applicable before 1 January 2018)

Revenue is recognised when it is probable that the economic benefits will flow to the Group and when the revenue can be measured reliably, on the following bases:

- (a) from the sale of goods, when the significant risks and rewards of ownership have been transferred to the buyer, provided that the Group maintains neither managerial involvement to the degree usually associated with ownership, nor effective control over the goods sold;
- (b) from construction contracts, on the percentage of completion basis, as further explained in the accounting policy for "Construction contracts (applicable before 1 January 2018)" below;
- (c) from the rendering of services, on the percentage of completion basis, as further explained in the accounting policy for "Contracts for services (applicable before 1 January 2018)" below;
- (d) rental income, on a time proportion basis over the lease terms;
- (e) interest income, on an accrual basis using the effective interest method by applying the rate that exactly discounts the estimated future cash receipts over the expected life of the financial instrument or a shorter period, when appropriate, to the net carrying amount of the financial asset; and
- (f) dividend income, when the shareholders' right to receive payment has been established.

Notes to Financial Statements

31 December 2018

2.4 SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES *(Continued)*

Contract assets (applicable from 1 January 2018)

A contract asset is the right to consideration in exchange for goods or services transferred to the customer. If the Group performs by transferring goods or services to a customer before the customer pays consideration or before payment is due, a contract asset is recognised for the earned consideration that is conditional.

Contract liabilities (applicable from 1 January 2018)

A contract liability is the obligation to transfer goods or services to a customer for which the Group has received a consideration (or an amount of consideration that is due) from the customer. If a customer pays the consideration before the Group transfers goods or services to the customer, a contract liability is recognised when the payment is made or the payment is due (whichever is earlier). Contract liabilities are recognised as revenue when the Group performs under the contract.

Contract costs (applicable from 1 January 2018)

Other than the costs which are capitalised as inventories, property, plant and equipment and intangible assets, costs incurred to fulfil a contract with a customer are capitalised as an asset if all of the following criteria are met:

- (a) The costs relate directly to a contract or to an anticipated contract that the entity can specifically identify.
- (b) The costs generate or enhance resources of the entity that will be used in satisfying (or in continuing to satisfy) performance obligations in the future.
- (c) The costs are expected to be recovered.

The capitalised contract costs are amortised and charged to the statement of profit or loss on a systematic basis that is consistent with the pattern of the revenue to which the asset related is recognised. Other contract costs are expensed as incurred.

Construction contracts (applicable before 1 January 2018)

Contract revenue comprises the agreed contract amount and appropriate amounts from variation orders, claims and incentive payments. Contract costs incurred comprise direct materials, the costs of subcontracting, direct labour and an appropriate proportion of variable and fixed construction overheads.

Revenue from fixed price construction contracts is recognised using the percentage of completion method, measured by reference to the proportion of costs incurred to date to the estimated total cost of the relevant contract.

Revenue from cost plus construction contracts is recognised using the percentage of completion method, by reference to the recoverable costs incurred during the period plus the related fee earned, measured by the proportion of costs incurred to date to the estimated total cost of the relevant contract.

Provision is made for foreseeable losses as soon as they are anticipated by management. Where contract costs incurred to date plus recognised profits less recognised losses exceed progress billings, the surplus is treated as an amount due from contract customers. Where progress billings exceed contract costs incurred to date plus recognised profits less recognised losses, the surplus is treated as an amount due to contract customers.





Notes to Financial Statements

31 December 2018

2.4 SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES *(Continued)*

Contracts for services (applicable before 1 January 2018)

Contract revenue on the rendering of services comprises the agreed contract amount. Costs of rendering services comprise labour and other costs of personnel directly engaged in providing the services and attributable overheads.

Revenue from the rendering of services is recognised based on the percentage of completion of the transaction, provided that the revenue, the costs incurred and the estimated costs to completion can be measured reliably. The percentage of completion is established by reference to the costs incurred to date as compared to the total costs to be incurred under the transaction. Where the outcome of a contract cannot be measured reliably, revenue is recognised only to the extent that the expenses incurred are eligible to be recovered.

Provision is made for foreseeable losses as soon as they are anticipated by management. Where contract costs incurred to date plus recognised profits less recognised losses exceed progress billings, the surplus is treated as an amount due from contract customers. Where progress billings exceed contract costs incurred to date plus recognised profits less recognised losses, the surplus is treated as an amount due to contract customers.

Share-based payments

The Company operates a share option scheme for the purpose of providing incentives and rewards to eligible participants who contribute to the success of the Group's operations. Employees (including directors) of the Group receive remuneration in the form of share-based payments, whereby employees render services as consideration for equity instruments ("equity-settled transactions").

The cost of equity-settled transactions with employees is measured by reference to the fair value at the date at which they are granted. The fair value is determined by an external valuer using a binomial model, further details of which are given in note 36 to the financial statements.

The cost of equity-settled transactions is recognised in employee benefit expense, together with a corresponding increase in equity, over the period in which the performance and/or service conditions are fulfilled. The cumulative expense recognised for equity-settled transactions at the end of each reporting period until the vesting date reflects the extent to which the vesting period has expired and the Group's best estimate of the number of equity instruments that will ultimately vest. The charge or credit to the statement of profit or loss for a period represents the movement in the cumulative expense recognised as at the beginning and end of that period.

Service and non-market performance conditions are not taken into account when determining the grant date fair value of awards, but the likelihood of the conditions being met is assessed as part of the Group's best estimate of the number of equity instruments that will ultimately vest. Market performance conditions are reflected within the grant date fair value. Any other conditions attached to an award, but without an associated service requirement, are considered to be non-vesting conditions. Non-vesting conditions are reflected in the fair value of an award and lead to an immediate expensing of an award unless there are also service and/or performance conditions.

For awards that do not ultimately vest because non-market performance and/or service conditions have not been met, no expense is recognised. Where awards include a market or non-vesting condition, the transactions are treated as vesting irrespective of whether the market or non-vesting condition is satisfied, provided that all other performance and/or service conditions are satisfied.

Notes to Financial Statements

31 December 2018

2.4 SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES *(Continued)*

Share-based payments *(Continued)*

Where the terms of an equity-settled award are modified, as a minimum an expense is recognised as if the terms had not been modified, if the original terms of the award are met. In addition, an expense is recognised for any modification that increases the total fair value of the share-based payments, or is otherwise beneficial to the employee as measured at the date of modification.

Where an equity-settled award is cancelled, it is treated as if it had vested on the date of cancellation, and any expense not yet recognised for the award is recognised immediately. This includes any award where non-vesting conditions within the control of either the Group or the employee are not met. However, if a new award is substituted for the cancelled award, and is designated as a replacement award on the date that it is granted, the cancelled and new awards are treated as if they were a modification of the original award, as described in the previous paragraph.

The dilutive effect of outstanding options is reflected as additional share dilution in the computation of earnings per share.

Employee benefits

Social pension plans

The Group has social pension plans for its employees arranged by local government labour and security authorities. The Group makes contributions on a monthly basis to the social pension plans. The contributions are charged to the statement of profit or loss as they become payable in accordance with the rules of the social pension plans. Under the plans, the Group has no further obligations beyond the contributions made.

Housing fund and other social insurances

The Group has participated in defined social security contribution schemes for its employees pursuant to the relevant laws and regulations of the PRC. These include housing fund, basic and supplementary medical insurance, unemployment insurance, injury insurance and maternity insurance. The Group makes monthly contributions to the housing fund and other social insurances. The contributions are charged to the statement of profit or loss on an accrual basis. The Group has no further obligations beyond the contributions made.

Apart from those described above, the Group does not have any other legal or constructive obligations over employee benefits.

Borrowing costs

Borrowing costs directly attributable to the acquisition, construction or production of qualifying assets, i.e., assets that necessarily take a substantial period of time to get ready for their intended use or sale, are capitalised as part of the cost of those assets. The capitalisation of such borrowing costs ceases when the assets are substantially ready for their intended use or sale. Investment income earned on the temporary investment of specific borrowings pending their expenditure on qualifying assets is deducted from the borrowing costs capitalised. All other borrowing costs are expensed in the period in which they are incurred. Borrowing costs consist of interest and other costs that an entity incurs in connection with the borrowing of funds.





Notes to Financial Statements

31 December 2018

2.4 SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES *(Continued)*

Dividends

Final dividends are recognised as a liability when they are approved by the shareholders in a general meeting. Proposed final dividends are disclosed in the notes to the financial statements.

Interim dividends are simultaneously proposed and declared, because the Company's memorandum and articles of association grant the directors the authority to declare interim dividends. Consequently, interim dividends are recognised immediately as a liability when they are proposed and declared.

Foreign currencies

These financial statements are presented in Hong Kong dollars, which is the Company's functional currency. Each entity in the Group determines its own functional currency and items included in the financial statements of each entity are measured using that functional currency. Foreign currency transactions recorded by the entities in the Group are initially recorded using their respective functional currency rates prevailing at the dates of the transactions. Monetary assets and liabilities denominated in foreign currencies are translated at the functional currency rates of exchange ruling at the end of the reporting period. Differences arising on settlement or translation of monetary items are recognised in the statement of profit or loss.

Non-monetary items that are measured in terms of historical cost in a foreign currency are translated using the exchange rates at the dates of the initial transactions. Non-monetary items measured at fair value in a foreign currency are translated using the exchange rates at the date when the fair value was measured. The gain or loss arising on translation of a non-monetary item measured at fair value is treated in line with the recognition of the gain or loss on change in fair value of the item (i.e., translation difference on the item whose fair value gain or loss is recognised in other comprehensive income or profit or loss is also recognised in other comprehensive income or profit or loss, respectively).

In determining the exchange rate on initial recognition of the related asset, expense or income on the derecognition of a non-monetary asset or non-monetary liability relating to an advance consideration, the date of initial transaction is the date on which the Group initially recognises the non-monetary asset or non-monetary liability arising from the advance consideration. If there are multiple payments or receipts in advance, the Group determines the transaction date for each payment or receipt of the advance consideration.

The functional currencies of certain overseas subsidiaries, joint ventures and associates are currencies other than Hong Kong dollar. As at the end of the reporting period, the assets and liabilities of these entities are translated into Hong Kong dollars at the exchange rates prevailing at the end of the reporting period and their statements of profit or loss are translated into Hong Kong dollars at the weighted average exchange rates for the year.

The resulting exchange differences are recognised in other comprehensive income and accumulated in the exchange fluctuation reserve. On disposal of a foreign operation, the component of other comprehensive income relating to that particular foreign operation is recognised in the statement of profit or loss.

Any goodwill arising on the acquisition of a foreign operation and any fair value adjustments to the carrying amounts of assets and liabilities arising on acquisition are treated as assets and liabilities of the foreign operation and translated at the closing rate.

For the purpose of the consolidated statement of cash flows, the cash flows of overseas subsidiaries are translated into Hong Kong dollars at the exchange rates ruling at the dates of the cash flows. Frequently recurring cash flows of overseas subsidiaries which arise throughout the year are translated into Hong Kong dollars at the weighted average exchange rates for the year.

Notes to Financial Statements

31 December 2018

3. SIGNIFICANT ACCOUNTING JUDGEMENTS AND ESTIMATES

The preparation of the Group's financial statements requires management to make judgements, estimates and assumptions that affect the reported amounts of revenues, expenses, assets and liabilities, and their accompanying disclosures, and the disclosure of contingent liabilities. Uncertainty about these assumptions and estimates could result in outcomes that could require a material adjustment to the carrying amounts of the assets or liabilities affected in the future.

Judgements

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

Revenue from contracts with customers

The Group applied the following judgements that significantly affect the determination of the amount and timing of revenue from contracts with customers:

(i) *Determining the method to estimate variable consideration and assessing the constraint for construction services*

The Group seeks to collect claims from the customers as reimbursement of costs and margins for scope of works not included in the original construction contract, which give rise to variable consideration. The Group determined that the expected value method is the appropriate method to use in estimating the variable consideration for claims in construction services, given there is a wide range of possible outcomes which are subject to negotiations with third parties.

Before including any amount of variable consideration in the transaction price, the Group considers whether the amount of variable consideration is constrained. The Group determined that the estimates of variable consideration are not constrained based on its historical experience, current negotiations with customers, profitability of the head contracts of the customers and the current economic conditions.

(ii) *Determining the timing of satisfaction of construction services*

The Group concluded that revenue for construction services is to be recognised over time because the Group's performance creates or enhances an asset that the customer controls as the asset is created or enhanced.

The Group determined that the input method is the best method in measuring the progress of the construction services because there is a direct relationship between the Group's effort (i.e., costs incurred) and the transfer of services to the customer. The Group recognises revenue on the basis of the costs incurred relative to the total expected costs to complete the services.

Operating lease commitments – Group as lessor

The Group has entered into commercial property leases on its investment property portfolio. The Group has determined, based on an evaluation of the terms and conditions of the arrangements, that it retains all the significant risks and rewards of ownership of these properties which are leased out on operating leases.

Classification between investment properties and owner-occupied properties

The Group determines whether a property qualifies as an investment property, and has developed criteria in making that judgement. Investment property is a property held to earn rentals or for capital appreciation or both. Therefore, the Group considers whether a property generates cash flows largely independently of the other assets held by the Group. Some properties comprise a portion that is held to earn rentals or for capital appreciation and another portion that is held for use in the production or supply of goods or services or for administrative purposes. If these portions could be sold separately or leased out separately under a finance lease, the Group accounts for the portions separately. If the portions could not be sold separately, the property is an investment property only if an insignificant portion is held for use in the production or supply of goods or services or for administrative purposes. Judgement is made on an individual property basis to determine whether ancillary services are so significant that a property does not qualify as an investment property.





Notes to Financial Statements

31 December 2018

3. SIGNIFICANT ACCOUNTING JUDGEMENTS AND ESTIMATES *(Continued)*

Estimation uncertainty

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

Variable considerations for claims to customers

The Group estimates variable considerations for claims to be included in the transaction price for the provision of construction services.

The Group developed a statistical model for estimating expected successful claims. The model used the historical claims data including the historical experiences with the same customer, profitability of the head contracts of the customers and economic conditions to estimate expected successful claims percentages. These percentages are applied to determine the expected value of the variable consideration. Any significant changes in experience as compared to historical successful claims pattern will impact the expected successful claims percentages estimated by the Group.

The Group updates its assessment of expected successful claims monthly. Estimates of expected successful claims are sensitive to changes in circumstances and the Group's past experience regarding negotiation of claims may not be representative of the actual outcome in the future.

Estimation of fair value of investment properties and leasehold land and buildings

In the absence of current prices in an active market for similar properties, the Group considers information from a variety of sources, including:

- (a) current prices in an active market for properties of a different nature, condition or location, adjusted to reflect those differences;
- (b) recent prices of similar properties on less active markets, with adjustments to reflect any changes in economic conditions since the date of the transactions that occurred at those prices; and
- (c) discounted cash flow projections based on reliable estimates of future cash flows, supported by the terms of any existing lease and other contracts and (when possible) by external evidence such as current market rents for similar properties in the same location and condition, and using discount rates that reflect current market assessments of the uncertainty in the amount and timing of the cash flows.

The carrying amounts of investment properties and leasehold land and buildings at 31 December 2018 were HK\$663,958,000 (2017: HK\$601,607,000) and HK\$269,128,000 (2017: HK\$282,877,000), respectively. Further details, including the key assumptions used for fair value measurement, are given in notes 14 and 13 to the financial statements.

Deferred tax assets

Deferred tax assets are recognised for unused tax losses to the extent that it is probable that taxable profit will be available against which the losses can be utilised. Significant management judgement is required to determine the amount of deferred tax assets that can be recognised, based upon the likely timing and level of future taxable profits together with future tax planning strategies. Further details are contained in note 34 to the financial statements.

Notes to Financial Statements

31 December 2018

3. SIGNIFICANT ACCOUNTING JUDGEMENTS AND ESTIMATES *(Continued)*

Estimation uncertainty *(Continued)*

Impairment of non-financial assets (other than goodwill)

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

Provision against obsolete inventories

Management of the Group reviews an ageing analysis of inventories at the end of each reporting period, and makes allowance for obsolete and slow-moving inventory items identified that are no longer suitable for sale. Management estimates the net realisable value for finished goods based primarily on the latest invoice prices and current market conditions. The Group carries out an inventory review on a product-by-product basis at the end of each reporting period and makes allowance for obsolete items. As at 31 December 2018, the carrying value of inventories was approximately HK\$56,880,000 (2017: HK\$40,950,000). No impairment losses were recognised for both years.

Fair value of unlisted equity investments

The unlisted equity investments have been valued based on a market-based valuation technique as detailed in note 45 to the financial statements. The valuation requires the Group to determine the comparable public companies (peers) and select the price multiple. In addition, the Group makes estimates about the discount for illiquidity and size differences. The Group classifies the fair value of these investments as Level 3. The fair value of the unlisted equity investments at 31 December 2018 was HK\$180,381,000. Further details are included in note 19 to the financial statements.

Provision for expected credit losses on trade receivables and contract assets

The Group uses a provision matrix to calculate ECLs for trade receivables and contract assets. The provision rates are based on days past due for groupings of various customer segments that have similar loss patterns (i.e., by geography, product type, customer type and rating, and coverage by letters of credit and other forms of credit insurance).

The provision matrix is initially based on the Group's historical observed default rates. The Group will calibrate the matrix to adjust the historical credit loss experience with forward-looking information. For instance, if forecast economic conditions (i.e., gross domestic products) are expected to deteriorate over the next year which can lead to an increased number of defaults in the manufacturing sector, the historical default rates are adjusted. At each reporting date, the historical observed default rates are updated and changes in the forward-looking estimates are analysed.

The assessment of the correlation among historical observed default rates, forecast economic conditions and ECLs is a significant estimate. The amount of ECLs is sensitive to changes in circumstances and forecast economic conditions. The Group's historical credit loss experience and forecast of economic conditions may also not be representative of customer's actual default in the future. The information about the ECLs on the Group's trade receivables and contract assets is disclosed in note 24 and note 22 to the financial statements, respectively.

Impairment of goodwill

The Group determines whether goodwill is impaired at least on an annual basis. This requires an estimation of the value in use of the cash-generating units to which the goodwill is allocated. Estimating the value in use requires the Group to make an estimate of the expected future cash flows from the cash-generating units and also to choose a suitable discount rate in order to calculate the present value of those cash flows. The carrying amount of goodwill at 31 December 2018 was HK\$263,879,000 (2017: HK\$465,760,000). Further details are given in note 16.





Notes to Financial Statements

31 December 2018

4. OPERATING SEGMENT INFORMATION

For management purposes, the Group is organised into business units based on their products and services and has four reportable operating segments as follows:

- (a) Shallow geothermal energy segment – provision, installation and maintenance of shallow geothermal energy utilisation system;
- (b) Air conditioning heat pump segment – trading of air conditioning heat pump products;
- (c) Property investment and development segment – investments in properties for their potential rental income; and
- (d) Securities investment and trading segment – trading of securities and other types of investment.

Management monitors the results of the Group's operating segments separately for the purpose of making decisions about resource allocation and performance assessment. Segment performance is evaluated based on reportable segment profit/loss, which is a measure of adjusted profit/loss before tax. The adjusted profit/loss before tax is measured consistently with the Group's profit/loss before tax except that share of profits and losses of associates and a joint venture, interest income, certain other income, certain administration costs, share-based payment expenses and finance costs are excluded from such measurement.

Segment assets exclude certain other receivables, investments in associates and a joint venture, deferred tax assets, amount due from a joint venture, time deposits, pledged deposits and cash and cash equivalents as these assets are managed on a group basis.

Segment liabilities exclude certain other payables and accruals, amounts due to associates and related companies, interest-bearing bank borrowings, deferred tax liabilities and tax payable as these liabilities are managed on a group basis.

Intersegment sales and transfers are transacted with reference to the selling prices used for sales made to third parties at the then prevailing market prices.

Notes to Financial Statements

31 December 2018

4. OPERATING SEGMENT INFORMATION (Continued)

Year ended	Shallow geothermal energy HK\$'000	Air conditioning heat pump HK\$'000	Property investment and development HK\$'000	Securities investment and trading HK\$'000	Total HK\$'000
31 December 2018					
Segment revenue (note 5)					
Sales to external customers	364,842	14,439	17,512	–	396,793
Intersegment sales	–	32,553	–	–	32,553
	364,842	46,992	17,512	–	429,346
<i>Reconciliation:</i>					
Elimination of intersegment sales					(32,553)
Revenue					396,793
Segment results	(348,705)	1,307	19,159	4,424	(323,815)
<i>Reconciliation:</i>					
Elimination of intersegment results					(6,541)
Share of profits and losses of associates					(6,746)
Share of profits and losses of a joint venture					458
Unallocated other income					1,697
Corporate and other unallocated expenses					(37,530)
Finance costs					(46,590)
Loss before tax					(419,067)
Segment assets	1,106,222	66,158	965,746	240,347	2,378,473
<i>Reconciliation:</i>					
Elimination of intersegment receivables					(61,079)
Corporate and other unallocated assets					176,270
Total assets					2,493,664
Segment liabilities	596,411	90,317	58,529	4,883	750,140
<i>Reconciliation:</i>					
Elimination of intersegment payables					(61,079)
Corporate and other unallocated liabilities					719,741
Total liabilities					1,408,802





Notes to Financial Statements

31 December 2018

4. OPERATING SEGMENT INFORMATION *(Continued)*

Year ended	Shallow geothermal energy HK\$'000	Air conditioning heat pump HK\$'000	Property investment and development HK\$'000	Securities investment and trading HK\$'000	Total HK\$'000
31 December 2018					
Other segment information:					
Amounts included in the measure of segment profit or loss or segment assets:					
Depreciation	12,901	1,034	1,993	289	16,217
Impairment loss recognised in respect of trade and bills receivables, net	15,690	1	393	–	16,084
Impairment loss recognised in respect of prepayments, deposits and other receivables, net	4,299	29	1,193	–	5,521
Impairment loss recognised in respect of contract assets, net	50,966	–	–	–	50,966
Impairment of goodwill	201,881	–	–	–	201,881
Changes in fair value of investment properties	–	–	(11,204)	–	(11,204)
Capital expenditure*	4,182	1,605	22,607	–	28,394
Amounts regularly provided to the chief operating decision maker but not included in the measure of segment profit or loss or segment assets:					
Investments in associates	49,824	–	–	–	49,824
Investment in a joint venture	7,647	–	–	–	7,647
Share of profits and losses of associates	6,746	–	–	–	6,746
Share of profits and losses of a joint venture	(458)	–	–	–	(458)
Share-based payment expenses	3,088	–	–	–	3,088

* Capital expenditure consists of additions to property, plant and equipment and investment properties.

Notes to Financial Statements

31 December 2018

4. OPERATING SEGMENT INFORMATION (Continued)

Year ended	Shallow geothermal energy HK\$ '000	Air conditioning heat pump HK\$ '000	Property investment and development HK\$ '000	Securities investment and trading HK\$ '000	Total HK\$ '000
31 December 2017					
Segment revenue:					
Sales to external customers	740,470	23,906	13,777	–	778,153
Intersegment sales	–	44,028	–	–	44,028
	740,470	67,934	13,777	–	822,181
<i>Reconciliation:</i>					
Elimination of intersegment sales					(44,028)
Revenue					778,153
Segment results	58,790	5,472	39,677	3,099	107,038
<i>Reconciliation:</i>					
Elimination of intersegment results					(5,331)
Share of profits and losses of associates					2,473
Share of profits and losses of a joint venture					276
Unallocated other income					2,252
Corporate and other unallocated expenses					(42,117)
Finance costs					(48,568)
Profit before tax					16,023
Segment assets	1,819,027	92,852	922,962	106,496	2,941,337
<i>Reconciliation:</i>					
Elimination of intersegment receivables					(43,768)
Corporate and other unallocated assets					202,696
Total assets					3,100,265
Segment liabilities	466,209	84,782	46,889	6,758	604,638
<i>Reconciliation:</i>					
Elimination of intersegment payables					(43,768)
Corporate and other unallocated liabilities					852,365
Total liabilities					1,413,235





Notes to Financial Statements

31 December 2018

4. OPERATING SEGMENT INFORMATION (Continued)

Year ended	Shallow geothermal energy HK\$'000	Air conditioning heat pump HK\$'000	Property investment and development HK\$'000	Securities investment and trading HK\$'000	Total HK\$'000
31 December 2017					
Other segment information:					
Amounts included in the measure of segment profit or loss or segment assets:					
Depreciation	14,208	615	2,517	326	17,666
Impairment loss recognised in respect of trade receivables, net	10,028	–	436	–	10,464
Impairment loss recognised in respect of available-for-sale investments	–	–	–	6,653	6,653
Loss on uncertainty in respect of collectability of amounts due from customers of contract work	58,678	–	–	–	58,678
Changes in fair value of investment properties	–	–	(25,900)	–	(25,900)
Capital expenditure	3,488	3,950	40,975	–	48,413
Amounts regularly provided to the chief operating decision maker but not included in the measure of segment profit or loss or segment assets:					
Investments in associates	40,594	–	–	–	40,594
Investment in a joint venture	7,578	–	–	–	7,578
Share of profits and losses of associates	(2,473)	–	–	–	(2,473)
Share of profits and losses of a joint venture	(276)	–	–	–	(276)
Share-based payment expenses	9,546	–	–	–	9,546

Geographical information

The Group's operations are mainly located in the PRC. All of the Group's revenue from external customers are based on the locations at which the services were provided or the goods were delivered and all of the Group's non-current assets are located in the PRC.

Notes to Financial Statements

31 December 2018

4. OPERATING SEGMENT INFORMATION *(Continued)*

Information about major customers

Information about revenue from major customers which individually amounted to 10% or more of Group's revenue is shown in the following table:

	2018 <i>HK\$'000</i>	2017 <i>HK\$'000</i>
Customer A	51,507	–
Customer B	–	316,805
Customer C	83,749	–
	135,256	316,805
Total revenue	396,793	778,153
Proportion of revenue	34.1%	40.7%

5. REVENUE, OTHER INCOME AND GAINS

An analysis of revenue is as follows:

	2018 <i>HK\$'000</i>	2017 <i>HK\$'000</i>
Revenue from contracts with customers	379,281	–
Sale of goods	–	23,906
Construction contracts	–	740,470
Revenue from other sources		
Gross rental income	17,512	13,777
	396,793	778,153





Notes to Financial Statements

31 December 2018

5. REVENUE, OTHER INCOME AND GAINS *(Continued)*

Revenue from contracts with customers

(i) *Disaggregated revenue information*

For the year ended 31 December 2018

Segments	Shallow geothermal energy <i>HK\$'000</i>	Air conditioning heat pump <i>HK\$'000</i>	Total <i>HK\$'000</i>
Type of goods or services:			
Sales of goods	–	14,439	14,439
Construction services	364,842	–	364,842
Total revenue from contracts with customers	364,842	14,439	379,281
Geographical markets:			
Mainland China	364,842	14,439	379,281
Timing of revenue recognition:			
Goods transferred at a point in time	–	14,439	14,439
Services transferred over time	364,842	–	364,842
Total revenue from contracts with customers	364,842	14,439	379,281

Set out below is the reconciliation of the revenue from contracts with customers with the amounts disclosed in the segment information:

For the year ended 31 December 2018

Segments	Shallow geothermal energy <i>HK\$'000</i>	Air conditioning heat pump <i>HK\$'000</i>	Total <i>HK\$'000</i>
Revenue from contracts with customers:			
External customers	364,842	14,439	379,281
Intersegment sales	–	32,553	32,553
	364,842	46,992	411,834
Intersegment adjustments and eliminations	–	(32,553)	(32,553)
Total revenue from contracts with customers	364,842	14,439	379,281

Notes to Financial Statements

31 December 2018

5. REVENUE, OTHER INCOME AND GAINS *(Continued)*

Revenue from contracts with customers *(Continued)*

(i) *Disaggregated revenue information (Continued)*

The following table shows the amounts of revenue recognised in the current reporting period that were included in the contract liabilities at the beginning of the reporting period:

	2018 HK\$'000
Revenue recognised that was included in contract liabilities at the beginning of the reporting period:	
Construction services	7,726

(ii) *Performance obligations*

Information about the Group's performance obligations is summarised below:

Sale of goods

The performance obligation is satisfied upon delivery of the goods and payment is generally due within 90 days from delivery. Some contracts provide customers with a right of return which give rise to variable consideration subject to constraint.

Construction services

The performance obligation is satisfied over time as services are rendered and payment is generally due within 90 days from the date of billing. A certain percentage of payment is retained by customers until the end of the retention period as the Group's entitlement to the final payment is conditional on the satisfaction of the service quality by the customers over a certain period as stipulated in the contracts.

The transaction price allocated to the remaining performance obligations (unsatisfied or partially unsatisfied) as at 31 December 2018 is as follows:

	HK\$'000
Within one year	290,092

All the performance obligations are expected to be recognised within one year. The amount disclosed above does not include variable consideration which is constrained.





Notes to Financial Statements

31 December 2018

5. REVENUE, OTHER INCOME AND GAINS (Continued)

	2018	2017
	HK\$'000	HK\$'000
Other income		
Interest income	3,914	782
Sale of scrap materials	704	394
Government grants (<i>note</i>)	995	1,330
Dividend income from financial assets at fair value through profit or loss	–	5
Dividend income from available-for-sale investments	–	2,433
Dividend income from equity investments at fair value through other comprehensive income	4,141	–
Others	173	1,401
	9,927	6,345
Gains		
Fair value change on financial assets at fair value through profit or loss	283	661
Gain on disposal of subsidiaries	–	24,236
Gain on disposal of items of property, plant and equipment	–	6,535
	283	31,432
	10,210	37,777

Note: Government grants have been received in respect of certain heating projects of the Group. There are no unfulfilled conditions or contingencies relating to these grants.

Notes to Financial Statements

31 December 2018

6. (LOSS)/PROFIT BEFORE TAX

The Group's (loss)/profit before tax is arrived at after charging/(crediting):

	Notes	2018 HK\$'000	2017 HK\$'000
Cost of inventories sold		14,095	23,765
Cost of services provided		352,899	531,801
Depreciation	13	16,217	17,666
Research and development costs		10,054	13,998
Impairment of goodwill*	16	201,881	–
Minimum lease payments under operating leases		9,702	7,773
Auditor's remuneration		3,431	3,128
Employee benefit expense (including directors' and chief executive's remuneration (note 8)):			
Wages and salaries		68,382	57,801
Equity-settled share option expense		3,088	9,546
Pension scheme contributions		9,417	8,546
		80,887	75,893
Impairment loss recognised in respect of trade and bills receivables, net	24	16,084	10,464
Impairment loss recognised in respect of prepayments, deposits and other receivables, net	25	5,521	–
Loss on uncertainty in respect of collectability of contract assets/ amounts due from customers for contract work, net	22, 23	50,966	58,678
Impairment loss recognised in respect of available-for-sale investments*	19	–	6,653
Changes in fair value of investment properties	14	(11,204)	(25,900)
Fair value change on financial assets at fair value through profit or loss		(283)	(661)
Loss on disposal of available-for-sale investments*		–	463
Dividend income from available-for-sale investments		–	(2,433)
Dividend income from equity investments at fair value through other comprehensive income		(4,141)	–
Dividend income from financial assets at fair value through profit or loss		–	(5)
Interest income		(3,914)	(782)
Loss/(gain) on disposal of items of property, plant and equipment*		536	(6,535)
Gain on disposal of subsidiaries		–	(24,236)

* Impairment losses recognised in respect of available-for-sale investments and goodwill and loss on disposal of available-for-sale investments and items of property, plant and equipment are included in "Other expenses" in the consolidated statement of profit or loss.





Notes to Financial Statements

31 December 2018

7. FINANCE COSTS

An analysis of finance costs is as follows:

	2018 HK\$ '000	2017 HK\$ '000
Interest on bank loans	37,124	37,365
Guarantee fee on bank loans	9,466	11,203
	46,590	48,568

8. DIRECTORS' AND CHIEF EXECUTIVE'S REMUNERATION

Directors' and chief executive's remuneration for the year, disclosed pursuant to the Listing Rules, section 383 (1)(a), (b), (c) and (f) of the Hong Kong Companies Ordinance and Part 2 of the Companies (Disclosure of Information about Benefits of Directors) Regulation, is as follows:

	Group	
	2018 HK\$ '000	2017 HK\$ '000
Fees	600	600
Other emoluments:		
Salaries, allowances and benefits in kind	11,566	9,118
Pension scheme contributions	127	147
	11,693	9,265
	12,293	9,865

Notes to Financial Statements

31 December 2018

8. DIRECTORS' AND CHIEF EXECUTIVE'S REMUNERATION (Continued)

(a) Independent non-executive directors

The fees paid to independent non-executive directors during the year were as follows:

	Fees HK\$'000
2018	
Mr. Wu Qiang	150
Mr. Jia Wenzeng	150
Mr. Wu Desheng	150
Mr. Guo Qingui	150
	600
2017	
Mr. Wu Qiang	150
Mr. Jia Wenzeng	150
Mr. Wu Desheng	150
Mr. Guo Qingui	150
	600

There were no other emoluments payable to the independent non-executive directors during the year (2017: Nil).





Notes to Financial Statements

31 December 2018

8. DIRECTORS' AND CHIEF EXECUTIVE'S REMUNERATION (Continued)

(b) Executive directors, non-executive directors and the chief executive

	Salaries, allowances and benefits in kind HK\$'000	Pension scheme contributions HK\$'000	Total remuneration HK\$'000
2018			
Chief executive:			
Mr. Wang Manquan	2,204	91	2,295
	2,204	91	2,295
Executive directors:			
Mr. An Yi (note (2))	1,539	–	1,539
Mr. Xu Shengheng	3,138	18	3,156
Mrs. Wang Yan (note (3))	791	–	791
Ms. Chan Wai Kay, Katherine	1,920	18	1,938
Mr. Zang Yiran	1,156	–	1,156
Mr. Dai Qi	818	–	818
	9,362	36	9,398
Non-executive director:			
Mr. Zhao Youmin (note (4))	–	–	–
Ms. Yang Wei (note (5))	–	–	–
	11,566	127	11,693
2017			
Chief executive:			
Mr. Wang Manquan	1,186	111	1,297
	1,186	111	1,297
Executive directors:			
Mr. An Yi	1,523	–	1,523
Mr. Liu Dajun (note (1))	493	–	493
Mr. Xu Shengheng	2,016	18	2,034
Ms. Chan Wai Kay, Katherine	1,920	18	1,938
Mr. Zang Yiran	1,200	–	1,200
Mr. Dai Qi	780	–	780
	7,932	36	7,968
Non-executive director:			
Mr. Zhao Youmin	–	–	–
	–	–	–
	9,118	147	9,265

Notes to Financial Statements

31 December 2018

8. DIRECTORS' AND CHIEF EXECUTIVE'S REMUNERATION *(Continued)*

(b) Executive directors, non-executive directors and the chief executive *(Continued)*

Notes:

- (1) Mr. Liu Dajun resigned as an executive director effective from 30 March 2017.
- (2) Mr. An Yi resigned as an executive director effective from 10 August 2018.
- (3) Ms. Wang Yan was appointed as an executive director effective from 10 August 2018.
- (4) Mr. Zhao Youmin resigned as a non-executive director effective from 10 August 2018.
- (5) Mr. Yang Wei was appointed as a non-executive director effective from 10 August 2018.

There was no arrangement under which a director or the chief executive waived or agreed to waive any remuneration during the year.

9. FIVE HIGHEST PAID EMPLOYEES

The five highest paid employees during the year included three directors and the chief executive (2017: three directors), details of whose remuneration are set out in note 8 above. Details of the remuneration for the year of one (2017: two) highest paid employee who is neither a director nor chief executive of the Company are as follows:

	2018 HK\$'000	2017 HK\$'000
Salaries, allowances and benefits in kind	1,500	2,124
Equity-settled share option expense	214	1,326
Pension scheme contributions	58	106
	1,772	3,556

The number of non-director and non-chief executive highest paid employees whose remuneration fell within the following band is as follows:

	Number of employees	
	2018	2017
HK\$1,500,001 to HK\$2,000,000	1	2

During the year and in prior years, share options were granted to a non-director and non-chief executive highest paid employee in respect of his services to the Group, further details of which are included in the disclosures in note 36 to the financial statements. The fair value of such options, which has been recognised in the statement of profit or loss over the vesting period, was determined as at the date of grant and the amount included in the financial statements for the current year is included in the above non-director and non-chief executive highest paid employees' remuneration disclosures.





Notes to Financial Statements

31 December 2018

10. INCOME TAX (CREDIT)/EXPENSE

Pursuant to the laws and regulations of the Cayman Islands and the BVI, the Group is not subject to any income tax in the Cayman Islands and the BVI during both years.

No provision for Hong Kong profits tax has been made as the Group did not have any assessable profits subject to Hong Kong profits tax during both years.

Under the Law of the PRC on Enterprise Income Tax (the "EIT Law") and Implementation Regulation of the EIT Law, except as stated below, the tax rate of all the other PRC subsidiaries is 25% from 1 January 2008 onwards.

Pursuant to the income tax rules and regulations of the PRC, certain subsidiaries were recognised as high and new technology enterprises and the income tax rate applicable to these subsidiaries was 15% for the year ended 31 December 2018 (2017: 15%).

	2018 HK\$ '000	2017 HK\$ '000
Current – Mainland China	–	7,546
Deferred (note 34)	(556)	4,515
Total tax (credit)/charge for the year	(556)	12,061

A reconciliation of the tax expense applicable to (loss)/profit before tax at the statutory rate for the country in which the Company and the majority of its subsidiaries are domiciled to the tax expense at the effective tax rate is as follows:

	2018 HK\$ '000	2017 HK\$ '000
(Loss)/profit before tax	(419,067)	16,023
Tax at statutory tax rate of 25%	(104,767)	4,006
Effect of differences in tax rates applicable to certain subsidiaries	3,144	(4,629)
Profits and losses attributable to a joint venture and associates	1,572	(687)
Tax losses utilised from previous periods	(1,908)	(21,145)
Expenses not deductible for tax	9,276	10,314
Tax losses and deductible temporary differences not recognised	75,359	24,202
Reversal of deferred tax assets recognised in prior years	16,768	–
Tax (credit)/charge at the Group's effective rate	(556)	12,061

The share of tax attributable to a joint venture and associates amounting to HK\$114,000 (2017: HK\$69,000) and negative HK\$1,686,000 (2017: HK\$618,000), respectively, is included in "Share of profits and losses of a joint venture and associates" in the consolidated statement of profit or loss.

Notes to Financial Statements

31 December 2018

11. DIVIDENDS

During the years ended 31 December 2018 and 2017, no final dividend was declared and paid to the shareholders of the Company.

Subsequent to the end of the reporting period, no final dividend in respect of the year ended 31 December 2018 has been proposed by the directors of the Company.

12. (LOSS)/EARNINGS PER SHARE ATTRIBUTABLE TO ORDINARY EQUITY HOLDERS OF THE PARENT

The calculation of the basic (loss)/earnings per share amounts is based on the (loss)/profit for the year attributable to ordinary equity holders of the parent, and the weighted average number of ordinary shares of 4,026,925,000 (2017: 3,530,455,000) in issue during the year.

The computation of diluted earnings per share does not assume the exercise of the Company's share options because the exercise prices of those options were higher than the average market price of the Company's shares for the year ended 31 December 2018.

No adjustment has been made to the basic (loss)/earnings per share amounts presented for the years ended 31 December 2018 and 2017 in respect of a dilution as the impact of the share options outstanding had an anti-dilutive effect on the basic (loss)/earnings per share amounts presented.

The calculations of basic and diluted (loss)/earnings per share are based on:

	2018 HK\$'000	2017 HK\$'000
(Loss)/earnings		
(Loss)/profit attributable to ordinary equity holders of the parent	(410,297)	10,533

	Number of shares	
	2018 '000	2017 '000
Shares		
Weighted average number of ordinary shares in issue during the year used in the basic (loss)/earnings per share calculation	4,026,925	3,530,455





Notes to Financial Statements

31 December 2018

13. PROPERTY, PLANT AND EQUIPMENT

	Leasehold land and buildings HK\$'000	Leasehold improvements HK\$'000	Plant and machinery HK\$'000	Computer equipment HK\$'000	Office equipment, furniture and fixtures HK\$'000	Motor vehicles HK\$'000	Construction in progress HK\$'000	Total HK\$'000
31 December 2018								
At 31 December 2017 and at 1 January 2018:								
Cost or valuation	282,877	3,284	98,180	3,152	17,925	9,686	292	415,396
Accumulated depreciation and impairment	-	(2,766)	(43,017)	(3,123)	(8,028)	(8,527)	-	(65,461)
Net carrying amount	282,877	518	55,163	29	9,897	1,159	292	349,935
At 1 January 2018, net of accumulated depreciation and impairment	282,877	518	55,163	29	9,897	1,159	292	349,935
Additions	-	212	2,248	136	1,649	175	1,460	5,880
Disposals	-	(24)	(3,402)	-	(5,576)	(65)	-	(9,067)
Depreciation provided during the year	(5,109)	(538)	(9,393)	(61)	(620)	(496)	-	(16,217)
Surplus on revaluation	5,360	-	-	-	-	-	-	5,360
Transfers	-	-	1,738	-	-	-	(1,738)	-
Exchange realignment	(14,000)	(30)	(2,719)	(4)	(490)	(44)	(14)	(17,301)
At 31 December 2018, net of accumulated depreciation and impairment	269,128	138	43,635	100	4,860	729	-	318,590
At 31 December 2018:								
Cost or valuation	269,128	3,392	93,520	3,148	13,157	9,530	-	391,875
Accumulated depreciation and impairment	-	(3,254)	(49,885)	(3,048)	(8,297)	(8,801)	-	(73,285)
Net carrying amount	269,128	138	43,635	100	4,860	729	-	318,590

Notes to Financial Statements

31 December 2018

13. PROPERTY, PLANT AND EQUIPMENT (Continued)

	Leasehold land and buildings HK\$'000	Leasehold improvements HK\$'000	Plant and machinery HK\$'000	Computer equipment HK\$'000	Office equipment, furniture and fixtures HK\$'000	Motor vehicles HK\$'000	Construction in progress HK\$'000	Total HK\$'000
31 December 2017								
At 1 January 2017:								
Cost or valuation	253,983	3,858	90,745	2,946	12,896	9,189	2,417	376,034
Accumulated depreciation and impairment	–	(2,353)	(30,173)	(2,824)	(6,267)	(7,567)	–	(49,184)
Net carrying amount	253,983	1,505	60,572	122	6,629	1,622	2,417	326,850
At 1 January 2017, net of accumulated depreciation and impairment	253,983	1,505	60,572	122	6,629	1,622	2,417	326,850
Additions	–	–	62	7	4,085	396	2,906	7,456
Disposals	–	(5,999)	–	–	–	(106)	–	(6,105)
Disposals of subsidiaries	–	–	(57)	(9)	(11)	(262)	–	(339)
Depreciation provided during the year	(5,408)	(315)	(9,959)	(104)	(1,305)	(575)	–	(17,666)
Surplus on revaluation	14,912	–	–	–	–	–	–	14,912
Transfers	–	5,213	–	–	–	–	(5,213)	–
Exchange realignment	19,390	114	4,545	13	499	84	182	24,827
At 31 December 2017, net of accumulated depreciation and impairment	282,877	518	55,163	29	9,897	1,159	292	349,935
At 31 December 2017:								
Cost or valuation	282,877	3,284	98,180	3,152	17,925	9,686	292	415,396
Accumulated depreciation and impairment	–	(2,766)	(43,017)	(3,123)	(8,028)	(8,527)	–	(65,461)
Net carrying amount	282,877	518	55,163	29	9,897	1,159	292	349,935



Notes to Financial Statements

13. PROPERTY, PLANT AND EQUIPMENT *(Continued)*

The Group's leasehold land and buildings were revalued individually at the end of the reporting period by Peak Vision Appraisals Limited, an independent professionally qualified valuer, at an aggregate open market value of HK\$269,128,000 (2017: HK\$282,877,000) based on their existing use. A revaluation surplus of HK\$5,360,000 (2017: HK\$14,912,000), resulting from the above valuations, has been credited to other comprehensive income.

As at 31 December 2018, the Group was in the process of obtaining the ownership certificates for certain buildings at a carrying amount of approximately HK\$181,477,000 (2017: HK\$188,945,000). In the opinion of the directors of the Company, the absence of formal title to these buildings does not impair their values to the Group as the Group has paid the full purchase consideration of these buildings and the probability of being evicted on the ground of an absence of formal title is remote.

Fair value hierarchy

The following table illustrates the fair value measurement hierarchy of the Group's leasehold land and buildings:

Fair value measurement as at 31 December 2018 using				
	Quoted prices in active markets (Level 1) HK\$'000	Significant observable inputs (Level 2) HK\$'000	Significant unobservable inputs (Level 3) HK\$'000	Total HK\$'000
Recurring fair value measurement for:				
Office buildings in Dalian, the PRC	–	8,537	–	8,537
A club house in Dalian, the PRC	–	–	79,114	79,114
Office buildings in Beijing, the PRC	–	–	181,477	181,477
	–	8,537	260,591	269,128

Fair value measurement as at 31 December 2017 using				
	Quoted prices in active markets (Level 1) HK\$'000	Significant observable inputs (Level 2) HK\$'000	Significant unobservable inputs (Level 3) HK\$'000	Total HK\$'000
Recurring fair value measurement for:				
Office buildings in Dalian, the PRC	–	8,681	–	8,681
A club house in Dalian, the PRC	–	–	85,251	85,251
Office buildings in Beijing, the PRC	–	–	188,945	188,945
	–	8,681	274,196	282,877

During the year, there were no transfers of fair value measurements between Level 1 and Level 2 and no transfers into or out of Level 3 (2017: Nil).

Notes to Financial Statements

31 December 2018

13. PROPERTY, PLANT AND EQUIPMENT (Continued)

Fair value hierarchy (Continued)

Reconciliation of fair value measurements categorised within Level 3 of the fair value hierarchy:

	A club house in Dalian HK\$'000	Office buildings in Beijing HK\$'000
Carrying amount at 1 January 2017	80,556	165,611
Depreciation during the year	(1,764)	(3,473)
Exchange realignment	6,276	12,344
Net gain from a fair value adjustment recognised in other comprehensive income	183	14,463
Carrying amount at 31 December 2017 and 1 January 2018	85,251	188,945
Depreciation during the year	(1,540)	(3,412)
Exchange realignment	(4,220)	(9,351)
Net (loss)/gain from a fair value adjustment recognised in other comprehensive income	(377)	5,295
Carrying amount at 31 December 2018	79,114	181,477

Below is a summary of the valuation techniques used and the key inputs to the valuation of leasehold land and buildings:

At 31 December 2018

Carrying value of leasehold land and buildings held by the Group	Fair value hierarchy	Valuation techniques	Significant unobservable inputs	Relationship of significant unobservable inputs to fair value
A club house in Dalian, the PRC HK\$79,114,000	Level 3	Depreciated replacement cost approach	Rate of newness of 88% and unit rate of replacement cost of RMB6,946 per sq.m.	The increase in the rate of newness and unit rate of replacement cost would result in an increase in fair value
Office buildings in Dalian, the PRC HK\$8,537,000	Level 2	Direct comparison method	N/A	N/A
Office buildings in Beijing, the PRC HK\$181,477,000	Level 3	Income approach	Market unit rent of RMB5.22 per sq.m. per day Market yield of 6.00%	The increase in the market unit rent would result in an increase in fair value The increase in the market yield would result in a decrease in fair value





Notes to Financial Statements

31 December 2018

13. PROPERTY, PLANT AND EQUIPMENT (Continued)

Fair value hierarchy (Continued)

At 31 December 2017

Carrying value of leasehold land and buildings held by the Group	Fair value hierarchy	Valuation techniques	Significant unobservable inputs	Relationship of significant unobservable inputs to fair value
A club house in Dalian, the PRC HK\$85,251,000	Level 3	Depreciated replacement cost approach	Rate of newness of 92% and unit rate of replacement cost of RMB6,815 per sq.m.	The increase in the rate of newness and unit rate of replacement cost would result in an increase in fair value
Office buildings in Dalian, the PRC HK\$8,681,000	Level 2	Direct comparison method	N/A	N/A
Office buildings in Beijing, the PRC HK\$188,945,000	Level 3	Income approach	Market unit rent of RMB5.12 per sq.m. per day Market yield of 5.75%	The increase in the market unit rent would result in an increase in fair value The increase in the market yield would result in a decrease in fair value

14. INVESTMENT PROPERTIES

	2018 HK\$'000	2017 HK\$'000
Carrying amount at 1 January	601,607	513,383
Exchange realignment	(30,171)	40,391
Development costs paid	22,514	21,933
Additions	58,804	–
Net gain from a fair value adjustment	11,204	25,900
Carrying amount at 31 December	663,958	601,607

Notes to Financial Statements

31 December 2018

14. INVESTMENT PROPERTIES (Continued)

As at 31 December 2018, the Group was in the process of obtaining the ownership certificates for certain investment properties at a carrying amount of approximately RMB366,231,000 (equivalent to HK\$417,976,000) (2017: RMB295,213,000 (equivalent to HK\$354,463,000)). In the opinion of the directors of the Company, the absence of formal title to these properties does not impair their values to the Group as the Group has paid the full purchase consideration of these properties and the probability of being evicted on the ground of an absence of formal title is remote.

The Group's investment properties consist of three classes of assets, i.e., industrial and ancillary properties, commercial property and residential property, based on the nature, characteristics and risks of each property. The Group's investment properties were measured at fair value on 31 December 2018 based on valuations performed by Peak Vision Appraisals Limited, an independent professionally qualified valuer, at HK\$663,958,000. Each year, the Group's management and the chief financial officer decide, after approval from the audit committee, to appoint which external valuer to be responsible for the external valuations of the Group's properties. Selection criteria include market knowledge, reputation, independence and whether professional standards are maintained. The Group's management and the chief financial officer have discussions with the valuer on the valuation assumptions and valuation results twice a year when the valuation is performed for interim and annual financial reporting.

Some investment properties are leased to third parties under operating leases, further summary details of which are included in note 41 to the financial statements.

Fair value hierarchy

The following table illustrates the fair value measurement hierarchy of the Group's investment properties:

	Fair value measurement as at 31 December 2018 using			Total HK\$'000
	Quoted prices in active markets (Level 1) HK\$'000	Significant observable inputs (Level 2) HK\$'000	Significant unobservable inputs (Level 3) HK\$'000	
Recurring fair value measurement for:				
Commercial property	–	–	26,934	26,934
Residential property	–	–	170,053	170,053
Industrial and ancillary properties	–	280,074	186,897	466,971
	–	280,074	383,884	663,958





Notes to Financial Statements

31 December 2018

14. INVESTMENT PROPERTIES (Continued)

Fair value hierarchy (Continued)

	Fair value measurement as at 31 December 2017 using			Total HK\$ '000
	Quoted prices in active markets (Level 1) HK\$ '000	Significant observable inputs (Level 2) HK\$ '000	Significant unobservable inputs (Level 3) HK\$ '000	
Recurring fair value measurement for:				
Commercial property	–	–	28,456	28,456
Residential property	–	–	174,224	174,224
Industrial and ancillary properties	–	208,805	190,122	398,927
	–	208,805	392,802	601,607

During the year, there were no transfers of fair value measurements between Level 1 and Level 2 and no transfers into or out of Level 3. During the prior year, there was a transfer from level 2 into level 3 amounting to HK\$9,022,000 due to the change of valuation techniques following the commencement of construction.

Reconciliation of fair value measurements categorised within Level 3 of the fair value hierarchy:

	Industrial and ancillary properties HK\$ '000	Residential property HK\$ '000	Commercial property HK\$ '000
Carrying amount at 1 January 2017	145,578	150,414	25,906
A transfer from Level 2	9,022	–	–
Exchange realignment	12,491	11,762	1,928
Development costs paid	18,266	3,611	–
Net gain from a fair value adjustment recognised in profit or loss	4,765	8,437	622
Carrying amount at 1 January 2018	190,122	174,224	28,456
Exchange realignment	(9,112)	(8,768)	(1,403)
Development costs paid	14,328	492	73
Net gain/(loss) from a fair value adjustment recognised in profit or loss	(8,441)	4,105	(192)
Carrying amount at 31 December 2018	186,897	170,053	26,934

Notes to Financial Statements

31 December 2018

14. INVESTMENT PROPERTIES (Continued)

Fair value hierarchy (Continued)

Below is a summary of the valuation techniques used and the key inputs to the valuation of investment properties:

At 31 December 2018

Carrying value of investment properties held by the Group	Fair value hierarchy	Valuation techniques	Significant unobservable inputs	Relationship of significant unobservable inputs to fair value
Industrial and ancillary property in Beijing, the PRC	Level 3	Income approach	Market unit rent of RMB3.64 per sq.m. per day	The increase in the market unit rent would result in an increase in fair value
HK\$76,535,000			Market yield of 8.00%	The increase in the market yield would result in a decrease in fair value
Industrial and ancillary property in Xinyi, the PRC	Level 3	Depreciated replacement cost approach	Unit rate of replacement cost of RMB847 per sq.m.	The increase in the unit rate of replacement cost would result in an increase in fair value
HK\$13,832,000				
Industrial and ancillary property in Pizhou, the PRC	Level 3	Depreciated replacement cost approach	Unit rate of replacement cost of RMB1,906 per sq.m.	The increase in the unit rate of replacement cost would result in an increase in fair value
HK\$96,530,000				
Residential property in Dalian, the PRC	Level 3	Residual approach	Market unit sales rate ranging from RMB4,800 per sq.m. to RMB5,800 per sq.m.	The increase in the market unit sales rate would result in an increase in fair value
HK\$170,053,000			Estimated cost to completion of RMB2,170 per sq.m.	The increase in the estimated cost to completion would result in a decrease in fair value





Notes to Financial Statements

31 December 2018

14. INVESTMENT PROPERTIES (Continued)

Fair value hierarchy (Continued)

At 31 December 2018

Carrying value of investment properties held by the Group	Fair value hierarchy	Valuation techniques	Significant unobservable inputs	Relationship of significant unobservable inputs to fair value
Commercial property in Dalian, the PRC	Level 3	Residual approach	Market unit sales rate ranging from RMB4,800 per sq.m. to RMB5,800 per sq.m.	The increase in the market unit sales rate would result in an increase in fair value
HK\$26,934,000			Estimated cost to completion ranging from RMB1,180 per sq.m. to RMB2,350 per sq.m.	The increase in the estimated cost to completion would result in a decrease in fair value
Industrial and ancillary property in Mianyang, the PRC	Level 2	Direct comparison method	N/A	N/A
HK\$129,423,000				
Industrial and ancillary property in Hangzhou, the PRC	Level 2	Direct comparison method	N/A	N/A
HK\$150,651,000				

Notes to Financial Statements

31 December 2018

14. INVESTMENT PROPERTIES (Continued)

Fair value hierarchy (Continued)

At 31 December 2017

Carrying value of investment properties held by the Group	Fair value hierarchy	Valuation techniques	Significant unobservable inputs	Relationship of significant unobservable inputs to fair value
Industrial and ancillary property in Beijing, the PRC	Level 3	Income approach	Market unit rent of RMB3.33 sq.m. per day Market yield of 7.75%	The increase in the market unit rent would result in an increase in fair value The increase in the market yield would result in a decrease in fair value
HK\$79,344,000				
Industrial and ancillary property in Xinyi, the PRC	Level 3	Depreciated replacement cost approach	Unit rate of replacement cost of RMB847 per sq.m.	The increase in the unit rate of replacement cost would result in an increase in fair value
HK\$14,553,000				
Industrial and ancillary property in Pizhou, the PRC	Level 3	Depreciated replacement cost approach	Unit rate of replacement cost of RMB1,778 per sq.m.	The increase in the unit rate of replacement cost would result in an increase in fair value
HK\$96,225,000				
Residential property in Dalian, the PRC	Level 3	Residual approach	Market unit sales rate ranging from RMB4,000 per sq.m. to RMB5,800 per sq.m.	The increase in the market unit sales rate would result in an increase in fair value
HK\$174,224,000			Estimated cost to completion of RMB2,180 per sq.m.	The increase in the estimated cost to completion would result in a decrease in fair value





Notes to Financial Statements

31 December 2018

14. INVESTMENT PROPERTIES (Continued)

Fair value hierarchy (Continued)

At 31 December 2017

Carrying value of investment properties held by the Group	Fair value hierarchy	Valuation techniques	Significant unobservable inputs	Relationship of significant unobservable inputs to fair value
Commercial property in Dalian, the PRC	Level 3	Residual approach	Market unit sales rate ranging from RMB4,000 per sq.m. to RMB5,800 per sq.m.	The increase in the market unit sales rate would result in an increase in fair value
HK\$28,456,000			Estimated cost to completion from RMB1,120 ranging per sq.m. to RMB2,230 per sq.m.	The increase in the estimated cost to completion would result in a decrease in fair value
Industrial and ancillary property in Mianyang, the PRC	Level 2	Direct comparison method	N/A	N/A
HK\$66,280,000				
Industrial and ancillary property in Hangzhou, the PRC	Level 2	Direct comparison method	N/A	N/A
HK\$142,525,000				

15. DEPOSITS PAID FOR ACQUISITIONS OF LAND USE RIGHTS

	2018 HK\$'000	2017 HK\$'000
Carrying amount at 1 January	105,802	119,965
Disposal	–	(21,569)
Exchange realignment	(5,236)	7,406
Carrying amount at 31 December	100,566	105,802

Up to approval date of the consolidated financial statements, the Group is in the process to obtain the certificates of land use rights.

Notes to Financial Statements

31 December 2018

16. GOODWILL

	HK\$'000
At 1 January 2017:	
Cost	465,760
Accumulated impairment	–
Net carrying amount	465,760
Cost at 1 January 2017, net of accumulated impairment	465,760
Impairment during the year	–
At 31 December 2017	<u>465,760</u>
At 31 December 2017:	
Cost	465,760
Accumulated impairment	–
Net carrying amount	<u>465,760</u>
Cost at 1 January 2018, net of accumulated impairment	465,760
Impairment during the year	(201,881)
Cost and net carrying amount at 31 December 2018	<u>263,879</u>
At 31 December 2018:	
Cost	465,760
Accumulated impairment	(201,881)
Net carrying amount	<u>263,879</u>

During the year ended 31 December 2018, an impairment loss of HK\$201,881,000 was recognised in respect of goodwill (2017: Nil).





Notes to Financial Statements

31 December 2018

16. GOODWILL *(Continued)*

Impairment testing of goodwill

Goodwill acquired through business combinations is allocated to shallow geothermal energy cash-generating unit for impairment testing.

The recoverable amount of the shallow geothermal energy cash-generating unit has been determined based on a value in use calculation using cash flow projections based on financial budgets covering a five-year period approved by senior management. The discount rate applied to the cash flow projections is 14.60% (2017: 16.86%). The growth rate used to extrapolate the cash flows of the shallow geothermal energy cash-generating unit beyond the five-year period is 3% (2017: 3%). Based on the annual impairment test performed for the year ended 31 December 2018, an impairment loss of HK\$201,881,000 had been provided in relation to the shallow geothermal energy cash-generating unit. The impairment loss was a result of poor performance and keen competition in the Mainland China market. The recoverable amount of the shallow geothermal energy cash-generating unit was HK\$487,242,000 as at 31 December 2018.

Assumptions were used in the value in use calculation of the shallow geothermal energy cash-generating unit for 31 December 2018 and 31 December 2017. The following describes each key assumption on which management has based its cash flow projections to undertake impairment testing of goodwill:

Budgeted EBIT ratio – The basis used to determine the value assigned to the budgeted EBIT ratio is the average EBIT ratio achieved in the year immediately before the budget year, increased for expected efficiency improvements, and expected market development.

Discount rate – The discount rate used is before tax and reflects specific risks relating to the relevant unit.

Long term growth rate – The long term growth rate used is based on the average projected inflation rate in the PRC according to the International Monetary Fund.

Notes to Financial Statements

31 December 2018

17. INVESTMENT IN A JOINT VENTURE

	2018 HK\$'000	2017 HK\$'000
Share of net assets	7,647	7,578

The Group's other receivable balances due from a joint venture are disclosed in note 27 to the financial statements.

Particular of the Group's joint venture is as follows:

Name	Particulars of issued shares held	Place of registration and business	Percentage of			Principal activities
			Ownership interest	Voting power	Profit sharing	
Zhejiang Wanhe Energy and Technology Co., Ltd.* (“浙江萬合能源環 境科技有限公司”)	Registered capital of RMB12,779,000	PRC/ Mainland China	47.39	47.39	47.39	Exploration and development of energy resources

* The English name of the company registered in the PRC represents the best efforts of management of the Company in directly translating the Chinese name of the company as no English name has been registered.

The following table illustrates the financial information of the Group's joint venture that is not individually material:

	2018 HK\$'000	2017 HK\$'000
Share of the joint venture's profit for the year	458	276
Share of the joint venture's other comprehensive (loss)/income	(389)	536
Share of the joint venture's total comprehensive income	69	812
Aggregate carrying amount of the Group's investment in the joint venture	7,647	7,578





Notes to Financial Statements

31 December 2018

18. INVESTMENTS IN ASSOCIATES

	2018 HK\$'000	2017 HK\$'000
Share of net assets	49,342	40,112
Goodwill on acquisition	482	482
	49,824	40,594

Particulars of the Group's associates are as follows:

Name	Particulars of issued shares	Place of incorporation/ registration and business	Percentage of ownership interest attributable to the Group	Principal activity
Beijing Ever Hot Pumps Co., Ltd.* ("BEHP", "北京永源熱泵有限責任公司")	Registered capital of RMB52,556,871	PRC/ Mainland China	49	Production and sale of machines and shallow geothermal energy system
Hongyuan Shallow Ground Heat Pump Technology Co., Ltd.* ("宏源地能熱泵科技有限公司")	Registered capital of RMB 50,000,000	PRC/ Mainland China	49	Trading of the shallow geothermal energy system
Beijing Digital Hengyouyuan Technology Co., Ltd.* ("北京數碼恒有源科技有限公司")	Registered capital of RMB 2,430,000	PRC/ Mainland China	48.97	Computer system service and software development

* The English names of the companies registered in the PRC represent the best efforts of management of the Company in directly translating the Chinese names of the companies as no English names have been registered.

Notes to Financial Statements

31 December 2018

18. INVESTMENTS IN ASSOCIATES (Continued)

BEHP, which is considered a material associate of the Group, is accounted for using the equity method.

The following table illustrates the summarised financial information in respect of BEHP adjusted for any differences in accounting policies and reconciled to the carrying amount in the consolidated financial statements:

	2018 HK\$'000	2017 HK\$'000
Current assets	76,601	101,442
Non-current assets	5,221	6,182
Current liabilities	(22,550)	(48,811)
Non-current liabilities	–	(720)
Net assets	59,272	58,093
Reconciliation to the Group's interest in the associate:		
Proportion of the Group's ownership	49%	49%
Group's share of net assets of the associate, excluding goodwill	29,043	28,466
Goodwill on acquisition (less cumulative impairment)	482	482
Carrying amount of the investment	29,525	28,948
Revenue	44,696	73,796
(Loss)/profit for the year	(15)	3,397
Other comprehensive income	1,193	1,055
Total comprehensive income for the year	1,178	4,452
Dividend received	–	–

The following table illustrates the aggregate financial information of the Group's associates that are not individually material:

	2018 HK\$'000	2017 HK\$'000
Share of the associates' (loss)/profit for the year	(6,739)	808
Share of the associates' other comprehensive (loss)/income	(1,385)	1,025
Share of the associates' total comprehensive (loss)/income	(8,124)	1,833
Aggregate carrying amount of the Group's investments in the associates	20,299	11,646





Notes to Financial Statements

31 December 2018

19. EQUITY INVESTMENTS DESIGNATED AT FAIR VALUE THROUGH OTHER COMPREHENSIVE INCOME/AVAILABLE-FOR-SALE INVESTMENTS

	2018 HK\$'000	2017 HK\$'000
Equity investments designated at fair value through other comprehensive income		
Listed equity investments, at fair value		
China Asset Management Co., Ltd.	57,853	–
Beijing Hisign Technology Co., Ltd.	740	–
	58,593	–
Unlisted equity investments, at fair value		
Beijing Life Insurance Co., Ltd.	180,324	–
Beijing Yingtong Huixin Investment Management Co., Ltd.	57	–
	180,381	–
	238,974	–
Available-for-sale investments		
Listed equity investments, at fair value	–	63,851
Unlisted equity investments, at cost	–	36,081
	–	99,932

The above equity investments were irrevocably designated at fair value through other comprehensive income as the Group considers these investments to be strategic in nature. During the year ended 31 December 2018, the Group received dividends in the amount of HK\$4,141,000.

There was a significant decline in the market value of a listed equity investment during the year ended 31 December 2017. The directors consider that such a decline indicates that the listed equity investment has been impaired and an impairment loss of HK\$6,653,000, which included a reclassification from other comprehensive income of HK\$1,907,000, has been recognised in the statement of profit or loss for the year ended 31 December 2017.

As at 31 December 2017, certain unlisted equity investments with a carrying amount of HK\$36,081,000 were stated at cost less impairment because the range of reasonable fair value estimates is so significant that the directors are of the opinion that their fair value cannot be measured reliably.

20. INVENTORIES

	2018 HK\$'000	2017 HK\$'000
Raw materials	56,302	21,903
Finished goods	578	19,047
	56,880	40,950

Notes to Financial Statements

31 December 2018

21. PROPERTIES HELD FOR SALE

	2018 HK\$'000	2017 HK\$'000
At 1 January	95,507	88,546
Exchange realignment	(4,727)	6,961
At 31 December	90,780	95,507

The above properties held for sale are situated in the PRC.

22. CONTRACT ASSETS AND CONTRACT LIABILITIES

	31 December 2018 HK\$'000	1 January 2018 HK\$'000
Contract assets arising from:		
Construction services	646,230	789,657
Impairment	(375,470)	(343,301)
	270,760	446,356
Less: Non-current portion	(18,825)	(19,080)
Current portion	251,935	427,276
Contract liabilities arising from:		
Construction services	56,510	34,936

Contract assets are initially recognised for revenue earned from the provision of construction services as the receipt of consideration is conditional on successful completion of construction. Included in contract assets for construction services are retention receivables. Upon completion of construction and acceptance by the customer, the amounts recognised as contract assets are reclassified to trade receivables. The decrease in contract assets in 2018 was the result of the decrease in the provision of construction services at the end of the year. During the year ended 31 December 2018, HK\$50,966,000 was recognised as an allowance for expected credit losses on contract assets. The Group's trading terms and credit policy with customers are disclosed in note 24 to the financial statements.

The expected timing of recovery or settlement for contract assets as at 31 December 2018 is as follows:

	HK\$'000
Within one year	251,935
More than one year	18,825
	270,760





Notes to Financial Statements

31 December 2018

22. CONTRACT ASSETS AND CONTRACT LIABILITIES (Continued)

The movements in the loss allowance for impairment of contract assets are as follows:

	2018 HK\$'000
At beginning of year	225,627
Effect of adoption of HKFRS 9	117,674
At beginning of year (restated)	343,301
Impairment losses, net (note 6)	50,966
Exchange realignment	(18,797)
At end of year	375,470

An impairment analysis is performed at each reporting date using a provision matrix to measure expected credit losses. The provision rates for the measurement of the expected credit losses of the contract assets are based on days past due for grouping of various customer segments with similar loss pattern. The calculation reflects the probability-weighted outcome, the time value of money and reasonable and supportable information that is available at the reporting date about past events, current conditions and forecasts of future economic conditions.

Set out below is the information about the credit risk exposure on the Group's contract assets using a provision matrix:

As at 31 December 2018

	Less than 1 year	1 to 2 years	2 to 3 years	3 to 4 years	4 to 5 years	Over 5 years	Total
Expected credit loss rate	5.00%	38.49%	52.61%	60.90%	88.66%	98.00%	58.10%
Gross carrying amount (HK\$'000)	150,500	112,784	100,010	4,409	39,846	238,681	646,230
Expected credit losses (HK\$'000)	7,525	43,411	52,615	2,685	35,327	233,907	375,470

Contract liabilities include short-term advances received to deliver construction services. The increase in contract liabilities in 2018 was mainly due to the increase in short-term advances received from customers in relation to the provision of construction services at the end of the year.

Notes to Financial Statements

31 December 2018

23. AMOUNTS DUE FROM/(TO) CUSTOMERS FOR CONTRACT WORK

	2017 HK\$ '000
Amounts due from customers for contract work	514,962
Amounts due to customers for contract work	(12,290)
	<u>502,672</u>
Contract costs incurred plus recognised profits less recognised losses to date	991,203
Less: Progress billings	(488,531)
	<u>502,672</u>

The movements in provision for impairment of amounts due from customers for contract work are as follows:

	2017 HK\$ '000
At beginning of year	155,845
Exchange realignment	11,104
Impairment losses recognised, net (<i>note 6</i>)	58,678
	<u>225,627</u>

During the year ended 31 December 2017, loss on uncertainty in respect of collectability of amounts due from customers for contract work amounting to approximately HK\$58,678,000. These amounts are long outstanding for contract work and not expected to be fully recoverable. Based on past experience, the directors of the Company are of the opinion that no provision for the remaining balances is necessary in respect of these balances as there has not been a significant change in credit quality and the balances are still considered fully recoverable.





Notes to Financial Statements

31 December 2018

24. TRADE AND BILLS RECEIVABLES

	2018 HK\$'000	2017 HK\$'000
Trade receivables	240,047	224,805
Impairment	(96,356)	(74,155)
Trade receivables, net	143,691	150,650
Retention receivables	–	49,068
Bills receivable	818	–
	144,509	199,718
Less: Non-current portion	(65,736)	(96,408)
Current portion	78,773	103,310

The Group's trading terms with its customers are mainly on credit. The credit period is generally three months. The Group seeks to maintain strict control over its outstanding receivables and has a credit control department to minimise credit risk. Overdue balances are reviewed regularly by senior management. In view of the aforementioned and the fact that the Group's trade receivables relate to a large number of diversified customers, there is no significant concentration of credit risk. The Group does not hold any collateral or other credit enhancements over its trade receivable balances. Trade receivables are non-interest-bearing.

An ageing analysis of the trade and bills receivables as at the end of the reporting period, based on the invoice date and net of loss allowance, is as follows:

	2018 HK\$'000	2017 HK\$'000
Within 90 days	33,262	77,201
91 to 180 days	3,181	16,739
181 to 365 days	28,536	16,289
Over 365 days	79,530	89,489
	144,509	199,718

Notes to Financial Statements

31 December 2018

24. TRADE AND BILLS RECEIVABLES (Continued)

The movements in the loss allowance for impairment of trade receivables are as follows:

	2018 HK\$'000	2017 HK\$'000
At beginning of year	74,155	59,646
Effect of adoption of HKFRS 9	10,897	–
At beginning of year (restated)	85,052	59,646
Impairment losses, net (note 6)	16,084	10,464
Exchange realignment	(4,780)	4,045
At end of year	96,356	74,155

Impairment under HKFRS 9 for the year ended 31 December 2018

An impairment analysis is performed at each reporting date using a provision matrix to measure expected credit losses. The provision rates are based on days past due for groupings of various customer segments with similar loss patterns. The calculation reflects the probability-weighted outcome, the time value of money and reasonable and supportable information that is available at the reporting date about past events, current conditions and forecasts of future economic conditions.

Set out below is the information about the credit risk exposure on the Group's trade receivables using a provision matrix based on the grouping of various customer segments:

As at 31 December 2018

The group one: construction services

	Less than						Total
	1 year	1 to 2 years	2 to 3 years	3 to 4 years	4 to 5 years	Over 5 years	
Expected credit loss rate	12.81%	46.90%	69.14%	75.76%	76.04%	100.00%	41.20%
Gross carrying amount (HK\$'000)	134,495	21,808	7,992	6,134	7,286	51,114	228,829
Expected credit losses (HK\$'000)	17,229	10,228	5,526	4,647	5,540	51,114	94,284

The group two: others

	Less than						Total
	1 year	1 to 2 years	2 to 3 years	3 to 4 years	4 to 5 years	Over 5 years	
Expected credit loss rate	2.88%	32.76%	68.10%	100.00%	100.00%	100.00%	18.47%
Gross carrying amount (HK\$'000)	6,694	3,843	192	32	133	324	11,218
Expected credit losses (HK\$'000)	193	1,259	131	32	133	324	2,072





Notes to Financial Statements

31 December 2018

24. TRADE AND BILLS RECEIVABLES (Continued)

Impairment under HKAS 39 for the year ended 31 December 2017

Included in the above provision for impairment of trade receivables, which was measured based on incurred credit losses under HKAS 39, as at 31 December 2017 was a provision for trade receivables with a carrying amount before provision of HK\$74,155,000. No individually provision for impairment of trade receivables was included in the above table at 31 December 2017.

The ageing analysis of the trade receivables as at 31 December 2017 that were not individually nor collectively considered to be impaired under HKAS 39 is as follows:

	2017 HK\$'000
Neither past due nor impaired	158,905
Less than one year past due	33,028
Over one year past due	7,785
	199,718

Receivables that were neither past due nor impaired relate to a large number of diversified customers for whom there was no recent history of default.

Receivables that were past due but not impaired relate to a number of independent customers that had a good track record with the Group. Based on past experience, the directors of the Company were of the opinion that no provision for impairment under HKAS 39 was necessary in respect of these balances as there had not been a significant change in credit quality and the balances were still considered fully recoverable.

25. PREPAYMENTS, DEPOSITS AND OTHER RECEIVABLES

	2018 HK\$'000	2017 HK\$'000
Prepayment for rental	4,992	8,450
Prepayment for an investment	–	171,690
Prepayments for others	29,546	61,458
Deposits	21,207	20,148
Other receivables	127,672	165,581
Less: Impairment allowance	(13,317)	(5,009)
	170,100	422,318
Less: non-current portion		
Prepayment for rental	(933)	(4,941)
Prepayment for an investment	–	(171,690)
	(933)	(176,631)
	169,167	245,687

Notes to Financial Statements

31 December 2018

25. PREPAYMENTS, DEPOSITS AND OTHER RECEIVABLES *(Continued)*

The movements in the loss allowance for impairment of deposits and other receivables are as follows:

	2018 HK\$'000	2017 HK\$'000
At beginning of year	5,009	4,658
Effect of adoption of HKFRS 9	3,374	–
At beginning of year (restated)	8,383	4,658
Exchange realignment	(587)	351
Impairment losses, net <i>(note 6)</i>	5,521	–
At end of year	13,317	5,009

Impairment under HKFRS 9 for the year ended 31 December 2018

Deposits and other receivables mainly represent rental deposits and deposits with suppliers. An impairment analysis is performed at each reporting date, expected credit losses are estimated by applying a loss rate approach with reference to the historical loss record of the Group.

26. AMOUNTS DUE TO RELATED COMPANIES

The amounts are unsecured, interest-free and repayable on demand.

27. AMOUNTS DUE FROM/(TO) ASSOCIATES AND A JOINT VENTURE

The amounts are unsecured, interest-free and repayable on demand.

28. FINANCIAL ASSETS AT FAIR VALUE THROUGH PROFIT OR LOSS

	2018 HK\$'000	2017 HK\$'000
Listed equity investments, at fair value	209	3,072

The above equity investments at 31 December 2018 were classified as financial assets at fair value through profit or loss as they were held for trading.





Notes to Financial Statements

31 December 2018

29. CASH AND CASH EQUIVALENTS, PLEDGED DEPOSITS AND TIME DEPOSITS

	2018	2017
	HK\$'000	HK\$'000
Cash and bank balances	64,804	117,021
Cash held at non-bank financial institutions	8,130	4,983
Deposits	1,780	–
	74,714	122,004
Less: Pledged deposits for the shallow geothermal energy contract	(1,549)	–
Time deposits with original maturity over three months	(231)	–
Cash and cash equivalents	72,934	122,004

At the end of the reporting period, the cash and cash equivalents of the Group denominated in Renminbi (“RMB”) amounted to HK\$49,029,000 (2017: HK\$65,501,000). The RMB is not freely convertible into other currencies, however, under Mainland China’s Foreign Exchange Control Regulations and Administration of Settlement, Sale and Payment of Foreign Exchange Regulations, the Group is permitted to exchange RMB for other currencies through banks authorised to conduct foreign exchange business.

Cash at banks earns interest at floating rates based on daily bank deposit rates. Short term time deposits are made for varying periods of between one day and three months depending on the immediate cash requirements of the Group, and earn interest at the respective short term time deposit rates. The bank balances are deposited with creditworthy banks with no recent history of default.

Notes to Financial Statements

31 December 2018

30. TRADE AND BILLS PAYABLES

An ageing analysis of the trade and bills payables as at the end of the reporting period, based on the invoice date, is as follows:

	2018 HK\$'000	2017 HK\$'000
Within 90 days	168,719	161,420
91 to 180 days	38,844	33,137
181 to 365 days	76,214	27,340
Over 365 days	189,864	159,808
	473,641	381,705

The trade and bills payables are non-interest-bearing and are normally settled in six months.

31. OTHER PAYABLES AND ACCRUALS

	2018 HK\$'000	2017 HK\$'000
Accruals	66,315	74,032
Deposits	–	22,646
Advance from customers	12,370	14,156
Other payables	70,204	61,238
	148,889	172,072
Less: Non-current portion	(10,472)	(9,547)
	138,417	162,525

Other payables and accruals are non-interest-bearing and have no fixed terms of settlement.





Notes to Financial Statements

31 December 2018

32. INTEREST-BEARING BANK BORROWINGS

	2018			2017		
	Effective interest rate (%)	Maturity	HK\$'000	Effective interest rate (%)	Maturity	HK\$'000
Current						
Bank loans – unsecured			–	6	2018	89,693
Bank loans – secured (<i>note</i>)	7	2019	456,517			–
			456,517			89,693
Non-current						
Bank loans – secured (<i>note</i>)			–	7	2019	480,286
			456,517			569,979

Note: A deemed substantial shareholder of the Company, China Energy Conservation and Environmental Protection Group (“CECEP”), provided a guarantee for the loan, which was borrowed from a subsidiary of CECEP, and the Company agreed to pay a guarantee fee at the rate of 2% per annum on the amount of the loan. The loan bears interest at 7% per annum and is repayable in 2019.

	2018 HK\$'000	2017 HK\$'000
Analysed into:		
Bank loans and overdrafts repayable:		
Within one year or on demand	456,517	89,693
In the second year	–	480,286
	456,517	569,979

The above borrowings are denominated in RMB and have a fixed interest rate.

33. DEFERRED INCOME

	2018 HK\$'000	2017 HK\$'000
At 1 January	10,542	9,804
Exchange realignment	(521)	738
At 31 December	10,021	10,542

As at 31 December 2018, government grants of approximately HK\$10,021,000 (2017: HK\$10,542,000) were designated for certain projects. The amount is stated as a non-current liability as at 31 December 2018 in the consolidated statement of financial position as the directors of the Company are of the opinion that certain conditions in respect of these grants will not be fulfilled within next twelve months from 31 December 2018.

Notes to Financial Statements

31 December 2018

34. DEFERRED TAX

The movements in deferred tax liabilities and assets during the year are as follows:

Deferred tax liabilities

	2018 Revaluation of investment properties HK\$'000
At 1 January 2018	75,725
Deferred tax charged to the statement of profit or loss during the year (note 10)	2,953
Exchange realignment	(3,853)
At 31 December 2018	74,825

Deferred tax asset

	2018			Total HK\$000
	Fair value adjustments of financial assets at fair value through other comprehensive income HK\$000	Losses available for offsetting against future taxable profits HK\$000	Impairment of trade and other receivables HK\$000	
At 1 January 2018	–	–	30,324	30,324
Effect of adoption of HKFRS9	1,676	–	3,057	4,733
At 1 January 2018 (restated)	1,676	–	33,381	35,057
Deferred tax credited/(charged) to the statement of profit or loss during the year (note 10)	–	12,650	(9,141)	3,509
Deferred tax credited to capital reserve	4,823	–	–	4,823
Exchange realignment	(84)	(448)	(1,328)	(1,860)
At 31 December 2018	6,415	12,202	22,912	41,529





Notes to Financial Statements

31 December 2018

34. DEFERRED TAX (Continued)

Deferred tax liabilities

	2017 Revaluation of investment properties HK\$'000
At 1 January 2017	64,035
Deferred tax charged to the statement of profit or loss during the year (note 10)	6,307
Exchange realignment	5,383
At 31 December 2017	<u>75,725</u>

Deferred tax assets

	2017 Impairment of trade and other receivables HK\$'000
At 1 January 2017	26,319
Deferred tax credited to the statement of profit or loss during the year (note 10)	1,792
Exchange realignment	2,213
At 31 December 2017	<u>30,324</u>

Deferred tax assets have not been recognised in respect of the following items:

	2018 HK\$'000	2017 HK\$'000
Tax losses	293,867	273,109
Deductible temporary differences	325,662	–
	<u>619,529</u>	<u>273,109</u>

The above tax losses are available for a maximum of five years for offsetting against future taxable profits of the companies in which the losses arose. Deferred tax assets have not been recognised in respect of the above items as it is not considered probable that taxable profits will be available against which the above items can be utilised.

Notes to Financial Statements

31 December 2018

34. DEFERRED TAX *(Continued)*

At 31 December 2018, no deferred tax has been recognised for withholding taxes that would be payable on the unremitted earnings that are subject to withholding taxes of the Group's subsidiaries and joint ventures established in Mainland China. In the opinion of the directors, it is not probable that these subsidiaries and joint ventures will distribute such earnings in the foreseeable future. The aggregate amount of temporary differences associated with investments in subsidiaries and joint ventures in Mainland China for which deferred tax liabilities have not been recognised totalled approximately HK\$197,613,000 at 31 December 2018 (2017: HK\$548,945,000).

There are no income tax consequences attaching to the payment of dividends by the Company to its shareholders.

35. SHARE CAPITAL Shares

	2018 HK\$'000	2017 HK\$'000
Issued and fully paid:		
4,026,925,000 (2017: 4,026,925,000) ordinary shares at US\$0.01 each	313,793	313,793

A summary of movements in the Company's share capital is as follows:

	Number of shares in issue '000	Share capital HK\$'000
At 1 January 2017	2,876,375	223,990
Rights issue	1,150,550	89,803
At 31 December 2017 and 31 December 2018	4,026,925	313,793

36. SHARE OPTION SCHEME

The principal purpose of the share option schemes of the Company is to recognise the significant contributions of the directors and employees of the Group to the growth of the Group, by rewarding them with opportunities to obtain an ownership interest in the Company and to further motivate and give incentive to these persons to continue to contribute to the Group's long term success and prosperity. The Company has a share option scheme adopted on 28 July 2010.





Notes to Financial Statements

31 December 2018

36. SHARE OPTION SCHEME *(Continued)*

Share Option Plan 2010

Pursuant to the ordinary resolutions passed at the extraordinary general meeting of the Company on 28 July 2010, the Company terminated the Share Option Scheme 2001 and adopted a new share option scheme (the "Share Option Scheme 2010"). The Share Option Scheme 2010 will remain in force for a period of ten years commencing from the date of adoption.

Under the Share Option Scheme 2010, the grantees may include (i) any full time or part time employee, director (including non-executive director and independent non-executive director) of the Company, and any of its subsidiaries and invested entity; (ii) any supplier of goods or services to any member of the Group or any invested entity; (iii) any customer of the Group or any invested entity; (iv) any consultant, adviser, manager, officer or entity that provides research, development or other technological support to the Group or any invested entity; and (v) any other person who, at the sole determination of the board of directors, has contributed to the Group based on certain assessment criteria.

The total number of shares which may be issued upon exercise of all options to be granted under the Share Option Scheme 2010 and any other share option schemes of the Company, must not in aggregate exceed 10% of the total number of shares in issue, unless the approval of shareholders in general meeting has been obtained.

The limit on the number of shares which may be issued upon exercise of all outstanding options granted and yet to be exercised under the Share Option Scheme 2010 and any other share option schemes must not exceed 30% of the total number of shares of the Company in issue from time to time.

The offer of a grant of share options may be accepted within 28 days from the date of the offer, upon payment of a nominal consideration of HK\$1 in total by the grantee. The exercise period of the share options granted is determinable by the board of director, and commences on any date after the date of grant and ends on a date which is not later than ten years from the date of offer of the share options.

The exercise price of share options is determined by the board of director, but may not be less than the highest of

- (i) the closing price of the Company's shares on the GEM of the Stock Exchange on the date of grant of the option;
- (ii) the average of the closing prices of the Company's shares on the GEM of the Stock Exchange for the five trading days immediately preceding the date of grant of the option; and
- (iii) the nominal value of the shares of the Company.

Details of specific categories of options granted under the Share Option Plan 2010 are as follows:

Notes to Financial Statements

31 December 2018

36. SHARE OPTION SCHEME (Continued)

Share Option Plan 2010 (Continued)

Batch	Date of grant	Vesting period	Exercise period	Exercise price per share
Grant 1	9 September 2010	N/A*	9 September 2010 to 8 September 2020	HK\$0.379
			9 September 2010 to 8 September 2011	
			9 September 2010 to 8 September 2012	
			9 September 2010 to 8 September 2013	
Grant 2	6 February 2013	N/A*	6 February 2013 to 5 February 2015	HK\$0.426
			6 February 2013 to 5 February 2014	
Grant 3	11 August 2014	N/A*	11 August 2014 to 10 August 2016	HK\$0.455
			11 August 2014 to 10 August 2015	
Grant 4	8 December 2016	N/A*	8 December 2016 to 31 December 2020	HK\$0.267
			8 December 2016 to 7 December 2017	
			8 December 2016 to 7 December 2018	

* The share options were vested immediately.





Notes to Financial Statements

31 December 2018

36. SHARE OPTION SCHEME (Continued)

Share Option Plan 2010 (Continued)

The following tables disclose movements of the Company's share options held by employees (including directors of the Company) during the years:

Year ended 31 December 2018

Date of grant	Outstanding at 1 January 2018	Lapsed during the year	Outstanding at 31 December 2018
Directors			
9 September 2010	33,795,445	–	33,795,445
8 December 2016	80,390,495	–	80,390,495
	114,185,940	–	114,185,940
Employees			
9 September 2010	129,442,171	–	129,442,171
8 December 2016	242,554,740	–	242,554,740
	371,996,911	–	371,996,911
	486,182,851	–	486,182,851
Exercisable at the end of year			486,182,851
Weighted average exercise price	HK\$0.305		HK\$0.305

Notes to Financial Statements

31 December 2018

36. SHARE OPTION SCHEME (Continued)

Share Option Plan 2010 (Continued)

Year ended 31 December 2017

Date of grant	Outstanding at 1 January 2017	Adjusted during the year	Outstanding at 31 December 2017
Directors			
9 September 2010	30,100,000	3,695,445	33,795,445
8 December 2016	71,600,000	8,790,495	80,390,495
	101,700,000	12,485,940	114,185,940
Employees			
9 September 2010	115,288,000	14,154,171	129,442,171
8 December 2016	216,032,000	26,522,740	242,554,740
	331,320,000	40,676,911	371,996,911
	433,020,000	53,162,851	486,182,851
Exercisable at the end of year			364,905,481
Weighted average exercise price	HK\$0.342		HK\$0.305

The Group recognised a share option expense of approximately HK\$3,088,000 for the year ended 31 December 2018 (2017: HK\$9,546,000) in relation to share options granted by the Company.

At the end of the reporting period, the Company had 486,182,851 share options outstanding under the Share Option Plan 2010. The exercise in full of the outstanding share options would, under the present capital structure of the Company, result in the issue of 486,182,851 additional ordinary shares of the Company and additional share capital of approximately HK\$38,000,000 (before issue expenses).

At the date of approval of these financial statements, the Company had 486,182,851 share options outstanding under the Share Option Plan 2010, which represented approximately 12.1% of the Company's shares in issue as at that date.





Notes to Financial Statements

31 December 2018

37. RESERVES

The amounts of the Group's reserves and the movements therein for the current and prior years are presented in the consolidated statement of changes in equity.

(a) Statutory reserve

In accordance with the relevant regulations in the PRC and joint venture agreements, each of the Sino-foreign joint ventures established in the PRC shall set aside a portion of its profit after tax, if any, to the statutory reserve. Such amount will be determined at the discretion of the board of directors of each entity.

(b) Contributed surplus

Contributed surplus represents the cancellation of the paid-up capital and the set off against the accumulated losses in prior years.

(c) Special reserve

Special reserve represents the reserve arising from the acquisition of non-controlling interests.

(d) Capital reserve

Capital reserve represents the deemed contribution from a substantial shareholder arising from the waiver of the convertible notes and the fair value changes in equity investments designated at fair value through other comprehensive income/available-for-sale investments.

38. NOTE TO THE CONSOLIDATED STATEMENT OF CASH FLOWS

Changes in liabilities arising from financing activities

	Interest-bearing bank borrowings HK\$ '000
At 1 January 2018	569,979
Repayment of bank borrowings	(89,693)
Exchange realignment	(23,769)
<hr/>	
At 31 December 2018	456,517

39. CONTINGENT LIABILITIES

At 31 December 2018, the Group did not have any contingent liabilities not provided in the financial statements (2017: Nil).

40. PLEDGE OF ASSETS

Details of the Group's assets pledged for the Group's shallow geothermal energy contract are included in note 29 to the financial statements. (2017: Nil).

Notes to Financial Statements

31 December 2018

41. OPERATING LEASE ARRANGEMENTS

(a) As lessor

The Group leases its part of the buildings and investment properties under operating lease arrangements, with leases negotiated for terms ranging from one to twenty years. The terms of the leases generally also require the tenants to pay security deposits and provide for periodic rent adjustments according to the then prevailing market conditions.

At 31 December 2018, the Group had total future minimum lease receivables under non-cancellable operating leases with its tenants falling due as follows:

	2018 HK\$'000	2017 HK\$'000
Within one year	13,610	9,534
In the second to fifth years, inclusive	57,485	37,892
After five years	119,065	126,119
	190,160	173,545

(b) As lessee

The Group leases certain of its office properties and staff quarters under operating lease arrangements. Leases for properties are negotiated for terms ranging from one to twelve years.

At 31 December 2018, the Group had total future minimum lease payments under non-cancellable operating leases falling due as follows:

	2018 HK\$'000	2017 HK\$'000
Within one year	4,775	4,367
In the second to fifth years, inclusive	2,991	3,566
	7,766	7,933

42. COMMITMENTS

In addition to the operating lease commitments detailed in note 41(b) above, the Group had the following capital commitments at the end of the reporting period:

	2018 HK\$'000	2017 HK\$'000
Contracted, but not provided for:		
Investment properties under construction	22,643	28,156
Acquisition of an equity investment designated at fair value through other comprehensive income/available-for-sale investment	228	240
Capital contributions payable to an associate	4,565	22,453
	27,436	50,849





Notes to Financial Statements

31 December 2018

43. RELATED PARTY TRANSACTIONS

- (a) Amounts due from/to related companies, a joint venture, and associates are included in the consolidated statement of financial position. Further details are given in notes 26 and 27 to the financial statements. Besides, details of bank borrowings with a related party are set out in note 32 to the financial statements.
- (b) In addition to the transactions detailed elsewhere in these financial statements, the Group had the following transactions with related parties during the year:

	Notes	2018 HK\$'000	2017 HK\$'000
Associates:			
Purchases of products	(i)	25,285	117,819
Rental income	(ii)	218	154
Other related parties:			
Provision of services*	(iii)	51,953	1,073
Deposit cash*	(iv)	6	6
Rental expense*	(v)	47	47
Guarantee fee*	(vi)	9,466	11,203

Notes:

- (i) The Group purchased goods from associates.
- (ii) The Group charged rental income to an associate.
- (iii) The Group provided services to a subsidiary of CECEP and CECEP.
- (iv) The Group entered into a financial service agreement with a subsidiary of CECEP and the outstanding deposit balance was HK\$6,000 as at 31 December 2018 (2017: HK\$6,000).
- (v) The Group paid a rental expense to a director.
- (vi) The Group had a guarantee fee payable to CECEP. Details are given in note 32.

The above related party transactions were conducted in accordance with the terms mutually agreed between the parties.

* These related party transactions also constitute connected transactions or continuing connected transactions as defined in Chapter 20 of the GEM Listing Rules.

(c) **Compensation of key management personnel of the Group:**

	2018 HK\$'000	2017 HK\$'000
Short term employee benefits	15,966	12,802
Post-employment benefits	202	253
Equity-settled share option expense	500	1,547
Total compensation paid to key management personnel	16,668	14,602

Further details of directors' and the chief executive's emoluments are included in note 8 to the financial statements.

Notes to Financial Statements

31 December 2018

44. FINANCIAL INSTRUMENTS BY CATEGORY

The carrying amounts of each of the categories of financial instruments as at the end of the reporting period are as follows:

2018

Financial assets

	Financial assets at	Financial assets	Financial assets at	Total
	fair value through	at fair value		
	profit and loss	through other	Equity	
	Held for trading	comprehensive	investments	
	HK\$'000	income	HK\$'000	HK\$'000
Equity investments designated at fair value through other comprehensive income	–	238,974	–	238,974
Financial assets included in prepayments, deposits and other receivables	–	–	135,562	135,562
Amount due from a joint venture	–	–	745	745
Trade and bills receivables	–	–	144,509	144,509
Financial assets at fair value through profit or loss	209	–	–	209
Time deposits	–	–	231	231
Pledge deposits	–	–	1,549	1,549
Cash and cash equivalents	–	–	72,934	72,934
	209	238,974	355,530	594,713

Financial liabilities

	Financial liabilities at amortised cost
	HK\$'000
Trade and bills payables	473,641
Financial liabilities included in other payables and accruals	136,519
Amounts due to associates	8,779
Amounts due to related companies	25,445
Interest-bearing bank borrowings	456,517
	1,100,901





Notes to Financial Statements

31 December 2018

44. FINANCIAL INSTRUMENTS BY CATEGORY (Continued)

2017

Financial assets

	Held for trading <i>HK\$'000</i>	Loans and receivables <i>HK\$'000</i>	Available-for-sale financial assets <i>HK\$'000</i>	Total <i>HK\$'000</i>
Available-for-sale investments	–	–	99,932	99,932
Financial assets included in prepayments, deposits and other receivables	–	180,720	–	180,720
Amount due from a joint venture	–	202	–	202
Trade and bills receivables	–	199,718	–	199,718
Financial assets at fair value through profit or loss	3,072	–	–	3,072
Cash and cash equivalents	–	122,004	–	122,004
	3,072	502,644	99,932	605,648

Financial liabilities

	Financial liabilities at amortised cost <i>HK\$'000</i>
Trade and bills payables	381,705
Financial liabilities included in other payables and accruals	135,270
Amounts due to associates	18,644
Amounts due to related companies	11,203
Interest-bearing bank borrowings	569,979
	1,116,801

Notes to Financial Statements

31 December 2018

45. FAIR VALUE AND FAIR VALUE HIERARCHY OF FINANCIAL INSTRUMENTS

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

	Carrying amounts		Fair values	
	2018 HK\$'000	2017 HK\$'000	2018 HK\$'000	2017 HK\$'000
Financial assets				
Trade receivables, non-current portion	65,736	96,408	65,736	96,408
Available-for-sale investments	–	63,851	–	63,851
Equity investments designated at fair value through other comprehensive income	238,974	–	238,974	–
Financial assets at fair value through profit or loss	209	3,072	209	3,072
	304,919	163,331	304,919	163,331
Financial liabilities				
Interest-bearing bank borrowings	456,517	569,979	456,517	586,591

Management has assessed that the fair values of cash and cash equivalents, the current portion of trade and bills receivables, trade and bills payables, financial assets included in prepayments, deposits and other receivables, financial liabilities included in other payables and accruals, amounts due from/to related companies, a joint venture and associates approximate to their carrying amounts largely due to the short term maturities of these instruments.

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

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

The following methods and assumptions were used to estimate the fair values:

The fair values of the non-current portion of trade receivables have been calculated by discounting the expected future cash flows using rates currently available for instruments with similar terms, credit risk and remaining maturities. The Group's own non-performance risk for interest-bearing bank borrowings as at 31 December 2018 was assessed to be insignificant.





Notes to Financial Statements

31 December 2018

45. FAIR VALUE AND FAIR VALUE HIERARCHY OF FINANCIAL INSTRUMENTS

(Continued)

The fair values of listed equity investments are based on quoted market prices. The fair values of unlisted equity investments designated at fair value through other comprehensive income, which were previously classified as available-for-sale equity investments, have been estimated using a market-based valuation technique based on assumptions that are not supported by observable market prices or rates. The valuation requires the directors to determine comparable public companies (peers) based on industry, size, leverage and strategy, and calculates an appropriate price multiple, such as price to book ("P/B") multiple, for each comparable company identified. The multiple is calculated by dividing the enterprise value of the comparable company by an book measure. The trading multiple is then discounted for considerations such as illiquidity and size differences between the comparable companies based on company-specific facts and circumstances. The discounted multiple is applied to the corresponding book measure of the unlisted equity investments to measure the fair value. The directors believe that the estimated fair values resulting from the valuation technique, which are recorded in the consolidated statement of financial position, and the related changes in fair values, which are recorded in other comprehensive income, are reasonable, and that they were the most appropriate values at the end of the reporting period.

Below is a summary of significant unobservable inputs to the valuation of financial instruments together with a quantitative sensitivity analysis as at 31 December 2018:

	Value technique	Significant unobservable input	Range	Sensitivity of fair value to the input
Unlisted equity investments	Valuation multiples	Average P/B multiple of peers	2018: 1.1 to 2.0	10% increase/decrease in multiple would result in increase/decrease in fair value by HK\$18,480,000
		Discount for lack of marketability and control	2018: 35%	10% increase/decrease in discount would result in decrease/increase in fair value by HK\$8,510,000

The discount for lack of marketability and control represents the amounts of premiums and discounts determined by the Group that market participants would take into account when pricing the investments.

Notes to Financial Statements

31 December 2018

45. FAIR VALUE AND FAIR VALUE HIERARCHY OF FINANCIAL INSTRUMENTS

(Continued)

Fair value hierarchy

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

Assets measured at fair value:

As at 31 December 2018

	Fair value measurement using			Total HK\$'000
	Quoted prices in active markets (Level 1) HK\$'000	Significant observable inputs (Level 2) HK\$'000	Significant unobservable inputs (Level 3) HK\$'000	
Equity investments designated at fair value through other comprehensive income	58,593	–	180,381	238,974
Financial assets at fair value through profit or loss	209	–	–	209
	58,802	–	180,381	239,183

As at 31 December 2017

	Fair value measurement using			Total HK\$'000
	Quoted prices in active markets (Level 1) HK\$'000	Significant observable inputs (Level 2) HK\$'000	Significant unobservable inputs (Level 3) HK\$'000	
Available-for-sale investments	63,851	–	–	63,851
Financial assets at fair value through profit or loss	3,072	–	–	3,072
	66,923	–	–	66,923





Notes to Financial Statements

31 December 2018

45. FAIR VALUE AND FAIR VALUE HIERARCHY OF FINANCIAL INSTRUMENTS

(Continued)

Fair value hierarchy (Continued)

Liabilities measured at fair value:

The Group did not have any financial liabilities measured at fair value as at 31 December 2018 (2017: Nil).

During the year, there were no transfers of fair value measurements between Level 1 and Level 2 and no transfers into or out of Level 3 for both financial assets and financial liabilities (2017: Nil).

The movements in fair value measurements within Level 3 during the year are as follows:

	2018 HK\$000	2017 HK\$000
Equity investments at fair value through other comprehensive income- unlisted		
At 1 January	36,081	–
Effect of adoption of HKFRS 9	–	–
At 1 January (restated)	36,081	–
Transfer from long-term prepayments	163,193	–
Total gains recognised in other comprehensive income	(17,108)	–
Exchange realignment	(1,785)	–
At 31 December	180,381	–

Assets for which fair values are disclosed:

As at 31 December 2018

	Fair value measurement using			Total HK\$'000
	Quoted prices in active markets (Level 1) HK\$'000	Significant observable inputs (Level 2) HK\$'000	Significant unobservable inputs (Level 3) HK\$'000	
Trade receivables, non-current portion	–	65,736	–	65,736

As at 31 December 2017

	Fair value measurement using			Total HK\$'000
	Quoted prices in active markets (Level 1) HK\$'000	Significant observable inputs (Level 2) HK\$'000	Significant unobservable inputs (Level 3) HK\$'000	
Trade receivables, non-current portion	–	96,408	–	96,408

Notes to Financial Statements

31 December 2018

45. FAIR VALUE AND FAIR VALUE HIERARCHY OF FINANCIAL INSTRUMENTS

*(Continued)***Fair value hierarchy** *(Continued)**Liabilities for which fair values are disclosed:*

As at 31 December 2018

	Fair value measurement using			Total HK\$'000
	Quoted prices in active markets (Level 1) HK\$'000	Significant observable inputs (Level 2) HK\$'000	Significant unobservable inputs (Level 3) HK\$'000	
Interest-bearing bank borrowings	–	456,517	–	456,517

As at 31 December 2017

	Fair value measurement using			Total HK\$'000
	Quoted prices in active markets (Level 1) HK\$'000	Significant observable inputs (Level 2) HK\$'000	Significant unobservable inputs (Level 3) HK\$'000	
Interest-bearing bank borrowings	–	586,591	–	586,591

46. FINANCIAL RISK MANAGEMENT OBJECTIVES AND POLICIES

The Group's principal financial instruments, comprise bank loans, equity investments at fair value through other comprehensive income and cash and short term deposits. The main purpose of these financial instruments is to raise finance for the Group's operations. The Group has various other financial assets and liabilities such as trade receivables and trade payables, which arise directly from its operations.

The main risks arising from the Group's financial instruments are interest rate risk, foreign currency risk, credit risk and liquidity risk and equity price risk. The board of directors reviews and agrees policies for managing each of these risks and they are summarised below.

Interest rate risk

The Group's long term debt obligations carry a fixed interest rate and the Group has no risk in respect of change in interest rate.

Foreign currency risk

The Group's PRC subsidiaries transacted in RMB, and the Company and other subsidiaries mainly transacted in HK\$. Management considers the Group's exposure to foreign currency risk is not significant.





Notes to Financial Statements

31 December 2018

46. FINANCIAL RISK MANAGEMENT OBJECTIVES AND POLICIES (Continued)

Credit risk

The Group trades only with recognised and creditworthy third parties. It is the Group's policy that all customers who wish to trade on credit terms are subject to credit verification procedures. In addition, receivable balances are monitored on an ongoing basis and the Group's exposure to bad debts is not significant.

Maximum exposure and year-end staging as at 31 December 2018

The table below shows the credit quality and the maximum exposure to credit risk based on the Group's credit policy, which is mainly based on past due information unless other information is available without undue cost or effort, and year-end staging classification as at 31 December 2018. The amounts presented are gross carrying amounts for financial assets.

	12-month ECLs		Lifetime ECLs		Simplified approach HK\$000	HK\$000
	Stage 1	Stage 2	Stage 3			
	HK\$000	HK\$000	HK\$000			
Pledged deposits						
– Not yet past due	1,549	–	–	–	–	1,549
Time deposits						
– Not yet past due	231	–	–	–	–	231
Contract assets*	–	–	–	–	270,760	270,760
Trade and bills receivables *	818	–	–	–	143,691	144,509
Cash and cash equivalents						
– Not yet past due	72,934	–	–	–	–	72,934
Financial assets included in prepayments, deposits and other receivables**						
– Normal**	71,730	–	–	–	–	71,730
– Doubtful**	63,832	–	–	–	–	63,832
	211,094	–	–	–	414,451	625,545

* For trade and bills receivables and contract assets to which the Group applies the simplified approach for impairment, information based on the provision matrix is disclosed in notes 24 and 22 to the financial statements, respectively.

** The credit quality of the financial assets included in prepayments, deposits and other receivables is considered to be "normal" when they are not past due and there is no information indicating that the financial assets had a significant increase in credit risk since initial recognition. Otherwise, the credit quality of the financial assets is considered to be "doubtful"

Notes to Financial Statements

31 December 2018

46. FINANCIAL RISK MANAGEMENT OBJECTIVES AND POLICIES *(Continued)*

Credit risk (Continued)

Maximum exposure as at 31 December 2017

The credit risk of the Group's other financial assets, which comprise cash and cash equivalents, amounts due from related companies, associates and a joint venture and other receivables, arises from default of the counterparty, with a maximum exposure equal to the carrying amounts of these instruments.

Since the Group trades only with recognised and creditworthy third parties, there is no requirement for collateral. Concentrations of credit risk are managed by customer/counterparty, by geographical region and by industry sector. There are no significant concentrations of credit risk within the Group as the customer bases of the Group's trade receivables are widely dispersed in different sectors and industries.

Further quantitative data in respect of the Group's exposure to credit risk arising from trade and bills receivables are disclosed in note 24 to the financial statements.

Liquidity risk

The Group monitors its risk to a shortage of funds using a recurring liquidity planning tool. This tool considers the maturity of both its financial instruments and financial assets (e.g., trade receivables) and projected cash flows from operations.

The maturity profile of the Group's financial liabilities as at the end of the reporting period, based on the contractual undiscounted payments, is as follows:

Group	2018			Total HK\$'000
	On demand HK\$'000	Within one year HK\$'000	One to five years HK\$'000	
Interest-bearing bank borrowings	–	484,906	–	484,906
Trade and bills payables	–	473,641	–	473,641
Financial liabilities included in other payables and accruals	136,519	–	–	136,519
Amounts due to related companies	25,445	–	–	25,445
Amounts due to associates	8,779	–	–	8,779
	170,743	958,547	–	1,129,290



Notes to Financial Statements

31 December 2018

46. FINANCIAL RISK MANAGEMENT OBJECTIVES AND POLICIES (Continued)

Liquidity risk (Continued)

Group	2017			
	On demand HK\$'000	Within one year HK\$'000	One to five years HK\$'000	Total HK\$'000
Interest-bearing bank borrowings	–	126,724	503,866	630,590
Trade and bills payables	–	381,705	–	381,705
Financial liabilities included in other payables and accruals	135,270	–	–	135,270
Amounts due to related companies	11,203	–	–	11,203
Amounts due to associates	18,644	–	–	18,644
	165,117	508,429	503,866	1,177,412

Equity price risk

Equity price risk is the risk that the fair values of equity securities decrease as a result of changes in the levels of equity indices and the value of individual securities. The Group is exposed to equity price risk arising from individual equity investments at fair value through other comprehensive income (note 19) as at 31 December 2018.

The following table demonstrates the sensitivity to every 5% change in the fair values of the equity investments, with all other variables held constant and before any impact on tax, based on their carrying amounts at the end of the reporting period. For the purpose of this analysis, for the equity investments at fair value through other comprehensive income, the impact is deemed to be on the fair value reserve and no account is given for factors such as impairment which might impact the statement of profit or loss.

2018	Carrying amount of equity investments	Change in equity
	HK\$000	HK\$000
Unlisted investments at fair value		
– Equity investments at fair value through other comprehensive income	180,381	9,019

Capital management

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

The Group manages its capital structure and makes adjustments to it in light of changes in economic conditions and the risk characteristics of the underlying assets. To maintain or adjust the capital structure, the Group may adjust the dividend payment to shareholders, return capital to shareholders or issue new shares. The Group is not subject to any externally imposed capital requirements. No changes were made in the objectives, policies or processes for managing capital during the years ended 31 December 2018 and 31 December 2017.

Notes to Financial Statements

31 December 2018

46. FINANCIAL RISK MANAGEMENT OBJECTIVES AND POLICIES (Continued)

Capital management (Continued)

The Group monitors capital using a gearing ratio, which is net debt divided by the capital plus net debt. Net debt includes interest-bearing bank borrowings, trade and bills payables, financial liabilities included in other payables and accruals, less cash and cash equivalents. Capital includes equity attributable to owners of the parent. The gearing ratios as at the end of the reporting periods were as follows:

	2018	2017
	HK\$'000	HK\$'000
Interest-bearing bank borrowings	456,517	569,979
Trade and bills payables	473,641	381,705
Financial liabilities included in other payables and accruals	136,519	135,270
Less: Cash and cash equivalents	(72,934)	(122,004)
Net debt	993,743	964,950
Equity attributable to owners of the parent	1,051,394	1,627,210
Capital and net debt	2,045,137	2,592,160
Gearing ratio	49%	37%





Notes to Financial Statements

31 December 2018

47. STATEMENT OF FINANCIAL POSITION OF THE COMPANY

Information about the statement of financial position of the Company at the end of the reporting period is as follows:

	2018 HK\$ '000	2017 HK\$ '000
NON-CURRENT ASSETS		
Investments in subsidiaries	836,134	836,134
Total non-current assets	836,134	836,134
CURRENT ASSETS		
Amounts due from subsidiaries	522,655	489,451
Prepayments, deposits and other receivables	1,017	1,888
Cash and cash equivalents	1,672	41,136
Total current assets	525,344	532,475
CURRENT LIABILITIES		
Amounts due to subsidiaries	–	3,200
Total current liabilities	–	3,200
NET CURRENT ASSETS	525,344	529,275
TOTAL ASSETS LESS CURRENT LIABILITIES	1,361,478	1,365,409
Net assets	1,361,478	1,365,409
EQUITY		
Share capital	313,793	313,793
Other reserves (<i>note</i>)	1,047,685	1,051,616
Total equity	1,361,478	1,365,409

Notes to Financial Statements

31 December 2018

47. STATEMENT OF FINANCIAL POSITION OF THE COMPANY (Continued)

Note:

A summary of the Company's reserves is as follows:

	Share premium HK\$'000	Contributed surplus HK\$'000	Treasury shares HK\$'000	Share option reserve HK\$'000	Capital reserve HK\$'000	Accumulated losses HK\$'000	Total HK\$'000
At 1 January 2017	871,455	154,381	–	36,483	32,235	(55,639)	1,038,915
Issue of shares	25,252	–	–	–	–	–	25,252
Share issue expenses	(2,857)	–	–	–	–	–	(2,857)
Total comprehensive loss for the year	–	–	–	–	–	(19,240)	(19,240)
Equity-settled share option arrangements	–	–	–	9,546	–	–	9,546
At 31 December 2017 and 1 January 2018	893,850	154,381	–	46,029	32,235	(74,879)	1,051,616
Total comprehensive loss for the year	–	–	–	–	–	(7,019)	(7,019)
Equity-settled share option arrangements	–	–	–	3,088	–	–	3,088
At 31 December 2018	893,850	154,381	–	49,117	32,235	(81,898)	1,047,685

The share option reserve comprises the fair value of share options granted which are yet to be exercised, as further explained in the accounting policy for share-based payments in note 2.4 to the financial statements. The amount will either be transferred to the share premium account when the related options are exercised, or be transferred to accumulated losses should the related options expire or be forfeited.

48. APPROVAL OF THE FINANCIAL STATEMENTS

The financial statements were approved and authorised for issue by the board of directors on 26 March 2019.





Five-Year Financial Summary

A summary of the published results and the assets, liabilities and non-controlling interests of the Group for the last five financial years, as extracted from the audited financial statements, are set out below.

CONSOLIDATED RESULTS

	For the year ended 31 December				
	2018	2017	2016	2015	2014
	HK\$'000	HK\$'000	HK\$'000	HK\$'000	HK\$'000
Revenue	396,793	778,153	619,053	319,354	283,601
Cost of sales and services	(366,994)	(614,244)	(508,454)	(199,621)	(196,314)
Gross profit	29,799	163,909	110,599	119,733	87,287
Gross profit margin	8%	21%	18%	37%	31%
(Loss)/profit before tax	(419,067)	16,023	(9,524)	(22,959)	(19,293)
Income tax credit/(expense)	556	(12,061)	(22,105)	(25,147)	(29,666)
(Loss)/profit for the year	(418,511)	3,962	(31,629)	(48,106)	(48,959)
Attributable to:					
– Owners of the parent	(410,297)	10,533	(30,816)	(47,506)	(53,506)
– Non-controlling interests	(8,214)	(6,571)	(813)	(600)	4,547
(Loss)/earnings per share					
– Basic (HK cents)	(10.19)	0.30	(1.07)	(1.64)	(1.84)
– Diluted (HK cents)	(10.19)	0.30	(1.07)	(1.64)	(1.84)

CONSOLIDATED ASSETS AND LIABILITIES

	2018	2017	2016	2015	2014
	HK\$'000	HK\$'000	HK\$'000	HK\$'000	HK\$'000
Non-current assets	1,770,461	1,974,571	1,656,826	1,444,067	1,353,775
Current assets	723,203	1,125,694	874,243	1,137,731	1,265,072
Current liabilities	(1,313,484)	(837,135)	(566,443)	(984,091)	(428,756)
Net current (liabilities)/assets	(590,281)	288,559	307,800	153,640	836,316
Total assets less current liabilities	1,180,180	2,263,130	1,964,626	1,597,707	2,190,091
Non-current liabilities	(95,318)	(576,100)	(523,324)	(77,256)	(580,560)
Net assets	1,084,862	1,687,030	1,441,302	1,520,451	1,609,531
Total debt to equity ratio	1.30	0.84	0.76	0.70	0.63

List of Major Properties Held by the Group

Location	Approximate gross floor area (square meter)	Group's interest	Land use	Term of lease	Stage of completion	Anticipated completion
Building						
No. 102 Xingshikou Road, Haidian District, Beijing, the PRC	5,628.82	100%	Office and industrial	Medium	Completed	–
Investment property						
No. 6, Zhuantang Science and Technology Economic Zone, Zhuantang Jiedao, Xihu District, Hangzhou City, Zhejiang Province, the PRC	32,798.00	100%	Office and industrial	Medium	Completed	–
Headquarter Block Nos. 026 and 027 office building, Jinjialin Village, Chengjiao Township, Fucheng District, Mianyang City, Sichuan Province, the PRC	19,610.06	100%	office	Medium	Completed	–
Investment property under construction and development						
Xianyuwan Village, Xianyuwan Town, Wafangdian City, Dalian, Liaoning Province, the PRC	173,289.00	100%	Residential	Medium	Planning in progress	December 2022

