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)

FINAL RESULTS ANNOUNCEMENT FOR THE YEAR ENDED 31 DECEMBER 2019

CHARACTERISTICS OF THE GEM OF THE STOCK EXCHANGE OF HONG KONG LIMITED (THE "STOCK EXCHANGE")

GEM has been positioned as a market designed to accommodate small and mid-sized companies to which a higher investment risk may be attached than other companies listed on the Stock Exchange. Prospective investors should be aware of the potential risks of investing in such companies and should make the decision to invest only after due and careful consideration.

Given that the companies listed on GEM are generally small and mid-sized companies, there is a risk that securities traded on GEM may be more susceptible to high market volatility than securities traded on the main board of the Stock Exchange and no assurance is given that there will be a liquid market in the securities traded on GEM.

This announcement, for which the directors of the China Geothermal Industry Development Group Limited (the "Company") collectively and individually accept full responsibility, includes particulars given in compliance with the Rules Governing the Listing of Securities on the GEM (the "GEM Listing Rules") of The Stock Exchange for the purpose of giving information with regard to the Company. The directors, having made all reasonable enquiries, confirm that to the best of their knowledge and belief the information contained in this announcement is accurate and complete in all material respects and not misleading or deceptive, and there are no other matters the omission of which would make any statement herein or this announcement misleading.

This announcement 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.

FINAL RESULTS

The board of directors ("Directors") of China Geothermal Industry Development Group Limited (the "Company") is pleased to announce the consolidated results of the Company and its subsidiaries (collectively referred to as the "Group") for the year ended 31 December 2019, together with the comparative figures for the year ended 31 December 2018 as follows:

CONSOLIDATED STATEMENT OF PROFIT OR LOSS

FOR THE YEAR ENDED 31 DECEMBER 2019

	Notes	2019 HK$'000	2018 HK$'000
REVENUE	4	**345,537**	396,793
Cost of sales		**(261,559)**	(379,670)
Gross profit		**83,978**	17,123
Other income and gains	4	**14,017**	10,210
Selling and distribution expenses		**(12,505)**	(13,601)
Administrative expenses		**(101,696)**	(112,326)
Impairment losses on trade and bills receivables, net		**(6,612)**	(16,084)
Impairment losses on prepayments, other receivables and other assets, net		**(54,814)**	(5,521)
Impairment losses on contract assets, net		**(23,505)**	(50,966)
Finance costs	5	**(39,309)**	(46,590)
Fair value changes on investment properties		**4,222**	11,204
Other expenses		**(267,360)**	(203,140)
Share of profits and losses of:			
A joint venture		**(6,105)**	458
Associates		**2,845**	(6,746)
Share-based payment expenses		**–**	(3,088)
LOSS BEFORE TAX	6	**(406,844)**	(419,067)
Income tax (expense)/credit	7	**(38,179)**	556
LOSS FOR THE YEAR		**(445,023)**	(418,511)
Attributable to:			
Owners of the parent		**(441,039)**	(410,297)
Non-controlling interests		**(3,984)**	(8,214)
		(445,023)	(418,511)
LOSS PER SHARE ATTRIBUTABLE TO ORDINARY EQUITY HOLDERS OF THE PARENT	9		
Basic and diluted (expressed in HK cents)		**(10.59)**	(10.19)

CONSOLIDATED STATEMENT OF COMPREHENSIVE INCOME

FOR THE YEAR ENDED 31 DECEMBER 2019

	2019	2018
	HK$'000	*HK$'000*
LOSS FOR THE YEAR	**(445,023)**	(418,511)
OTHER COMPREHENSIVE (LOSS)/INCOME		
Other comprehensive loss that may be reclassified to profit or loss in subsequent periods:		
Exchange differences:		
Exchange differences on translation of foreign operations	**(16,630)**	(49,317)
Share of other comprehensive loss of a joint venture	**(57)**	(389)
Share of other comprehensive loss of associates	**(1,127)**	(801)
Net other comprehensive loss that may be reclassified to profit or loss in subsequent periods	**(17,814)**	(50,507)
Other comprehensive (loss)/income that will not to be reclassified to profit or loss in subsequent periods:		
(Loss)/gain on property revaluation	**(5,742)**	5,360
Equity investments designated at fair value through other comprehensive income:		
Changes in fair value	**5,712**	(19,209)
Income tax effect	**(1,285)**	4,823
	4,427	(14,386)
Net other comprehensive loss that will not to be reclassified to profit or loss in subsequent periods	**(1,315)**	(9,026)
OTHER COMPREHENSIVE LOSS FOR THE YEAR, NET OF TAX	**(19,129)**	(59,533)
TOTAL COMPREHENSIVE LOSS FOR THE YEAR	**(464,152)**	(478,044)
Attributable to:		
Owners of the parent	**(459,531)**	(468,646)
Non-controlling interests	**(4,621)**	(9,398)
	(464,152)	(478,044)

CONSOLIDATED STATEMENT OF FINANCIAL POSITION

AS AT 31 DECEMBER 2019

	Notes	2019 HK$'000	2018 HK$'000
NON-CURRENT ASSETS			
Property, plant and equipment		**301,502**	318,590
Investment properties		**677,933**	663,958
Right-of-use assets		**2,579**	–
Deposits paid for acquisitions of land use rights		**27,221**	100,566
Goodwill		**–**	263,879
Investment in a joint venture		**–**	7,647
Investments in associates		**51,542**	49,824
Equity investments designated at fair value through other comprehensive income		**239,406**	238,974
Deferred tax assets		**4,990**	41,529
Long-term prepayments		**–**	933
Contract assets		**18,794**	18,825
Trade receivables	*10*	**57,029**	65,736
Total non-current assets		**1,380,996**	1,770,461
CURRENT ASSETS			
Inventories		**28,996**	56,880
Properties held for sale		**88,796**	90,780
Trade and bills receivables	*10*	**53,401**	78,773
Prepayments, other receivables and other assets		**172,278**	169,167
Contract assets		**167,897**	251,935
Amounts due from related companies		**517**	–
Amount due from a joint venture		**–**	745
Financial assets at fair value through profit or loss		**48**	209
Restricted cash		**5,636**	–
Time deposits		**232**	231
Pledged deposits		**–**	1,549
Cash and cash equivalents		**56,871**	72,934
Total current assets		**574,672**	723,203
CURRENT LIABILITIES			
Trade and bills payables	*11*	**309,476**	473,641
Other payables and accruals		**189,840**	138,417
Contract liabilities		**43,807**	56,510
Amounts due to associates		**21,293**	8,779
Amounts due to related companies		**479,184**	25,445
Interest-bearing bank and other borrowings		**6,140**	456,517
Lease liabilities		**1,648**	–
Tax payable		**148,074**	154,175
Total current liabilities		**1,199,462**	1,313,484
NET CURRENT LIABILITIES		**(624,790)**	(590,281)
TOTAL ASSETS LESS CURRENT LIABILITIES		**756,206**	1,180,180

CONSOLIDATED STATEMENT OF FINANCIAL POSITION (CONTINUED)

AS AT 31 DECEMBER 2019

	2019 *HK$'000*	2018 *HK$'000*
TOTAL ASSETS LESS CURRENT LIABILITIES	**756,206**	1,180,180
NON-CURRENT LIABILITIES		
Other payables and accruals	**8,542**	10,472
Lease liabilities	**511**	–
Deferred income	**8,931**	10,021
Deferred tax liabilities	**74,117**	74,825
Total non-current liabilities	**92,101**	95,318
Net assets	**664,105**	1,084,862
EQUITY		
Equity attributable to owners of the parent		
Share capital	**353,043**	313,793
Reserves	**283,023**	737,601
	636,066	1,051,394
Non-controlling interests	**28,039**	33,468
Total equity	**664,105**	1,084,862

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

FOR THE YEAR ENDED 31 DECEMBER 2019

1. CORPORATE AND GROUP INFORMATION

China Geothermal Industry Development Group Limited was incorporated in the Cayman Islands as an exempted company with limited liability and its shares are listed on 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 in the annual report.

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

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

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 2019, the Group incurred a consolidated net loss of HK$445,023,000 and had consolidated accumulated losses of HK$853,553,000. As at 31 December 2019, the Group had net current liabilities of HK$624,790,000.

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;

- Included in the interest-bearing bank and other borrowings as at 31 December 2018 was an entrusted loan of HK456,517,000, borrowed from a subsidiary of China Energy Conservation and Environmental Protection Group ("CECEP") through a bank and guaranteed by CECEP. The loan was due on 13 September 2019, and due to the tight cash flows of the Group, CECEP repaid the loan on behalf of the Group by granting an unsecured shareholder's loan of RMB400,000,000 to Ever Source Science & Technology Development Group Co., Ltd. ("HYY") on 12 September 2019, which is repayable on demand.

  In order to refinance this loan, HYY intends to apply for a facility in the principal amount of RMB400,000,000 from a bank. Pursuant to the requirements of the bank, CECEP shall provide a guarantee in favour of the bank to secure the repayment obligations of HYY for the application of the facility. Therefore, on 16 December 2019, CECEP and HYY entered into the guarantee service agreement, pursuant to which, CECEP agreed to provide the guarantee service to the Group. The Group shall pay to CECEP the guarantee fee at 1% per annum on any outstanding principal amount of the facility under the facility agreement. As requested by CECEP, on 16 December 2019, HYY entered into the counter guarantee agreement in favour of CECEP against all amounts which may be incurred by CECEP under the guarantee. HYY shall grant the counter guarantee to CECEP for the principal amount of the facility together with interests, penalty and other related fees and expenses which may be payable by CECEP under the guarantee to the bank. At the extraordinary general meeting held on 13 March 2020, the shareholders of the Company passed the ordinary resolution in respect of the guarantee service agreement and the counter guarantee agreement and the transactions contemplated thereunder. The Group is now in the process of the registration of pledge under the counter guarantee agreement. Due to the relatively high credit rating of CECEP, HYY is expected to obtain more favourable terms for the application for the facility if CECEP provides the guarantee.

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 2019 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 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.

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 9	*Prepayment Features with Negative Compensation*
HKFRS 16	*Leases*
Amendments to HKAS 19	*Plan Amendment, Curtailment or Settlement*
Amendments to HKAS 28	*Long-term Interests in Associates and Joint Ventures*
HK(IFRIC)-lnt 23	*Uncertainty over Income Tax Treatments*
Annual Improvements to HKFRSs 2015-2017 Cycle	Amendments to HKFRS 3, HKFRS 11, HKAS 12 and HKAS 23

Except for the amendments to HKFRS 9 and HKAS 19, and *Annual Improvements to HKFRSs 2015-2017 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:

(a) HKFRS 16 replaces HKAS 17 *Leases*, HK(IFRIC)-lnt 4 *Determining whether an Arrangement contains a Lease*, HK(SIC)-lnt 15 *Operating Leases – Incentives* and HK(SIC)-lnt 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 account for all leases under a single on-balance sheet model to recognise and measure right-of-use assets and lease liabilities, except for certain recognition exemptions. Lessor accounting under HKFRS 16 is substantially unchanged from HKAS 17. Lessors continue to classify leases as either operating or finance leases using similar principles as in HKAS 17.

HKFRS 16 did not have any significant impact on leases where the Group is the lessor.

The Group has adopted HKFRS 16 using the modified retrospective method with the date of initial application of 1 January 2019. Under this method, the standard has been applied retrospectively with the cumulative effect of initial adoption recognised as an adjustment to the opening balance of retained profits at 1 January 2019, and the comparative information for 2018 was not restated and continued to be reported under HKAS 17 and related interpretations.

New definition of a lease

Under HKFRS 16, a contract is, or contains, a lease if the contract conveys a right to control the use of an identified asset for a period of time in exchange for consideration. Control is conveyed where the customer has both the right to obtain substantially all of the economic benefits from use of the identified asset and the right to direct the use of the identified asset. The Group elected to use the transition practical expedient allowing the standard to be applied only to contracts that were previously identified as leases applying HKAS 17 and HK(IFRIC)-lnt 4 at the date of initial application. Contracts that were not identified as leases under HKAS 17 and HK(IFRIC)-lnt 4 were not reassessed. Therefore, the definition of a lease under HKFRS 16 has been applied only to contracts entered into or changed on or after 1 January 2019.

As a lessee – Leases previously classified as operating leases

Nature of the effect of adoption of HKFRS 16

The Group has lease contracts for various items of property and other equipment. As a lessee, the Group previously classified leases as either finance leases or operating leases based on the assessment of whether the lease transferred substantially all the rewards and risks of ownership of assets to the Group. Under HKFRS 16, the Group applies a single approach to recognise and measure right-of-use assets and lease liabilities for all leases, except for two elective exemptions for leases of low-value assets (elected on a lease-by-lease basis) and leases with a lease term of 12 months or less ("short-term leases") (elected by class of underlying asset). Instead of recognising rental expenses under operating leases on a straight-line basis over the lease term commencing from 1 January 2019, the Group recognises depreciation (and impairment, if any) of the right-of-use assets and interest accrued on the outstanding lease liabilities (as finance costs).

Impact on transition

Lease liabilities at 1 January 2019 were recognised based on the present value of the remaining lease payments, discounted using the incremental borrowing rate at 1 January 2019. The right-of-use assets were 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 1 January 2019.

All these assets were assessed for any impairment based on HKAS 36 on that date. The Group elected to present the right-of-use assets separately in the statement of financial position.

For the leasehold land and buildings (that were held to earn rental income and/or for capital appreciation) previously included in investment properties and measured at fair value, the Group has continued to include them as investment properties at 1 January 2019. They continue to be measured at fair value applying HKAS 40.

The Group has used the following elective practical expedients when applying HKFRS 16 at 1 January 2019:

- Applying the short-term lease exemptions to leases with a lease term that ends within 12 months from the date of initial application

- Using hindsight in determining the lease term where the contract contains options to extend/terminate the lease

Financial impact at 1 January 2019

The impact arising from the adoption of HKFRS 16 at 1 January 2019 was as follows:

	Increase/ (decrease) *HK$'000*
Assets	
Increase in right-of-use assets	6,858
Decrease in long-term prepayments	(294)
Decrease in prepayments, other receivables and other assets	(220)
Increase in total assets	6,344
Liabilities	
Increase in lease liabilities	6,344
Increase in total liabilities	6,344

The lease liabilities as at 1 January 2019 reconciled to the operating lease commitments as at 31 December 2018 are as follows:

	HK$'000
Operating lease commitments as at 31 December 2018	7,766
Less: Commitments relating to short-term leases and those leases with a remaining lease term ended on or before 31 December 2019	(860)
	6,906
Weighted average incremental borrowing rate as at 1 January 2019	7%
Discounted operating lease commitments as at 1 January 2019	6,344
Lease liabilities as at 1 January 2019	6,344

(b) 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 assessed its business model for its long-term interests in associates and joint ventures upon adoption of the amendments on 1 January 2019 and concluded that the long-term interests in associates and joint ventures continued to be measured at amortised cost in accordance with HKFRS 9. Accordingly, the amendments did not have any impact on the financial position or performance of the Group.

(c) HK(IFRIC)-lnt 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. Based on the analysis, the Group considered the interpretation did not have any impact on the financial position or performance of the Group.

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	*Definition of a Business*[1]
Amendments to HKFRS 9, HKAS 39 and HKFRS 7	*Interest Rate Benchmark Reform*[1]
Amendments to HKFRS 10 and HKAS 28 (2011)	*Sale or Contribution of Assets between an Investor and its Associate or Joint Venture*[3]
HKFRS 17	*Insurance Contracts*[2]
Amendments to HKAS 1 and HKAS 8	*Definition of Material*[1]

1 Effective for annual periods beginning on or after 1 January 2020
2 Effective for annual periods beginning on or after 1 January 2021
3 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. Since the amendments apply prospectively to transactions or other events that occur on or after the date of first application, the Group will not be affected by these amendments on the date of transition.

Amendments to HKFRS 9, HKAS 39 and HKFRS 7 address the effects of interbank offered rate reform on financial reporting. The amendments provide temporary reliefs which enable hedge accounting to continue during the period of uncertainty before the replacement of an existing interest rate benchmark. In addition, the amendments require companies to provide additional information to investors about their hedging relationships which are directly affected by these uncertainties. The amendments are effective for annual periods beginning on or after 1 January 2020. Early application is permitted. The amendments are not expected to have any significant impact on the Group's financial statements.

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.

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.

3. 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 systems;

(b) Air conditioning/shallow geothermal heat pump segment – trading of air conditioning/shallow geothermal 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 non-lease-related finance costs are excluded from such measurement.

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

Segment liabilities exclude certain amounts due to associates and related companies, interest-bearing bank and other borrowings (other than lease liabilities), 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.

3. OPERATING SEGMENT INFORMATON (CONTINUED)

Year ended 31 December 2019

	Shallow geothermal energy HK$'000	Air conditioning/ shallow geothermal heat pump HK$'000	Property investment and development HK$'000	Securities investment and trading HK$'000	Total HK$'000
Segment revenue *(note 4)*:					
Sales to external customers	246,672	92,485	6.380	–	345,537
Intersegment sales	–	19,922	–	–	19,922
	246,672	112,407	6.380	–	365,459
Reconciliation:					
Elimination of intersegment sales					(19,922)
Revenue					345,537
Segment results	(332,837)	2,597	1,478	(1,109)	(329,871)
Reconciliation:					
Elimination of intersegment results					(2,608)
Share of profits and losses of associates					2,845
Share of profits and losses of a joint venture					(6,105)
Unallocated other income					3,290
Corporate and other unallocated expenses					(35,374)
Finance costs (other than interest on lease liabilities)					(39,021)
Loss before tax					(406,844)
Segment assets	692,899	55,001	981,953	241,280	1,971,133
Reconciliation:					
Elimination of intersegment receivables					(138,887)
Corporate and other unallocated assets					123,422
Total assets					1,955,668
Segment liabilities	475,034	56,875	156,381	11,542	669,832
Reconciliation:					
Elimination of intersegment payables					(138,887)
Corporate and other unallocated liabilities					730,618
Total liabilities					1,291,563

3. OPERATING SEGMENT INFORMATON (CONTINUED)

Year ended 31 December 2019

	Shallow geothermal energy *HK$'000*	Air conditioning/ shallow geothermal heat pump *HK$'000*	Property investment and development *HK$'000*	Securities investment and trading *HK$'000*	Total *HK$'000*
Other segment information:					
Amounts included in the measure of segment profit or loss or segment assets:					
Depreciation of property, plant and equipment	**13,672**	**625**	**1,853**	**22**	**16,172**
Depreciation of right-of-use assets	**4,005**	**–**	**–**	**–**	**4,005**
Impairment loss recognised in respect of trade and bills receivables, net	**6,456**	**(1)**	**157**	**–**	**6,612**
Impairment loss recognised in respect of prepayments, other receivables and other assets	**53,601**	**(41)**	**1,254**	**–**	**54,814**
Impairment loss recognised in respect of contract assets, net	**23,217**	**–**	**288**	**–**	**23,505**
Impairment of goodwill	**263,879**	**–**	**–**	**–**	**263,879**
Changes in fair value of investment properties	**–**	**–**	**(4,222)**	**–**	**(4,222)**
Capital expenditure*	**525**	**–**	**1,041**	**–**	**1,566**
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	**51,542**	**–**	**–**	**–**	**51,542**
Share of profits and losses of associates	**(2,845)**	**–**	**–**	**–**	**(2,845)**
Share of profits and losses of a joint venture	**6,105**	**–**	**–**	**–**	**6,105**

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

3. OPERATING SEGMENT INFORMATON (CONTINUED)

Year ended 31 December 2018

	Shallow geothermal energy *HK$'000*	Air conditioning/ shallow geothermal heat pump *HK$'000*	Property investment and development *HK$'000*	Securities investment and trading *HK$'000*	Total *HK$'000*
Segment revenue *(note 4)***:**					
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
Reconciliation:					
Elimination of intersegment sales					(32,553)
Revenue					396,793
Segment results	(348,705)	1,307	19,159	4,424	(323,815)
Reconciliation:					
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
Reconciliation:					
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
Reconciliation:					
Elimination of intersegment payables					(61,079)
Corporate and other unallocated liabilities					719,741
Total liabilities					1,408,802

3. OPERATING SEGMENT INFORMATON (CONTINUED)

Year ended 31 December 2018

	Shallow geothermal energy *HK$'000*	Air conditioning/ shallow geothermal heat pump *HK$'000*	Property investment and development *HK$'000*	Securities investment and trading *HK$'000*	Total *HK$'000*
Other segment information:					
Amounts included in the measure of segment profit or loss or segment assets:					
Depreciation of property, plant and equipment	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, other receivables and other assets, 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

Geographical information

The Group's operations are mainly located in the Mainland China. 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 Mainland China.

Information about major customers

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

	2019	2018
	HK$'000	*HK$'000*
Customer A	**90,373**	–
Customer B	**–**	51,507
Customer C	**–**	83,749
	90,373	135,256
Total revenue	**345,537**	396,793
Proportion of revenue	**26.2%**	34.1%

4. REVENUE, OTHER INCOME AND GAINS

An analysis of revenue is as follows:

	2019	2018
	HK$'000	*HK$'000*
Revenue from contracts with customers	**339,157**	379,281
Revenue from other sources		
Gross rental income from investment property operating leases:		
Other lease payments, including fixed payments	**6,380**	17,512
	345,537	396,793

Revenue from contracts with customers

(a) Disaggregated revenue information

For the year ended 31 December 2019

Segments	**Shallow geothermal energy** *HK$'000*	**Air conditioning/ shallow geothermal heat pump** *HK$'000*	**Total** *HK$'000*
Type of goods or services:			
Sale of industrial products	–	92,485	92,485
Construction services	246,672	–	246,672
Total revenue from contracts with customers	246,672	92,485	339,157
Geographical markets:			
Mainland China	246,672	92,485	339,157
Timing of revenue recognition:			
Goods transferred at a point in time	–	92,485	92,485
Services transferred over time	246,672	–	246,672
Total revenue from contracts with customers	246,672	92,485	339,157

For the year ended 31 December 2018

Segments	Shallow geothermal energy *HK$'000*	Air conditioning/ shallow geothermal heat pump *HK$'000*	Total *HK$'000*
Type of goods or services:			
Sale of industrial products	–	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 2019

Segments	**Shallow geothermal energy** *HK$'000*	**Air conditioning/ shallow geothermal heat pump** *HK$'000*	**Total** *HK$'000*
Revenue from contracts with customers:			
External customers	246,672	92,485	339,157
Intersegment sales	–	19,922	19,922
	246,672	112,407	359,079
Intersegment adjustments and eliminations	–	(19,922)	(19,922)
Total revenue from contracts with customers	246,672	92,485	339,157

For the year ended 31 December 2018

Segments	Shallow geothermal energy *HK$'000*	Air conditioning/ shallow geothermal heat pump *HK$'000*	Total *HK$'000*
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

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:

	2019	2018
	HK$'000	*HK$'000*
Revenue recognised that was included in contract liabilities at the beginning of the reporting period:		
Construction services	**25,549**	7,726

(b) Performance obligations

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

Sale of industrial products

The performance obligation is satisfied upon delivery of the industrial products 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 amounts of transaction prices allocated to the remaining performance obligations (unsatisfied or partially unsatisfied) as at 31 December are as follows:

	2019	2018
	HK$'000	*HK$'000*
Amounts expected to be recoginsed as revenue:		
Within one year	**173,935**	290,092

All the amounts of transaction prices allocated to the performance obligations are expected to be recognised as revenue within one year. The amounts disclosed above do not include variable consideration which is constrained.

	2019	2018
	HK$'000	*HK$'000*
Other income		
Interest income	**2,494**	3,914
Sale of scrap materials	**579**	704
Government grants *(note)*	**2,007**	995
Dividend income from equity investments at fair value through other comprehensive income	**–**	4,141
Income from exempted payables	**7,216**	–
Others	**795**	173
	13,091	9,927
Gains		
Fair value change on financial assets at fair value through profit or loss	**–**	283
Gain on remeasurement of the investment in a joint venture	**926**	–
	926	283
	14,017	10,210

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.

5. FINANCE COSTS

An analysis of finance costs is as follows:

	2019	2018
	HK$'000	*HK$'000*
Interest on bank loans and other loans	**32,200**	37,124
Interest on lease liabilities	**288**	–
Guarantee fee on other borrowings	**6,821**	9,466
	39,309	46,590

6. LOSS BEFORE TAX

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

	Notes	**2019** *HK$'000*	2018 *HK$'000*
Cost of inventories sold		**86,961**	14,095
Cost of services provided		**174,598**	365,575
Depreciation of property, plant and equipment		**16,172**	16,217
Depreciation of right-of-use assets		**4,005**	–
Research and development costs		**6,440**	10,054
Impairment of goodwill*		**263,879**	201,881
Minimum lease payments under operating leases		**–**	9,702
Lease payments not included in the measurement of lease liabilities		**4,227**	–
Auditor's remuneration		**3,752**	3,431
Employee benefit expense (including directors' and chief executive's remuneration):			
Wages and salaries		**57,013**	68,382
Equity-settled share option expense		**–**	3,088
Pension scheme contributions		**8,679**	9,417
		65,692	80,887
Impairment loss recognised in respect of trade and bills receivables, net	*10*	**6,612**	16,084
Impairment loss recognised in respect of prepayments, other receivables and other assets, net		**54,814**	5,521
Loss on uncertainty in respect of collectability of contract assets, net		**23,505**	50,966
Changes in fair value of investment properties		**(4,222)**	(11,204)
Fair value change on financial assets at fair value through profit or loss		**1,109**	(283)
Dividend income from equity investments at fair value through other comprehensive income		**–**	(4,141)
Gain on remeasurement of the investment in a joint venture		**(926)**	–
Interest income		**(2,494)**	(3,914)
Loss on disposal of items of property, plant and equipment*		**24**	536

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

7. INCOME TAX EXPENSE/(CREDIT)

Pursuant to the laws and regulations of the Cayman Islands and the British Virgin Islands (the "BVI"), the Group was 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 the 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 2019 (2018: 15%).

	2019	2018
	HK$'000	*HK$'000*
Current – Mainland China	**2,121**	–
Deferred	**36,058**	(556)
Total tax charge/(credit) for the year	**38,179**	(556)

8. DIVIDENDS

During the years ended 31 December 2019 and 2018, 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 2019 has been proposed by the directors of the Company.

9. LOSS PER SHARE ATTRIBUTABLE TO ORDINARY EQUITY HOLDERS OF THE PARENT

The calculation of the basic loss per share amounts is based on the loss for the year attributable to ordinary equity holders of the parent, and the weighted average number of ordinary shares of 4,163,227,000 (2018: 4,026,925,000) in issue during the year.

The computation of diluted loss 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 2019.

No adjustment has been made to the basic loss per share amounts presented for the years ended 31 December 2019 and 2018 in respect of a dilution as the impact of the share options outstanding had an anti-dilutive effect on the basic loss per share amounts presented.

The calculations of basic and diluted loss per share are based on:

	2019	2018
	HK$'000	*HK$'000*
Loss		
Loss attributable to ordinary equity holders of the parent	**(441,039)**	(410,297)

	Number of shares	
	2019	2018
	'000	*'000*
Shares		
Weighted average number of ordinary shares in issue during the year used in the basic loss per share calculation	**4,163,227**	4,026,925

10. TRADE AND BILLS RECEIVABLES

	2019	2018
	HK$'000	*HK$'000*
Trade receivables	**210,947**	240,047
Impairment	**(100,740)**	(96,356)
Trade receivables, net	**110,207**	143,691
Bills receivable	**223**	818
	110,430	144,509
Less: Non-current portion	**(57,029)**	(65,736)
Current portion	**53,401**	78,773

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:

	2019	2018
	HK$'000	*HK$'000*
Within 90 days	**27,834**	33,262
91 to 180 days	**6,304**	3,181
181 to 365 days	**5,398**	28,536
Over 365 days	**70,894**	79,530
	110,430	144,509

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

	2019	2018
	HK$'000	*HK$'000*
At beginning of year	**96,356**	85,052
Impairment losses, net *(note 6)*	**6,612**	16,084
Exchange realignment	**(2,228)**	(4,780)
At end of year	**100,740**	96,356

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 2019

The group one: construction services

	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	13.17%	51.18%	71.69%	76.81%	81.98%	100.00%	48.56%
Gross carrying amount *(HK$'000)*	106,440	12,191	17,486	7,781	4,554	57,528	205,980
Expected credit losses *(HK$'000)*	14,018	6,239	12,536	5,977	3,733	57,528	100,031

The group two: others

	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	2.41%	25.62%	42.42%	69.06%	86.44%	100.00%	14.27%
Gross carrying amount *(HK$'000)*	4,013	196	297	78	6	377	4,967
Expected credit losses *(HK$'000)*	97	50	126	54	5	377	709

As at 31 December 2018

The group one: construction services

	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	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 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	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

11. TRADE AND BILLS PAYABLES

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

	2019	2018
	HK$'000	*HK$'000*
Within 90 days	**101,998**	168,719
91 to 180 days	**14,883**	38,844
181 to 365 days	**23,817**	76,214
Over 365 days	**168,778**	189,864
	309,476	473,641

The trade and bills payables are non-interest-bearing and are normally settled on terms of six months.

FINANCIAL HIGHLIGHTS

Income Allocation

	2019 *HK$'000*	**%**	2018 *HK$'000*	%
1. Shallow geothermal energy utilisation system				
Including: Planning and Design	**2,101**	**1**	6,267	2
Supply of renewable energy	**21,146**	**6**	49,509	12
Engineering construction	**163,573**	**47**	271,773	68
Operation and maintenance	**37,155**	**11**	21,791	5
Intelligent manufacturing	**22,697**	**6**	15,502	4
2. Air conditioning/shallow geothermal heat pump	**92,485**	**27**	14,439	4
3. Properties investment and development	**6,380**	**2**	17,512	5
Total revenue	**345,537**	**100**	396,793	100

	2019 *HK$'000*	2018 *HK$'000*
Revenue	**345,537**	396,793
Gross profit	**83,978**	17,123
Loss before tax	**(406,844)**	(419,067)
Loss for the year	**(445,023)**	(418,511)
Research and development costs (included in the administrative expenses)	**6,440**	10,054
Impairment losses on trade and bills receivables, net	**6,612**	16,084
Impairment loss recognised in respect of prepayments, other receivables and other assets, net	**54,814**	5,521
Impairment losses on uncertainty in respect of collectability of contract assets, net	**23,505**	50,966
Impairment on goodwill	**263,879**	201,881

As at 31 December 2019 & 2018

	2019 *HK$'000*	2018 *HK$'000*
Current assets	**574,672**	723,203
Total assets	**1,955,668**	2,493,664
Net current liabilities	**(624,790)**	(590,281)
Total equity	**664,105**	1,084,862

FINANCIAL REVIEW

For the year ended 31 December 2019, the loss of the Group amounted to approximately HK$445,023,000 and revenue amounted to HK$345,537,000 as compared with the loss of the Group amounted to HK$418,511,000 and revenue amounted to approximately HK$396,793,000 for the year ended 31 December 2018. For more detailed information, please refer to the consolidated financial statements for the year ended 31 December 2019 and 2018.

OPERATIONAL RESULTS

Total revenue from operations for the year ended 31 December 2019 was approximately HK$345,537,000 as compared with HK$396,793,000 for the year ended 31 December 2018, representing a decrease of 12.9%. 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. During the year ended 31 December 2019 , the Group recorded a net loss of approximately HK$445,023,000 (including an impairment on goodwill and contract assets amounted to approximately HK$263,879,000 and HK$23,505,000 respectively) compared with a net loss of approximately HK$418,511,000 for the year ended 31 December 2018.

GROSS PROFIT MARGIN

Gross profit from the Group's operations for the year ended 31 December 2019 was approximately HK$83,978,000, represented the gross profit margin of 24.3% (2018: approximately HK$17,123,000 represented the gross profit margin of 4.3%). The Group's gross profit margin had increased by 20%. The increase in gross profit margin of the Group was mainly due to the fact that since the fourth quarter of 2018, the investment 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 led to the decrease of the Group's gross profit margin in the previous year. In contrast, the new projects obtained in this year have a higher gross profit margin.

SELLING & DISTRIBUTION EXPENSES

Selling and distribution expenses for this year decreased by approximately HK$1,096,000, or 8.1% as compared with that of the year ended 31 December 2018. The selling and distribution expenses decreased mainly due to the decreases of the marketing, advertising and office costs resulted by the decrease in projects.

ADMINISTRATIVE EXPENSES

Administrative expenses amounted to approximately HK$101,696,000 (decreased by 9.5%) and HK$112,326,000 for the years ended 31 December 2019 and 2018 respectively. The decrease in administrative expenses was mainly due to effective cost control by the Group. It mainly included the decrease in staff salaries of HK$9,940,000.

SHARE-BASED PAYMENT EXPENSES

During the year ended 31 December 2019, the Group had not incurred any share-based payment expenses while in 2018 the share-based payment expenses amounted to approximately HK$3,088,000 which was the amortisation of relevant expenses arising from the granting of share options to directors, officers, employees and business partners by the Group.

ORDER BOOK

As at 31 December 2019, the Group had contracts on hand of approximately HK$173,935,000 (2018: approximately HK$290,092,000).

SEGMENTAL INFORMATION

The Group's reportable and operating segment consists of shallow geothermal energy, air conditioning/shallow geothermal 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/shallow geothermal heat pump

The Group continued the promotion of its air conditioning/shallow geothermal heat pump business this year and has expanded more than 20,000 devices in the district of Jinzhou and Xinji in Hebei and Gujiao 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.

Properties investment and development

The Group has expanded its business to construct 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 under development 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 3 "Operating Segment Information" of this announcement.

FINANCIAL RESOURCES AND LIQUIDITY

Net current liabilities of the Group as at 31 December 2019 was approximately HK$624,790,000 (2018: HK$590,281,000).

As at 31 December 2019, the Group had cash and cash equivalents of approximately HK$56,871,000 (2018: approximately HK$72,934,000). 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 certain measures. Details of which could be referred to note 2.1 of the notes to the consolidated financial statements of this announcement.

CHARGES OF GROUP ASSETS

As at 31 December 2019, certain of the Group's buildings with a net carrying amounts of approximately HK$9,087,000 (2018: Nil) were pledged to obtain a bank loan. While as at 31 December 2018, a pledged bank deposit amounted to HK$1,549,000 was pledged for a shallow geothermal energy contract.

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 2019, the Group had no foreign exchange contracts.

GEARING RATIO

The gearing ratio of the Group, based on total net debt (including interest-bearing bank and other borrowings, lease liabilities, 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 59% as at 31 December 2019 (2018: 49%). The gearing ratio increased as compared to last year was due to the decrease in the equity.

EMPLOYEES

As at 31 December 2019, the Group has approximately 580 employees (2018: approximately 650). 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 the Company's annual report.

At 31 December 2019, the number of shares options had been granted and remained outstanding under the Share Option Plan 2010 was 486,182,851, (representing approximately 10.7% of the shares of the Company).

CONTINGENT LIABILITIES

As at 31 December 2019, the Company did not have any contingent liabilities not provided in the financial statements (2018: Nil).

DIVIDEND

The Board does not recommend the payment of any final dividend for the year ended 31 December 2019 (2018: Nil).

CAPITAL STRUCTURE

On 9 July 2019, the Company completed the allotment and issue of 250,000,000 shares pursuant a subscription agreement dated 26 June 2019 at a subscription price of HK$0.0785 per share to Ms. Liu Ening. On 9 December 2019, the Company completed the allotment and issue of 250,000,000 shares pursuant a subscription agreement dated 25 November 2019 at a subscription price of HK$0.08 per share to Universal Zone Limited, a company wholly owned by Mr. Zhang Yiying.

As at 31 December 2019, 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 4,526,925,163 ordinary shares of US$0.01 each.

EVENTS AFTER THE REPORTING PERIOD

(a) On 16 December 2019, HYY entered into the counter guarantee agreement in favour of CECEP against all amounts which may be incurred by CECEP under the guarantee of a bank facility. HYY shall grant the counter guarantee to CECEP for the principal amount of the facility together with interests, penalty and other related fees and expenses which may be payable by CECEP under the guarantee to the bank. At the extraordinary general meeting held on 13 March 2020, the shareholders of the Company passed the ordinary resolution in respect of the guarantee service agreement and the counter guarantee agreement and the transactions contemplated thereunder. The Group is now in the process of the registration of pledge under the counter guarantee agreement.

(b) On 15 January 2020, the Company adopted a share award scheme. The purpose of the scheme is to attract, retain and incentivise key employees, executive officers, directors and consultants of the Company and its subsidiaries to retain them for the continual operations and development the Group. Subject to any early termination as may be determined by the board, the scheme shall be valid and effective for a term of ten years commencing on the adoption date. The maximum number of award shares which may be awarded under the scheme shall be 135 million shares, representing approximately 2.98% of the total number of issued shares of the Company as at the adoption date. The maximum number of shares which may be awarded to a selected participant shall not exceed 1 percent (1%) of the total number of issued shares of the Company as at the adoption date.

(c) Since January 2020, the outbreak of Novel Coronavirus ("COVID-19") has impact on the business environment in China. Up to the date of this announcement, certain aspects of the business of the Group were affected by COVID-19. The Group will keep continuous attention on the situation of the COVID-19 and react actively to its impact on the financial position and operating results of the Group.

CAPITAL COMMITMENT AND SUBSTANTIAL INVESTMENTS

Details of capital commitments are set out in note 42 to the consolidated financial statements of the Company's Annual Report.

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 and is a smart heating/cooling system service provider integrating scientific research and development, shallow geothermal energy collection, system design, equipment manufacturing, engineering installation, operation and maintenance to provide public service of integrated clean heating. The Group made full use of its knowledge and application experience in the field of heating, relying on the production capacity of strategic partners, established a sales network that promotes shallow geothermal energy as an alternative energy source for northern heating, and built a heating heat pump production base.

With the complicated market environment in 2019, the Group continued to improve its management measures and refined its management system, achieving initial results. Firstly, the Group formulated new measures for expanding its market according to the characteristics of each market position, and has made clear policies on remuneration, contracts and operating expenses. Secondly, the Group continued to focus on business divisions and develop relevant business with professional companies as platforms. At the same time, the Company has unified the safety and quality standards, performance results auditing standards and platform fees in order to allow the operation and auditing of business divisions be conducted independently. Thirdly, the Group established project centre to coordinate professional platform companies and the engineering team so as to ensure control and schedules between internals and externals are well arranged. Fourthly, in line with the principle of budget first, serious assessment, openness and transparency, the Group has formulated the decentralized approval measures for financial expenditure, and has defined the authorization and approval process. The implementation of the above-mentioned series of measures has ensured the transformation of the Group's management. Due to the implementation of the above-mentioned refined management measures, the Company's operating losses in 2019 were significantly narrowed down as compared with that of 2018.

In 2019, the Group actively developed resources for new projects, and strived to expand the key business projects of the rural ground source heat pump heating transformation project in Boye County, Huaqiaocheng Jinan Zhangqiu Xiuyuanhe Cultural Tourism Comprehensive Project (Phase I), the coal-to-electricity projects in Dingzhou City and Xinji City and ground source energy heat pump environmental system in Tianlu Buildings of Tibet, in particular, the Xiong'an Citizen Service Center project, which was co-constructed by the Group, was awarded the "China Construction Engineering Luban Award", representing the highest honor of quality of our projects in China's construction industry. This is a great affirmation and encouragement for the Group's project teams for construction projects. At the same time, the Group has also invested in a number of demonstration projects in Henan, Anhui and Xinjiang in 2019, which achieved good demonstration results for future development in the regions.

In 2019, the Group re-integrated the after-sales service personnel and maintenance customer service personnel team, established a new customer service center for answering calls for maintenance and repair 24 hours a day, and made use of the "HYY Cloud Platform" developed by the Group for task dispatch and feedback to ensure timeliness and effectiveness of the after-sales maintenance work, which has been well received by users, creating a good atmosphere for the Group to explore new markets.

Major risks of operation

Increases in some operating costs brought about by the new projects: The Group has vigorously expanded markets outside Beijing, especially in neighboring areas such as Shanxi, Hebei, and Shandong, and has successively launched several projects. With the increase of projects, the transportation costs, travelling costs, and local agency costs of the new projects have increased as compared to previous projects in Beijing, and therefore the project operating costs have also increased to a certain extent.

The rise of potential competitors has increased the difficulty of project promotion: in recent years, the Group has actively implemented the three principles of northern heating as "enterprise-oriented, government-driven and affordable for residents", and has vigorously carried out rural clean energy heating transformation projects. Due to the early research and development, early investment and stable performance of the Group's products, it has gained a large market share in the use of shallow geothermal energy to provide heating for rural households. With the continuous upgrade of the Group's products, some potential competitors have also enhanced their product research and development, and a phenomenon of full competition has been formed in some regions making it difficult for the Group to expand its projects.

High receivables which cause pressure on the Group's funding: The Group has established a receivables collection working group to specifically deal with the issue of receivables, but there are still a large number of receivables, which affects the group's liquidity. Especially a large number of projects that currently require corporate advances, the Group abandoned some of the intended projects.

Business outlook

Although the application of shallow geothermal energy for building heating in China has started late with just over 20 years' development, at present, the total application area has ranked second in the world, just after the United States. According to estimates, the use of shallow geothermal energy as an alternative energy for heating in the northern regions has a huge potential market of about 3 trillion yuan, of which the rural market accounts for more than 1 trillion yuan.

The president Xi Jinping emphasized in the 14th meeting of the Central Financial Leadership Group on 21 December 2016 that "the promotion of clean heating in winters of North China not only relates to the warm winter for the public in the northern region, but also contributes to substantial reduction of smoggy days. This composes an important chapter of the revolution in energy generation and consumption, and the revolution of living style of rural livelihood. It should further pursue in the principles of enterprise-oriented, government-driven and affordable for residents, adopt gas if appropriate, adopt electricity if appropriate, use clean energy as much as possible to speed up the proportion of clean heating." 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". All of which will help boosting the development of shallow geothermal energy industry.

The Group will continue to adopt "safety first, standards as the core, lay a solid foundation, make all strategies practicable, do everything responsibly, work happily every day" as the code of conduct. In existing model of business divisions, professional companies and engineering center, we will continue to strengthen regional development and promotion with engineering center as the core to develop an integrated development model of construction, operation, and maintenance as a whole. Besides, system establishment and quantitative assessment measures shall be continuously enhanced to achieve goals and evaluations for every task through transparency to ensure fairness. Refined management around "full budget, assessment, and openness" shall continuously be carried out. Facing different regions, different objects and different needs, the Group will rely on the strategic cooperation of product production and agencies in different regions, and rely on partner channels and Internet channels to firmly develop the business divisions and the "three agents". Classified management based on the business divisions and type of agency to establish a targeted market expansion mechanism which is of high efficiency, flat management, unified internal and external standards so as to exploring a development path with characteristics of Chinese geothermal energy company.

CORPORATE GOVERNANCE

The Company has adopted the code provisions of the Corporate Governance Code (the "Code") as set out in Appendix 15 of the GEM Listing Rules. During the year, the Company has complied with the Code except for the deviations which are explained as follows:–

Under 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, was unable to attend the annual general meeting held on 28 June 2019. In addition, two non-executive Directors and three independent non-executive Directors, namely Mr. Yang Wei, Mr. Wang Michael Zhiyu, Mr. Jia Wenzeng, Mr. Wu Qiang and Mr. Guo Qingui were unable to attend the adjourned extraordinary general meeting of the Company held on 16 September 2019.

NON-COMPLIANCE WITH RULE 5.05A OF THE GEM LISTING RULES AFTER THE REPORTING PERIOD

Upon the appointment of Mr. Zhang Yiying as a non-executive director on 16 January 2020, the Company failed to comply with the minimum number of independent non-executive directors as required under Rule 5.05A of the GEM Listing Rules.

On 27 March 2020, the Board has resolved to appoint Mr. Guan Chenghua as an independent non-executive Director to be effective from 28 March 2020. Upon the effective of the appointment of Mr. Guan as an independent non-executive director, the Company will be in compliance with the requirement of the minimum number of independent non-executive directors prescribed under Rule 5.05A of the GEM Listing Rule.

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 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 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 consolidated results for the year ended 31 December 2019 and has provided advice and comments thereon. The Audit Committee held five meetings during the year.

SCOPE OF WORK OF ERNST & YOUNG

The figures in respect of the Group's consolidated statement of financial position, consolidated statement of profit or loss, consolidated statement of comprehensive income and the related notes thereto for the year ended 31 December 2019 as set out in the preliminary announcement have been agreed by the Group's auditor, Ernst & Young, to the amounts set out in the Group's draft consolidated financial statements for the year. The work performed by Ernst & Young in this respect did not constitute an assurance engagement in accordance with Hong Kong Standards on Auditing, Hong Kong Standards on Review Engagements or Hong Kong Standards on Assurance Engagements issued by the Hong Kong Institute of Certified Public Accountants and consequently no assurance has been expressed by Ernst & Young on the preliminary announcement.

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.

PURCHASE, REDEMPTION OR SALE OF LISTED SECURITIES OF THE COMPANY

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

By Order of the Board of
China Geothermal Industry Development Group Limited
Xu Shengheng
Joint Chairman & Executive Director

Hong Kong, 27 March 2020

As at the date of this announcement, the Board comprises Mr. Xu Shengheng, Ms. Wang Yan, Ms. Chan Wai Kay, Katherine, Mr. Wang Manquan, Mr. Zang Yiran and Mr. Dai Qi as executive Directors, Mr. Yang Wei, Mr. Zhang Yiying, Mr. Wang Michael Zhiyu (Ms. Liu Ening being his alternate Director) as non-executive Directors, Mr. Jia Wenzeng, Mr. Wu Desheng, Mr. Wu Qiang and Mr. Guo Qingui as independent non-executive Directors.