

Consolidated Income Statement

for the year ended 31st December 2019

	Note	2019 HK\$'M	2018 HK\$'M
Revenue	5	40,628.1	39,073.0
Total operating expenses	6	(32,604.4)	(30,689.8)
		8,023.7	8,383.2
Other gains, net	7	1,048.7	20.0
Interest expense	9	(1,230.4)	(1,176.6)
Share of results of associates	21	1,820.4	3,589.5
Share of results of joint ventures	22	741.5	1,523.4
Profit before taxation	10	10,403.9	12,339.5
Taxation	13	(2,289.6)	(1,907.6)
Profit for the year		8,114.3	10,431.9
Attributable to:			
Shareholders of the Company		6,965.7	9,312.8
Holders of perpetual capital securities		98.6	107.4
Non-controlling interests		1,050.0	1,011.7
		8,114.3	10,431.9
Earnings per share – basic and diluted, HK cents	15	41.2	55.0*

* Adjusted for the bonus share issue in 2019

Consolidated Statement of Comprehensive Income

for the year ended 31st December 2019

	2019 HK\$'M	2018 HK\$'M
Profit for the year	8,114.3	10,431.9
Other comprehensive income:		
<i>Items that will not be reclassified subsequently to profit or loss:</i>		
Movement in reserve of equity investments at fair value through other comprehensive income	1,490.7	6.7
Remeasurements of retirement benefit	102.1	(73.4)
Share of other comprehensive income of associates	71.0	-
Exchange differences	(74.8)	-
<i>Items that may be reclassified subsequently to profit or loss:</i>		
Movement in reserve of debt investments at fair value through other comprehensive income	14.7	(20.9)
Change in fair value of cash flow hedges	(15.2)	(88.7)
Share of other comprehensive income of an associate	10.8	3.6
Exchange differences	(777.0)	(2,699.7)
Other comprehensive income/(loss) for the year, net of tax	822.3	(2,872.4)
Total comprehensive income for the year	8,936.6	7,559.5
Total comprehensive income attributable to:		
Shareholders of the Company	7,388.1	6,818.3
Holders of perpetual capital securities	98.6	107.4
Non-controlling interests	1,449.9	633.8
	8,936.6	7,559.5

The notes on pages 100 to 191 form part of these consolidated financial statements.

Consolidated Statement of Financial Position

as at 31st December 2019

	Note	2019 HK\$'M	2018 HK\$'M
Assets			
Non-current assets			
Property, plant and equipment	16	61,082.7	57,978.8
Investment property	17	830.0	778.0
Right-of-use assets	18	2,725.2	-
Leasehold land	18	-	2,214.5
Intangible assets	19	5,291.1	5,682.1
Associates	21	27,475.5	26,314.1
Joint ventures	22	10,613.5	10,950.3
Financial assets at fair value through other comprehensive income	23	3,141.9	1,127.0
Financial assets at fair value through profit or loss	24	5,030.6	3,506.7
Derivative financial instruments	25	354.1	55.4
Retirement benefit assets	26	66.3	-
Other non-current assets	27	3,729.8	3,474.0
		120,340.7	112,080.9
Current assets			
Inventories	28	2,363.7	2,480.7
Trade and other receivables	29	8,001.2	7,615.9
Loan and other receivables from associates	21	526.7	356.9
Loan and other receivables from joint ventures	22	800.4	822.6
Loan and other receivables from non-controlling shareholders		240.0	155.0
Financial assets at fair value through profit or loss	24	188.5	303.5
Derivative financial instruments	25	1.4	38.2
Time deposits over three months	30	158.6	338.6
Time deposits up to three months, cash and bank balances	30	7,848.9	8,500.8
		20,129.4	20,612.2
Current liabilities			
Trade payables and other liabilities	31	(14,718.0)	(13,929.4)
Amounts due to joint ventures	22	(943.2)	(1,049.5)
Loan and other payables due to non-controlling shareholders		(100.4)	(148.0)
Provision for taxation		(1,165.3)	(496.8)
Borrowings	32	(9,240.6)	(8,062.7)
Redeemable perpetual securities	32	-	(2,349.6)
Derivative financial instruments	25	-	(114.9)
		(26,167.5)	(26,150.9)
Total assets less current liabilities		114,302.6	106,542.2

The notes on pages 100 to 191 form part of these consolidated financial statements.

Consolidated Statement of Financial Position (Continued)

as at 31st December 2019

	Note	2019 HK\$'M	2018 HK\$'M
Non-current liabilities			
Deferred taxation	33	(7,180.5)	(6,099.1)
Borrowings	32	(28,695.6)	(27,609.3)
Asset retirement obligations		(78.1)	(48.6)
Derivative financial instruments	25	(571.0)	(558.9)
Retirement benefit liabilities	26	-	(23.8)
Other non-current liabilities	34	(2,380.7)	(2,009.2)
		(38,905.9)	(36,348.9)
Net assets			
		75,396.7	70,193.3
Capital and reserves			
Share capital	35	5,474.7	5,474.7
Reserves	36	58,734.7	56,926.0
Shareholders' funds			
		64,209.4	62,400.7
Perpetual capital securities	37	2,384.2	-
Non-controlling interests		8,803.1	7,792.6
Total equity		75,396.7	70,193.3

Approved by the Board of Directors on 19th March 2020

Lee Ka-kit
Director

David Li Kwok-po
Director

The notes on pages 100 to 191 form part of these consolidated financial statements.

Consolidated Cash Flow Statement

for the year ended 31st December 2019

	Note	2019 HK\$'M	2018 HK\$'M
Net cash from operating activities	41	9,912.4	9,438.9
Investing activities			
Receipt from sale of property, plant and equipment		76.3	136.2
Receipt from sale of right-of-use assets/leasehold land		7.1	65.9
Purchase of property, plant and equipment		(6,751.3)	(6,567.0)
Payment for right-of-use assets/leasehold land		(301.6)	(179.0)
Increase in investments in associates		(412.3)	(703.7)
Increase in loans to associates		(214.2)	(226.7)
Repayment of loans by associates		7.8	61.3
Increase in investments in joint ventures		(79.0)	(27.3)
Increase in loans to joint ventures		(43.4)	(14.7)
Decrease in amounts due to joint ventures		(51.5)	(92.4)
Repayment of loans by joint ventures		74.9	51.7
Consideration paid for acquisition of businesses in prior periods		–	(22.1)
Acquisition of businesses	42 (a)	(42.5)	(61.6)
Sale of financial assets at fair value through profit or loss		50.6	803.0
Sale of financial assets at fair value through other comprehensive income		21.2	84.2
Purchase of financial assets at fair value through profit or loss		(10.0)	(1,108.0)
Purchase of financial assets at fair value through other comprehensive income		(98.9)	(26.4)
Decrease in time deposits over three months		175.1	1,724.3
Interest received		233.7	310.4
Dividends received from investments in securities		105.4	125.8
Dividends received from associates		1,064.3	949.9
Dividends received from joint ventures		887.5	939.6
Net cash used in investing activities		(5,300.8)	(3,776.6)

The notes on pages 100 to 191 form part of these consolidated financial statements.

Consolidated Cash Flow Statement (Continued)

for the year ended 31st December 2019

	Note	2019 HK\$'M	2018 HK\$'M
Financing activities			
Redemption of perpetual capital securities		(2,405.4)	-
Issue of perpetual capital securities		2,341.3	-
Change in loans with non-controlling shareholders		(132.8)	(76.6)
Capital injection by non-controlling shareholders		100.1	169.2
Further acquisition of subsidiaries	42 (b)	(37.5)	(70.6)
Partial disposal of a subsidiary		-	31.1
Increase in borrowings		22,012.0	20,526.2
Repayment of borrowings		(19,441.2)	(21,195.6)
Principal elements of lease payments		(128.6)	-
Interest paid for the lease liability		(16.3)	-
Interest paid to holders of perpetual capital securities		(55.7)	(111.6)
Interest paid		(1,405.1)	(1,486.0)
Dividends paid to shareholders of the Company	43 (a)	(5,569.9)	(5,063.6)
Dividends paid to non-controlling shareholders		(474.8)	(511.0)
Net cash used in financing activities		(5,213.9)	(7,788.5)
Decrease in cash and cash equivalents		(602.3)	(2,126.2)
Cash and cash equivalents at 1st January		8,500.8	10,758.6
Effect of foreign exchange rate changes		(49.6)	(131.6)
Cash and cash equivalents at 31st December		7,848.9	8,500.8
Analysis of the balances of cash and cash equivalents			
Cash and bank balances		5,385.3	4,857.1
Time deposits up to three months		2,463.6	3,643.7
		7,848.9	8,500.8

The notes on pages 100 to 191 form part of these consolidated financial statements.

Consolidated Statement of Changes in Equity

for the year ended 31st December 2019

	Attributable to shareholders of the Company		Holders of perpetual capital securities HK\$'M	Non-controlling interests HK\$'M	Total HK\$'M
	Share capital HK\$'M	Reserves HK\$'M			
As at 1st January 2019	5,474.7	56,926.0	-	7,792.6	70,193.3
Adjustment on adoption of HKFRS 16, net of taxation (note 2(b))	-	(30.6)	-	(6.1)	(36.7)
As at 1st January 2019 (restated)	5,474.7	56,895.4	-	7,786.5	70,156.6
Profit for the year	-	6,965.7	98.6	1,050.0	8,114.3
Other comprehensive income:					
Movement in reserve of financial assets at fair value through other comprehensive income	-	1,030.6	-	474.8	1,505.4
Remeasurements of retirement benefit	-	102.1	-	-	102.1
Change in fair value of cash flow hedges	-	(15.1)	-	(0.1)	(15.2)
Share of other comprehensive income of associates	-	81.8	-	-	81.8
Exchange differences	-	(777.0)	-	(74.8)	(851.8)
Total comprehensive income for the year	-	7,388.1	98.6	1,449.9	8,936.6
Capital injection	-	-	-	100.1	100.1
Further acquisition of subsidiaries (note 42(b))	-	21.1	-	(58.6)	(37.5)
Interest paid on perpetual capital securities	-	-	(55.7)	-	(55.7)
Dividends paid to shareholders of the Company	-	(5,569.9)	-	-	(5,569.9)
Dividends paid to non-controlling shareholders	-	-	-	(474.8)	(474.8)
Issue of perpetual capital securities	-	-	2,341.3	-	2,341.3
As at 31st December 2019	5,474.7	58,734.7	2,384.2	8,803.1	75,396.7

Consolidated Statement of Changes in Equity (Continued)

for the year ended 31st December 2019

	Attributable to shareholders of the Company		Holders of perpetual capital securities HK\$'M	Non-controlling interests HK\$'M	Total HK\$'M
	Share capital HK\$'M	Reserves HK\$'M			
As at 1st January 2018	5,474.7	54,964.1	2,354.1	7,453.0	70,245.9
Changes in accounting policies	-	254.5	-	24.8	279.3
As at 1st January 2018 (restated)	5,474.7	55,218.6	2,354.1	7,477.8	70,525.2
Profit for the year	-	9,312.8	107.4	1,011.7	10,431.9
Other comprehensive income:					
Movement in reserve of financial assets at fair value through other comprehensive income	-	(33.3)	-	19.1	(14.2)
Remeasurements of retirement benefit	-	(73.4)	-	-	(73.4)
Change in fair value of cash flow hedges	-	(88.7)	-	-	(88.7)
Share of other comprehensive income of an associate	-	3.6	-	-	3.6
Exchange differences	-	(2,302.7)	-	(397.0)	(2,699.7)
Total comprehensive income for the year	-	6,818.3	107.4	633.8	7,559.5
Capital injection	-	-	-	169.2	169.2
Further acquisition of subsidiaries	-	(22.2)	-	(48.4)	(70.6)
Interest paid on perpetual capital securities	-	-	(111.6)	-	(111.6)
Dividends paid to shareholders of the Company	-	(5,063.6)	-	-	(5,063.6)
Dividends paid to non-controlling shareholders	-	-	-	(511.0)	(511.0)
Acquisition of businesses	-	-	-	52.1	52.1
Partial disposal of a subsidiary	-	12.0	-	19.1	31.1
Redemption of perpetual capital securities	-	(37.1)	(2,349.9)	-	(2,387.0)
As at 31st December 2018	5,474.7	56,926.0	-	7,792.6	70,193.3

The notes on pages 100 to 191 form part of these consolidated financial statements.

Notes to the Consolidated Financial Statements

1 General information

The Hong Kong and China Gas Company Limited (the “Company”) and its subsidiaries (collectively, the “Group”) have been diversified into different fields of businesses and principally engage in the production, distribution and marketing of gas, water supply and emerging environmentally-friendly energy businesses in Hong Kong and the People’s Republic of China (the “PRC”). The Group is also engaged in property development and investment activities in Hong Kong.

The Company is a limited liability company incorporated and domiciled in Hong Kong and listed on The Stock Exchange of Hong Kong Limited. The address of its registered office is 23rd Floor, 363 Java Road, North Point, Hong Kong.

2 Summary of significant accounting policies

The principal accounting policies applied in the preparation of the consolidated financial statements are set out below. These policies have been consistently applied to both years presented, unless otherwise stated.

(a) Basis of preparation

The consolidated financial statements of the Company have been prepared in accordance with Hong Kong Financial Reporting Standards (“HKFRS”). They have been prepared under the historical cost convention, as modified by the revaluation of investment property, financial assets and liabilities at fair value through profit or loss (“FVPL”), financial assets and liabilities at fair value through other comprehensive income (“FVOCI”) and derivative financial instruments, which are carried at fair value.

As at 31st December 2019, the Group was in a net current liabilities position of approximately HK\$6.0 billion. This is mainly because of the settlement of the US\$1 billion guaranteed notes in August 2018, which was not fully refinanced by non-current borrowings since the settlement. Taking into consideration the Group’s available facilities, history of obtaining external financing and the Group’s expected cash flows from operations, management believes that there are sufficient financial resources available to the Group to meet its liabilities as and when they fall due. Accordingly, these consolidated financial statements have been prepared on a going concern basis.

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

(i) *New or amendments to standards and interpretation adopted in 2019*

The Group has adopted the following amendments to standards and new interpretation which are effective for the Group’s financial year beginning 1st January 2019 and relevant to the Group.

Amendments to HKAS 19	Employee Benefits, Plan Amendment, Curtailment or Settlement
Amendments to HKAS 28	Investments in Associates and Joint Ventures
Amendments to HKFRS 9	Prepayment Features with Negative Compensation
Annual Improvements Projects	HKASs and HKFRSs 2015 – 2017 cycle
HK(IFRIC)-Interpretation 23	Uncertainty over Income Tax Treatments

The adoption of the amendments to standards and new interpretation has no significant impact on the Group’s results and financial position or any substantial changes in Group’s accounting policies.

Save as mentioned above, the HKICPA has issued HKFRS 16 Leases (“HKFRS 16”) which is effective for accounting period beginning 1st January 2019, with the impact of the adoption of the new accounting policies being disclosed in note 2(b) below.

2 Summary of significant accounting policies (Continued)

(a) Basis of preparation (Continued)

(ii) *New or revised standards, interpretations and amendments that are not yet effective for the year ended 31st December 2019 but relevant to the Group and have not been early adopted by the Group*

HKFRS 17	Insurance Contracts
Amendments to HKFRS 3	Definition of a Business
Amendments to HKFRS 10 and HKAS 28	Sale or Contribution of Assets between an Investor and its Associate or Joint Venture
Amendments to HKFRS 7, HKFRS 9 and HKAS 39	Interest Rate Benchmark Reform
Amendments to HKAS 1 and HKAS 8	Definition of Material
Conceptual Framework for Financial Reporting 2018	Revised Conceptual Framework for Financial Reporting

(b) Changes in accounting policies

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

As indicated in note 2(a)(i) above, the Group has adopted HKFRS 16 retrospectively from 1st January 2019, but has not restated comparative information for the prior reporting period, as permitted under the specific transitional provisions in the standard. The reclassifications and adjustments arising from the new leasing rules are therefore not reflected in the consolidated statement of financial position as at 31st December 2018, but are recognised in the opening consolidated statement of financial position as at 1st January 2019. The new accounting policies are disclosed in note 2(j).

On adoption of HKFRS 16, the Group recognised lease liabilities in relation to leases which had previously been classified as "operating leases" under the principles of HKAS 17 Leases ("HKAS 17"). These liabilities were measured at the present value of the remaining lease payments, discounted using the lessee's incremental borrowing rate as of 1st January 2019. The weighted average lessee's incremental borrowing rates applied to the lease liabilities on 1st January 2019 were 3% for leases in Hong Kong and 5% for leases in mainland China. While for right-of-use assets, the Group has elected to measure the right-of-use assets as if HKFRS 16 had been applied since the commencement date of a lease using the same incremental borrowing rate.

For leases previously classified as finance leases, the Group recognised the carrying amount of the lease asset and lease liability immediately before transition as the carrying amount of the right-of-use asset and the lease liability at the date of initial application.

The Group reassessed all lease contracts as well as contracts which did not satisfy the definition of a lease under HKAS 17 at 1st January 2019, there is one lease contract that was previously classified as an operating lease when applying HKAS 17 not meeting the definition of a lease under HKFRS 16.

There were no existing contracts that were not classified as a lease under HKAS 17 but satisfy the definition of a lease under HKFRS 16.

There were no onerous lease contracts that would have required an adjustment to the right-of-use assets at the date of initial application.

2 Summary of significant accounting policies (Continued)

(b) Changes in accounting policies (Continued)

(i) Practical expedients applied

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

- the use of a single discount rate to a portfolio of leases with reasonably similar characteristics;
- reliance on previous assessments on whether leases are onerous;
- the exclusion of initial direct costs for the measurement of the right-of-use asset at the date of initial application; and
- the use of hindsight in determining the lease term where the contract contains options to extend or terminate the lease.

(ii) Measurement of lease liabilities

	HK\$'M
Operating lease commitments disclosed as at 31st December 2018	579.2
Less: contract reassessed as a service agreement	(124.0)
Discounted using the lessee's incremental borrowing rates of at the date of initial application	(22.8)
Lease liabilities recognised as at 1st January 2019	432.4
Of which are:	
Current lease liabilities	113.6
Non-current lease liabilities	318.8
	432.4

(iii) Measurement of right-of-use assets

	31st December 2019 HK\$'M	1st January 2019 HK\$'M
Prepaid leasehold land	2,418.3	2,214.5
Buildings, plant and equipment and others	306.9	401.3
Total right-of-use assets	2,725.2	2,615.8

(iv) Adjustments recognised on 1st January 2019

The change in accounting policies affected the following items in the consolidated statement of financial position as at 1st January 2019:

- Associates – decrease by HK\$2.4 million
- Joint ventures – decrease by HK\$9.9 million
- Right-of-use assets – increase by HK\$401.3 million
- Deferred taxation – decrease by HK\$5.7 million
- Lease liabilities – increase by HK\$432.4 million

The net impact on retained profits and non-controlling interests on 1st January 2019 were a decrease of HK\$30.6 million and a decrease of HK\$6.1 million respectively.

The adoption of HKFRS 16 resulted in changes in certain terminology used. The right-of-use assets in relation to prepaid leasehold land were previously presented as leasehold land.

2 Summary of significant accounting policies (Continued)

(b) Changes in accounting policies (Continued)

(v) *Lessor accounting*

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

(vi) *Impact on segment information*

Adjusted profit before interest, tax, depreciation and amortisation (“adjusted EBITDA”) for the year ended 31st December 2019, segment assets and segment liabilities as at 31st December 2019 all increased as a result of the change in accounting policies. Lease liabilities are now included in segment liabilities, whereas finance lease liabilities were previously excluded from segment liabilities. The following segments were affected by the change in accounting policies:

	Adjusted EBITDA HK\$'M	Segment assets HK\$'M	Segment liabilities HK\$'M
Gas, water and related businesses			
– Hong Kong	57.1	81.4	83.6
– mainland China	108.3	126.4	144.1
New Energy	12.8	46.1	49.8
Other segments	24.5	53.0	60.9
	202.7	306.9	338.4

(c) Consolidation

The consolidated financial statements include the financial statements of the Company and its subsidiaries made up to 31st December.

(i) *Subsidiaries*

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

The Group applies the acquisition method to account for business combinations. The consideration transferred for the acquisition of a subsidiary is the fair values of the assets transferred, the liabilities incurred to the former owners of the acquiree and the equity interests issued by the Group. The consideration transferred includes the fair value of any asset or liability resulting from a contingent consideration arrangement. Acquisition-related costs are expensed as incurred. Identifiable assets acquired and liabilities and contingent liabilities assumed in a business combination are measured initially at their fair values at the date of acquisition. Subsequent changes to the fair value of the contingent consideration that is deemed to be an asset or liability is recognised in accordance with HKFRS 9 in the profit or loss. Contingent consideration that is classified as equity is not remeasured, and its subsequent settlement is accounted for within equity. The Group recognises any non-controlling interest in the acquiree on an acquisition-by-acquisition basis, either at fair value or at the non-controlling interest's proportionate share of the recognised amounts of acquiree's identifiable net assets.

Goodwill is initially measured as the excess of the aggregate of the consideration transferred and the fair value of non-controlling interest over the net identifiable assets acquired and liabilities assumed. If this consideration is lower than the fair value of the net assets of the subsidiary acquired, the difference is recognised in the profit or loss.

2 Summary of significant accounting policies (Continued)

(c) Consolidation (Continued)

(i) Subsidiaries (Continued)

Inter-company transactions, balances, income and expenses on transactions between group companies are eliminated. Profits and losses resulting from inter-company transactions that are recognised in assets are also eliminated. Accounting policies of subsidiaries have been changed where necessary to ensure consistency with the policies adopted by the Group.

In the Company's statement of financial position, the investments in subsidiaries are stated at cost less provision for impairment. Cost also includes direct attributable cost of investment. The results of subsidiaries are accounted by the Company on the basis of dividend received and receivable.

(ii) Changes in ownership interests in subsidiaries without change of control

Transactions with non-controlling interests that do not result in loss of control are accounted for as equity transactions – that is, as transactions with the owners in their capacity as owners. The difference between fair value of any consideration paid and the relevant share acquired of the carrying value of net assets of the subsidiary is recorded in equity. Gains or losses on disposals to non-controlling interests are also recorded in equity.

(iii) Disposal of subsidiaries

When the Group ceases to have control, any retained interest in the entity is re-measured to its fair value at the date when control is lost, with the change in carrying amount recognised in the profit or loss. The fair value is the initial carrying amount for the purposes of subsequently accounting for the retained interest as an associate, a joint venture or a financial asset. In addition, any amounts previously recognised in the other comprehensive income in respect of that entity are accounted for as if the Group had directly disposed of the related assets or liabilities. This may mean that amounts previously recognised in the other comprehensive income are reclassified to the profit or loss.

(iv) Associates

Associates are all entities over which the Group has significant influence but not control, generally accompanying a shareholding of between 20 per cent and 50 per cent of the voting rights. Investments in associates are accounted for using the equity method of accounting. Under the equity method, the investment is initially recognised at cost, and the carrying amount is increased or decreased to recognise the investor's share of the profit or loss of the investee after the date of acquisition. The Group's investment in associates includes goodwill identified on acquisition. Upon the acquisition of the ownership interest in an associate, any difference between the cost of the associate and the Group's share of the net fair value of the associate's identifiable assets and liabilities is accounted for as goodwill.

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

The Group's share of its associates' post-acquisition profits or losses is recognised in the profit or loss, and its share of post-acquisition movements in the other comprehensive income is recognised in the other comprehensive income with a corresponding adjustment to the carrying amount of the investment. When the Group's share of losses in an associate equals or exceeds its interest in the associate, including any other unsecured receivables, the Group does not recognise further losses, unless it has incurred legal or constructive obligations or made payments on behalf of the associate.

The Group determines at each reporting date whether there is any objective evidence that the investment in the associate is impaired. If this is the case, the Group calculates the amount of impairment as the difference between the recoverable amount of the associate and its carrying value and recognises the amount in the profit or loss.

2 Summary of significant accounting policies (Continued)

(c) Consolidation (Continued)

(iv) Associates (Continued)

Profits and losses resulting from upstream and downstream transactions between the Group and its associate are recognised in the Group's financial statements only to the extent of unrelated investor's interests in the associates. Unrealised losses are eliminated unless the transaction provides evidence of an impairment of the asset transferred. Accounting policies of associates have been changed where necessary to ensure consistency with the policies adopted by the Group.

Dilution gains and losses in associates are recognised in the profit or loss.

In the Company's statement of financial position, the investment in an associate is stated at the cost less provision for impairment. The result of the associate is accounted for by the Company on the basis of dividend received and receivable.

(v) Joint ventures

Joint ventures are joint ventures whereby the Group and other parties undertake an economic activity which is subject to joint control and none of the participating parties has unilateral control over the economic activity. Investments in joint ventures are accounted for by the equity method of accounting. Under the equity method, the investment is initially recognised at cost, and the carrying amount is increased or decreased to recognise the investor's share of the profit or loss of the investee after the date of acquisition. The Group's investment in joint ventures includes goodwill identified on acquisition. Upon the acquisition of the ownership interest in a joint venture, any difference between the cost of the joint venture and the Group's share of the net fair value of the joint venture's identifiable assets and liabilities is accounted for as goodwill.

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

The Group's share of its joint ventures' post-acquisition profits or losses is recognised in the profit or loss, and its share of post-acquisition movements in the other comprehensive income is recognised in the other comprehensive income with a corresponding adjustment to the carrying amount of the investment. When the Group's share of losses in a joint venture equals or exceeds its interest in the joint venture, including any other unsecured receivables, the Group does not recognise further losses, unless it has incurred legal or constructive obligations or made payments on behalf of the joint venture.

The Group determines at each reporting date whether there is any objective evidence that the investment in the joint venture is impaired. If this is the case, the Group calculates the amount of impairment as the difference between the recoverable amount of the joint venture and its carrying value and recognises the amount in the profit or loss.

Profits and losses resulting from upstream and downstream transactions between the Group and its joint venture are recognised in the Group's financial statements only to the extent of unrelated investor's interests in the joint ventures. Unrealised losses are eliminated unless the transaction provides evidence of an impairment of the asset transferred. Accounting policies of joint ventures have been changed where necessary to ensure consistency with the policies adopted by the Group.

Dilution gains and losses in joint ventures are recognised in the profit or loss.

In the Company's statement of financial position, the investments in joint ventures are stated at cost less provision for impairment. The results of joint ventures are accounted for by the Company on the basis of dividend received and receivable.

2 Summary of significant accounting policies (Continued)

(d) Segment reporting

Operating segments are reported in a manner consistent with the internal reporting provided to the chief operating decision-maker. The chief operating decision-maker, who is responsible for allocating resources and assessing performance of the operating segments, has been identified as the executive committee members that makes strategic decisions.

(e) Foreign currency translation

(i) *Functional and presentation currency*

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

(ii) *Transactions and balances*

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

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

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

(iii) *Group companies*

The results and financial position of all the Group entities, including associates and joint ventures, (none of which has the currency of a hyperinflationary economy) that have a functional currency different from the presentation currency are translated into the presentation currency as follows:

- assets and liabilities for each statement of financial position presented are translated at the closing rate at the date of that statement of financial position;
- income and expenses for each income statement are translated at average exchange rates (unless this average is not a reasonable approximation of the cumulative effect of the rates prevailing on the transaction dates, in which case income and expenses are translated at the dates of the transactions); and
- all resulting exchange differences are recognised in other comprehensive income.

On consolidation, exchange differences arising from the translation of the net investment in foreign operations are taken to other comprehensive income. When a foreign operation is sold, exchange differences that were recorded in equity are recognised in the profit or loss as part of the gain or loss on sale.

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

2 Summary of significant accounting policies (Continued)

(f) Exploration and evaluation expenditure

Exploration and evaluation expenditure comprises costs which are directly attributable to: researching and analysing historical exploration data; conducting geological studies, exploratory drilling and sampling; examining and testing extraction and treatment methods; and compiling pre-feasibility and feasibility studies. Exploration and evaluation expenditure also includes the costs incurred in acquiring mining and oil properties, the entry premiums paid to gain access to areas of interest and amounts payable to third parties to acquire interests in existing projects.

During the initial stage of a project, exploration and evaluation costs, other than costs incurred in acquiring land use right and mining and oil properties, are expensed as incurred. Expenditure on a project after it has reached a stage at which there is a high degree of confidence in its viability is capitalised and transferred to property, plant and equipment if the project proceeds. If a project does not prove viable, all irrecoverable costs associated with the project are expensed in the profit or loss.

(g) Property, plant and equipment

Property, plant and equipment are stated at cost less accumulated depreciation and accumulated impairment. The capitalised costs in respect of capital work in progress include direct materials, direct labour costs, subcontracting costs, capitalised borrowing costs and other direct overheads. Capital work in progress is transferred to relevant categories of property, plant and equipment upon completion of their respective work.

Subsequent costs are included in the asset's carrying amount or recognised as a separate asset, as appropriate, only when it is probable that future economic benefits associated with the item will flow to the Group and the cost of the item can be measured reliably. The carrying amount of the replaced part is derecognised. All other repairs and maintenance incurred in restoring property, plant and equipment to their normal working condition are charged to the profit or loss.

Depreciation of property, plant and equipment is calculated on a straight-line basis to allocate the cost less accumulated impairment of each component of the asset to its residual value over its estimated useful life as follows:

Production plant and related equipment	10 – 40 years
Vehicles, office furniture and equipment	5 – 15 years
Gas mains and risers	25 – 40 years
Water mains	30 – 50 years
Gasholders, office, store and buildings	20 – 40 years
Meters and installations	5 – 30 years
Mining and oil properties	Based on the units of production method utilising only estimated recoverable coal and oil reserves as the depletion base
Others	5 – 30 years
Capital work in progress	No depreciation

The assets' residual values and useful lives are reviewed, and adjusted if appropriate, at each date of statement of financial position.

Gain or loss on disposal of a property, plant and equipment is the difference between the net sales proceeds and the carrying amount of the relevant asset and is recognised in the profit or loss.

2 Summary of significant accounting policies (Continued)

(h) Deferred overburden removal costs

Mining structures include deferred stripping costs and mining related property, plant and equipment. When estimated coal reserves have been determined, stripping costs incurred to develop coal mines are capitalised as part of the cost of the mining structures. Stripping costs incurred during the production phase are variable production costs that are included in the costs of inventory produced during the period that the stripping costs are incurred, unless the stripping activity can be shown to give rise to future benefits from the mineral properties, in which case the stripping costs would be capitalised into property, plant and equipment as mining structures. Future benefits arise when stripping activity increases the future output of the mine by providing access to a new ore body.

Mining structures are depreciated on the unit-of-production method utilising only estimated coal reserves in the depletion base, or based on the useful lives of respective items of property, plant and equipment, whichever is appropriate.

(i) Investment property

Property that is held for long-term rental yields or for capital appreciation or both, and that is not occupied by the Group, is classified as investment property.

Investment property comprises land held under operating leases and buildings held under finance leases.

Land held under operating leases are classified and accounted for as investment property when the rest of the definition of investment property is met. In such cases, the operating leases concerned are accounted for as if it were finance leases.

Investment property is measured initially at its cost, including related transaction costs. After initial recognition, investment property is carried at fair value. Fair value is based on active market value, adjusted, if necessary, for any difference in the nature, location or condition of the specific asset. If this information is not available, the Group uses alternative valuation methods such as recent prices on less active markets or discounted cash flow projections. These valuations are performed in accordance with the HKIS Valuation Standards (2017 Edition) published by the Hong Kong Institute of Surveyors ("HKIS"). These valuations are reviewed annually by qualified valuers. The fair value of investment property reflects, among other things, rental income from current leases and assumptions about rental income from future leases in the light of current market conditions. The fair value also reflects, on a similar basis, any cash outflows that could be expected in respect of the property.

Subsequent expenditure is charged to the asset's carrying amount only when it is probable that future economic benefits associated with the item will flow to the Group and the cost of the item can be measured reliably. All other repairs and maintenance costs are expensed in the profit or loss during the financial period in which they are incurred.

Changes in fair values are recognised in the profit or loss.

Property that is being constructed or developed for future use as investment property is classified as investment properties and measured at fair value unless fair value cannot be reliably determined. Any difference between the fair value of the property at that date and its previous carrying amount is recognised in the profit or loss.

If an item of property, plant and equipment becomes an investment property because its use has changed, any difference resulting between the carrying amount and the fair value of this item at the date of transfer is recognised in equity as a revaluation of property, plant and equipment. However, if a fair value gain reverses a previous impairment, the gain is recognised in the profit or loss.

2 Summary of significant accounting policies (Continued)

(j) Leases

As explained in note 2(b) above, the Group has changed its accounting policies for leases where the Group is the lessee. The new policies are described below and the impact of the changes in note 2(b).

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

Contracts may contain both lease and non-lease components. The Group allocates the consideration in the contract to the lease and non-lease components based on their relative stand-alone prices.

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

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

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

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

The Group is exposed to potential future increases in variable lease payments based on an index or rate, which are not included in the lease liability until they take effect. When adjustments to lease payments based on an index or rate take effect, the lease liability is reassessed and adjusted against the right-of-use asset.

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

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

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

Right-of-use assets are generally depreciated over the shorter of the asset's useful life and the lease term on a straight-line basis.

Lease income from operating leases where the Group is a lessor is recognised in the profit or loss on a straight-line basis over the lease term.

2 Summary of significant accounting policies (Continued)

(j) Leases (Continued)

Accounting policies applied until 31st December 2018

Until 31st December 2018, leases of assets where the Group had substantially all the risks and rewards of ownership were classified as finance leases. Finance leases were capitalised at the lease's commencement at the lower of the fair value of the leased property and the present value of the minimum lease payments. Each lease payment was allocated between the liability and finance charges so as to achieve a constant rate on the finance balance outstanding. The corresponding rental obligations, net of finance charges, were included in current and non-current borrowings. The interest element of the finance cost was recognised in the profit or loss over the lease period so as to produce a constant periodic rate of interest on the remaining balance of the liability for each period. The property, plant and equipment acquired under finance leases were carried at cost less accumulated depreciation and impairment. They were depreciated over the shorter of the useful life of the assets and the lease term.

Leases in which a significant portion of the risks and rewards of ownership were retained by the lessor were classified as operating leases. Payments made under operating leases (net of any incentives received from the lessor) were charged in the profit or loss on a straight-line basis over the period of the lease.

(k) Intangible assets

Goodwill represents the excess of the cost of an acquisition over the fair value of the Group's share of the net identifiable assets of the acquired subsidiaries, associates and joint ventures at the date of acquisition. Goodwill on acquisitions of subsidiaries is included in "intangible assets". Goodwill arising on an acquisition of an associate or a joint venture is included in the cost of the investment of the relevant associate or joint venture. Separately recognised goodwill is tested annually for impairment and carried at cost less accumulated impairment losses. Impairment losses on separately recognised goodwill are not reversed. Gains and losses on the disposal of an entity include the carrying amount of goodwill relating to the entity sold.

Separately recognised goodwill is allocated to cash-generating units, primarily individual projects, for the purpose of impairment testing. The allocation is made to those cash-generating units or groups of cash-generating units that are expected to benefit from the business combination in which the goodwill arose.

Other intangible assets are carried at cost less accumulated amortisation and impairment. Amortisation is calculated using the straight-line method to allocate the cost over the period of the relevant right from 15 years to 50 years.

(l) Impairment of investments in subsidiaries, associates, joint ventures and non-financial assets

Goodwill are at least tested annually for impairment and are reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount may not be recoverable. Other assets are reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount may not be recoverable.

An impairment is recognised for the amount by which the asset's carrying amount exceeds its recoverable amount. The recoverable amount is the higher of an asset's fair value less costs of disposal and value-in-use. For the purposes of assessing impairment, assets are grouped at the lowest levels for which there are separately identifiable cash flows (cash-generating units). Assets other than separately recognised goodwill that suffered an impairment are reviewed for possible reversal of the impairment at each reporting date.

2 Summary of significant accounting policies (Continued)

(m) Investments and other financial assets

(i) **Classification**

The Group classifies its financial assets in the following categories: those to be measured subsequently at fair value (either through other comprehensive income or through profit or loss) and those to be measured at amortised cost. The classification depends on the entity's business model for managing the financial assets and the contractual terms of the cash flows.

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

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

(ii) **Recognition and derecognition**

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

(iii) **Measurement**

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

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

Debt instruments

Subsequent measurement of debt instruments depends on the Group's business model for managing the asset and the cash flow characteristics of the asset. The Group classifies its debt instruments as FVOCI where assets that are held for collection of contractual cash flows and for selling the financial assets, where the assets' cash flows represent solely payments of principal and interest, are measured at FVOCI. Movements in the carrying amount are taken through other comprehensive income, except for the recognition of impairment gains or losses, interest income and foreign exchange gains and losses which are recognised in the profit or loss. When the financial asset is derecognised, the cumulative gain or loss previously recognised in other comprehensive income is reclassified from equity to the profit or loss and recognised in other gains, net. Interest income from these financial assets is included in finance income using the effective interest rate method. Foreign exchange gains and losses are presented in other gains, net and impairment expenses are presented as separate line item in the income statement.

Equity instruments

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

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

2 Summary of significant accounting policies (Continued)

(m) Investments and other financial assets (Continued)

(iv) Impairment

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

For trade receivables, the Group applies the simplified approach permitted by HKFRS 9, which requires expected lifetime losses to be recognised from initial recognition of the receivables, with further details set out in note 29.

(n) Derivative financial instruments and hedging activities

Derivatives are initially recognised at fair value on the date a derivative contract is entered into and are subsequently remeasured at their fair value. The method of recognising the resulting gain or loss depends on whether the derivative is designated as a hedging instrument, and if so, the nature of the item being hedged. The Group designates certain derivatives as hedges of a particular risk associated with a recognised asset or liability or a highly probable forecast transaction (cash flow hedge).

At the inception of the hedging, the Group documents the economic, relationship between hedging instruments and hedged items, including whether changes in the cash flows of the hedging instruments are expected to offset changes in the cash flows of hedged items. The Group documents its risk management objective and strategy for undertaking its hedge transactions.

The fair values of derivative financial instruments designated in hedge relationships are disclosed in note 25. Movements in the hedging reserve in shareholders' equity are shown in note 36. The full fair value of a hedging derivative is classified as a non-current asset or liability when the remaining maturity of the hedged item is more than 12 months; it is classified as a current asset or liability when the remaining maturity of the hedged item is less than 12 months. Trading derivatives are classified as a current asset or liability.

Cash flow hedge that qualify for hedge accounting

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

When option contracts are used to hedge forecast transactions, the Group designates only the intrinsic value of the options as the hedging instrument.

Gains or losses relating to the effective portion of the change in intrinsic value of the options are recognised in the cash flow hedge reserve within equity. The changes in the time value of the options that relate to the hedged item ('aligned time value') are recognised within other comprehensive income in the costs of hedging reserve within equity.

When forward contracts are used to hedge forecast transactions, the Group generally designates only the change in fair value of the forward contracts related to the spot component as the hedging instrument. Gains or losses relating to the effective portion of the change in the spot component of the forward contracts are recognised in the cash flow hedge reserve within equity. The change in the forward element of the contracts that relates to the hedged item ('aligned forward element') is recognised within other comprehensive income in the costs of hedging reserve within equity. In some cases, the entity may designate the full change in fair value of the forward contracts (including forward points) as the hedging instrument. In such cases, the gains or losses relating to the effective portion of the change in fair value of the entire forward contracts are recognised in the cash flow hedge reserve within equity.

2 Summary of significant accounting policies (Continued)

(n) Derivative financial instruments and hedging activities (Continued)

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

- Where the hedged item subsequently results in the recognition of a non-financial asset (such as inventory), both the deferred hedging gains and losses and the deferred time value of the option contracts or deferred forward points, if any, are included within the initial cost of the asset. The deferred amounts are ultimately recognised in the profit or loss as the hedged item affects the profit or loss (for example through cost of sales).
- The gain or loss relating to the effective portion of the interest rate swaps hedging variable rate borrowings is recognised in the profit or loss within finance cost at the same time as the interest expense on the hedged borrowings.

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

(o) Inventories

Inventories comprise stores and materials and work in progress and are stated at the lower of cost and net realisable value. Cost, calculated on the weighted average basis, comprises materials, direct labour and an appropriate proportion of overheads. Net realisable value is determined on the basis of anticipated sales proceeds less estimated selling expenses.

(p) Contract assets and contract liabilities

Upon entering into a contract with a customer, the Group obtains rights to receive consideration from the customer and assumes performance obligations to transfer goods or provide services to the customer.

The combination of those rights and performance obligations gives rise to a net contract asset or a net contract liability depending on the relationship between the remaining rights and the performance obligations. The contract is an asset and recognised as contract assets if the cumulative revenue recognised in the profit or loss exceeds cumulative payments made by customers. Conversely, the contract is a liability and recognised as contract liabilities if the cumulative payments made by customers exceeds the revenue recognised in the profit or loss.

Contract assets are assessed for impairment under the same approach adopted for impairment assessment of financial assets carried at amortised cost. Contract liabilities are recognised as revenue when the Group transfers the goods or services to the customers and therefore satisfied its performance obligation.

The incremental costs of obtaining a contract with a customer are capitalised and presented as contract related assets, if the Group expects to recover those costs, and are subsequently amortised on a systematic basis that is consistent with the transfer to the customers of the goods or services to which the assets relate. The Group recognises an impairment loss in the profit or loss to the extent that the carrying amount of the contract related assets recognised exceeds the remaining amounts of consideration that the Group expects to receive less the costs that relate directly to providing those goods or services that have not been recognised as expenses.

2 Summary of significant accounting policies (Continued)

(q) Construction contracts

Contract costs are recognised as expenses in the period in which they are incurred.

When the outcome of a construction contract cannot be reasonably measured, but the Group expects to recover the costs incurred in satisfying the performance obligation, contract revenue is recognised only to the extent of contract costs incurred until such time that the outcome of the performance obligation can be reasonably measured.

When the outcome of a construction contract can be reasonably measured, contract revenue is recognised over time by measuring the progress towards complete satisfaction of that performance obligation. When it is probable that total contract costs will exceed total contract revenue, the expected loss is recognised as an expense immediately.

Variations in contract work, claims and incentive payments are included in contract revenue to the extent that they have been agreed with the customer and are capable of being reliably measured.

(r) Trade and other receivables

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

Trade and other receivables are recognised initially at the amount of consideration that is unconditional unless they contain significant financing components, when they are recognised at fair value. The Group holds with the objective to collect the contractual cash flows and therefore measures them subsequently at amortised cost using the effective interest method, less provision for impairment. A provision for impairment is established when there is no reasonable expectation of recovery.

(s) Cash and cash equivalents

Cash and cash equivalents include cash in hand, deposits held at call with banks, other short term highly liquid investments with original maturities of three months or less and bank overdrafts. In the statement of financial position, cash and cash equivalents are presented as time deposits up to three months, cash and bank balances in current assets and bank overdrafts are included in borrowings in current liabilities.

(t) Trade payables

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

(u) Borrowings and borrowing costs

Borrowings are recognised initially at fair value, net of transaction costs incurred. Borrowings are subsequently stated at amortised cost; any difference between the proceeds (net of transaction costs) and the redemption value is recognised in the profit or loss over the period of the borrowings using the effective interest method.

Fees paid on the establishment of loan facilities are recognised as transaction costs of the loan to the extent that it is probable that some or all of the facility will be drawn down. In this case, the fee is deferred until the drawdown occurs. To the extent there is no evidence that it is probable that some or all of the facility will be drawndown, the fee is capitalised as a pre-payment for liquidity services and amortised over the period of the facility to which it relates.

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

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

2 Summary of significant accounting policies (Continued)

(v) Current and deferred taxation

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

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

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

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

Deferred taxation is provided on temporary differences arising on investments in subsidiaries, associates and joint ventures, except where the timing of the reversal of the temporary difference is controlled by the Group and it is probable that the temporary difference will not reverse in the foreseeable future.

(w) Revenue and income recognition

- (i) Gas sales – recognised at a point in time and based on gas consumption derived from meter readings.
- (ii) Water sales – recognised at a point in time and based on water consumption derived from meter readings.
- (iii) Liquefied petroleum gas sales – recognised at a point in time and upon completion of the gas filling transaction.
- (iv) Equipment sales – recognised at a point in time and upon completion of installation work or when equipment, materials and parts are delivered to customers and title has passed.
- (v) Oil and coal related sales – recognised at a point in time and upon completion of delivery and title has passed.
- (vi) Maintenance and service charges – recognised over time when services are provided.
- (vii) Interest income – recognised on a time proportion basis, taking into account the principal amounts outstanding and the interest rates applicable.
- (viii) Dividend income – recognised when the right to receive payment is established.
- (ix) Rental income – recognised on a straight-line accrual basis over the terms of lease agreements.
- (x) Construction and gas connection income – recognised over time or at a point in time depending on the terms of the contracts and actual work performed.

2 Summary of significant accounting policies (Continued)

(x) **Employee benefits**

Salaries, bonuses and paid annual leave are accrued in the year in which the associated services are rendered by employees to the Group.

The Group operates a number of defined contribution and one defined benefit retirement schemes and the assets of the schemes are held separately from those of the Group in independently administered funds. The retirement schemes are funded by payments from employees and by the Group, taking into account the recommendations of independent qualified actuaries.

(i) **Defined contribution retirement schemes**

The Group contributes to defined contribution retirement schemes and Mandatory Provident Fund schemes which are available to salaried employees in Hong Kong. The Group's contributions to these retirement schemes are calculated as a percentage of the employees' basic salaries or relevant income and are expensed as incurred. No forfeited contributions have been utilised by the Group to reduce the existing contributions.

For employees in mainland China, the Group contributes on a monthly basis to various defined contribution plans organised by the relevant municipal and provincial governments in the PRC based on a certain percentage of the relevant employees' monthly salaries. The municipal and provincial governments undertake to assume the retirement benefit obligations payable to all existing and future retired employees under these plans and the Group has no further constructive obligation for post-retirement benefits beyond the contributions made. Contributions to these plans are expensed as incurred.

(ii) **Defined benefit retirement scheme**

The Group also operates a defined benefit retirement scheme, namely the Workmen Retirement Scheme, in Hong Kong. The scheme provides benefit to employees based on final salary. The Group's net obligation in respect of the defined benefit retirement scheme is calculated separately for the scheme using the projected unit credit method. The benefit obligation is measured as the present value of the estimated future benefit that employees have earned for their service in the current and prior years using interest rates of government bonds which have terms to maturity approximating the terms of the related liability.

The current service cost of the defined benefit plan, recognised in the profit or loss in employee benefit expense, except where included in the cost of an asset, reflects the increase in the defined benefit obligation results from employee service in the current year, benefit changes, curtailments and settlements.

Actuarial gains and losses arising from experience adjustments and changes in actuarial assumptions are charged or credited to equity in other comprehensive income in the period in which they arise. Past-service costs are recognised immediately in the profit or loss.

2 Summary of significant accounting policies (Continued)

(y) Provisions and contingencies

Provisions are recognised when the Group has a present legal or constructive obligation as a result of past events, it is probable that an outflow of resources will be required to settle the obligation, and a reliable estimate of the amount can be made. Where the Group expects a provision to be reimbursed, the reimbursement is recognised as a separate asset when the reimbursement is virtually certain.

Provisions are measured at the present value of the expenditures expected to be required to settle the obligation using a pre-tax rate that reflects current market assessments of the time value of money and the risks specific to the obligation. The increase in the provision due to passage of time is recognised as interest expense.

A contingent liability is a possible obligation that arises from past events and whose existence will only be confirmed by the occurrence or non-occurrence of one or more uncertain future events not wholly within the control of the Group. It can also be a present obligation arising from past events that is not recognised because it is not probable that an outflow of economic resources will be required or the amount of obligation cannot be measured reliably.

A contingent liability is not recognised but is disclosed in the notes to the consolidated financial statements. When a change in the probability of an outflow occurs so that the outflow is probable, it will then be recognised as a provision.

A contingent asset is a possible asset that arises from past events and whose existence will be confirmed only by the occurrence or non-occurrence of one or more uncertain events not wholly within the control of the Group.

A contingent asset is not recognised but is disclosed in the notes to the consolidated financial statements when an inflow of economic benefits is probable. When inflow is virtually certain, an asset is recognised.

Asset retirement obligations which meet the criteria of provisions are recognised as provisions and the amount recognised is the present value of the estimated future expenditure determined in accordance with local conditions and requirements, while a corresponding addition to the related oil properties of an amount equivalent to the provision is also created. This is subsequently depleted as part of the costs of the oil properties. Interest expenses from the assets retirement obligations for each period are recognised with the effective interest method during the useful life of the related oil properties.

If the conditions for the recognition of the provisions are not met, the expenditures for the decommissioning, removal and site cleaning will be expensed in the profit or loss when occurred.

3 Financial risk management

Financial risk factors

The Group's activities expose it to a variety of financial risks: market risk (including foreign exchange risk, price risk and cash flow and fair value interest rate risk), credit risk and liquidity risk. The Group's overall risk management programme focuses on the unpredictability of financial markets and seeks to minimise potential adverse effects on the Group's financial performance. The Group uses derivative financial instruments to manage and reduce certain risk exposures.

Risk management is carried out by treasury and investment departments (Group Treasury) under policies approved by the Treasury Committee, comprising all the executive directors of the Company. Group Treasury identifies, evaluates and manages financial risks in close co-operation with the Group's operating units. The Treasury Committee provides written principles for overall risk management, as well as written policies covering specific areas, such as foreign exchange risk, interest rate risk, credit risk, use of derivative financial instruments and non-derivative financial instruments, and investment of excess liquidity.

(a) Market risk

(i) *Foreign exchange risk*

The Group operates in Hong Kong, mainland China and Thailand and is exposed to foreign exchange risk arising from various currency exposures, primarily with respect to the United States dollars ("USD"), Renminbi ("RMB") and Thailand Baht ("THB"). Foreign exchange risk arises from future commercial transactions and recognised assets and liabilities.

To manage the foreign exchange risk arising from future commercial transactions and recognised assets and liabilities, the Group uses forward contracts. Foreign exchange risk arises when future commercial transactions or recognised assets or liabilities are denominated in a currency that is not the entity's functional currency. The Group has also entered into cross currency swap contracts to manage its exposure to foreign exchange risk from recognised liabilities, including medium-term notes denominated in foreign currencies. Group Treasury is responsible for managing the net position in each foreign currency by using external forward currency contracts and other suitable financial instruments.

Transactions denominated in the USD mainly arise from the Group's operation in Hong Kong. Pursuant to Hong Kong's Linked Exchange Rate System under which HKD is pegged to the USD, management considers there are no significant foreign exchange risks with respect to the USD. Furthermore, there are no significant transactions and recognised assets and liabilities of the Thailand business in currency other than THB. Management considers there is no significant foreign exchange risk from the Thailand business.

At 31st December 2019, if the RMB had weakened/strengthened by 2 per cent (2018: 2 per cent) against HKD with all other variables held constant, pre-tax profit for the year would have been HK\$27.0 million (2018: HK\$124.5 million) lower/higher.

(ii) *Price risk*

The Group is exposed to equity securities price risk for the listed equity investments held by the Group which are classified as financial assets at FVOCI and financial assets at FVPL of HK\$2,606.2 million (2018: HK\$348.3 million) and HK\$2,236.3 million (2018: HK\$264.1 million) respectively.

The Group also held unlisted equity investments which are classified as FVPL of HK\$50.5 million (2018: HK\$39.4 million). The underlyings of the investments are listed equity securities, which making them subject to equity securities price risk.

It is the Group's policy to maintain a well-diversified portfolio of investments to minimise impact of price risk.

3 Financial risk management (Continued)

Financial risk factors (Continued)

(a) Market risk (Continued)

(ii) Price risk (Continued)

Majority of the Group's equity securities are publicly traded and are included in one of the following indexes: Hang Seng Index, S&P 500 Index, Euro Stoxx 50 Price Index and Shanghai Stock Exchange A Share Index.

Included in Shanghai Stock Exchange A Share Index are mainly the equity securities of two companies newly listed in the PRC with total carrying values amounted to HK\$4,356.5 million. As their listing dates were close to year-end, there is no proven correlation between the equity security and the index.

The table below summarises the impact of increases/decreases of the following indexes on the Group's pre-tax profit for the year and on other comprehensive income. The analysis is based on the assumption that the indexes had increased/decreased by 10 per cent with all other variables held constant and all the Group's equity securities moved according to the historical correlation with the indexes.

	Impact on pre-tax profit		Impact on other comprehensive income	
	2019 HK\$'M	2018 HK\$'M	2019 HK\$'M	2018 HK\$'M
Hang Seng Index	19.4	26.8	9.4	9.2
S&P 500 Index	3.3	3.2	-	-
Euro Stoxx 50 Price Index	4.1	3.6	-	-

Pre-tax profit for the year would increase/decrease as a result of gains/losses on equity securities classified as at FVPL. Other comprehensive income would increase/decrease as a result of gains/losses on equity securities classified as FVOCI before consideration of any impairment.

(iii) Cash flow and fair value interest rate risk

Financial instruments at fixed and variable rates expose the Group to fair value interest rate risk and cash flow interest rate risk respectively. The Group's interest-bearing assets mainly comprise floating and fixed rate bank deposits of HK\$8,007.5 million (2018: HK\$8,839.4 million). The Group's interest bearing liabilities mainly comprises floating rate borrowings of HK\$17,024.9 million (2018: HK\$18,339.9 million), fixed rate borrowings of HK\$20,911.3 million (2018: HK\$19,681.7 million) and floating rate deposits received from customers of HK\$1,389.3 million (2018: HK\$1,371.5 million).

At 31st December 2019, if market interest rates on bank deposits had been 100 basis points (2018: 100 basis points) higher/lower with all other variables held constant, pre-tax profit for the year would have been HK\$75.0 million (2018: HK\$114.3 million) higher/lower, mainly as a result of higher/lower interest income on floating rate bank deposits.

At 31st December 2019, if market interest rates on borrowings and customers' deposits had been 100 basis points (2018: 100 basis points) higher/lower with all other variables held constant, pre-tax profit for the year would have been HK\$235.4 million (2018: HK\$173.4 million) lower/higher, mainly as a result of higher/lower interest expense on floating rate borrowings and customers' deposits.

3 Financial risk management (Continued)

Financial risk factors (Continued)

(b) Credit risk

Credit risk of the Group mainly arises from:

	2019 HK\$'M	2018 HK\$'M
Cash and bank deposits	8,007.5	8,839.4
Debt securities and derivative financial instruments	479.0	204.6
Trade receivables	3,819.8	3,563.5
Other receivables	2,445.5	2,470.9
Loan and other receivables from joint ventures	800.4	862.5
Loan and other receivables from associates	1,373.8	1,171.6
Loan and other receivables from non-controlling interests	240.0	155.0
Other non-current assets	2,830.6	2,706.3

The Group has no significant concentrations of credit risk. The Group has credit policy to handle credit risk of customers. There is no significant concentration of sales to any individual customer. The top five largest customers account for less than 30 per cent of the total revenues. Furthermore, security deposits are required for gas customers. This also applies to the PRC associates and joint ventures where there is no significant concentration of sales to any individual customer. Other non-current assets mainly represent aviation fuel facility construction receivable. Management considered that counterparty default risk is low and there is no history of default in repayment. Debt securities, derivative financial instruments entered with a non-financial institution and cash transactions counter parties are mostly with good credit rating of investment grade or above. The Group has policies that limit the amount of credit exposure to any one financial institution.

The Group monitors the exposure to credit risk in respect of the financial assistance provided to its joint ventures and associates through exercising joint control or influence over their financial and operating policy decisions and reviewing their financial positions on a regular basis.

The credit quality of financial assets can be assessed by reference to external credit ratings (if available) or to historical information about counterparty default rates is as follows:

	2019 %	2018 %
Cash and bank deposits		
AA	8.8	13.5
A	72.6	68.1
BBB	13.4	12.0
BB	0.7	1.4
Unrated	4.5	5.0
	100.0	100.0
Debt securities		
AA	20.2	8.0
A	41.5	39.4
BBB	–	11.5
Unrated	38.3	41.1
	100.0	100.0

Credit ratings are quoted from Bloomberg.

3 Financial risk management (Continued)

Financial risk factors (Continued)

(b) Credit risk (Continued)

Credit quality of loan and other receivables from associates, loan and other receivables from joint ventures, other non-current assets and trade and other receivables are disclosed in notes 21, 22, 27 and 29 respectively to the consolidated financial statements. None of the financial assets that are fully performing has been renegotiated during the year.

The Group has three types of financial assets that are subject to the expected credit loss model, including trade receivables, other receivables and loan and other receivables from associates, joint ventures and non-controlling shareholders and debt investments carried at amortised cost and FVOCI. While cash and cash equivalents are also subject to the impairment requirements of HKFRS 9, the identified impairment loss was immaterial.

Trade receivables

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

To measure the expected credit losses, trade receivables have been grouped based on shared credit risk characteristics and the days past due. The Group used expected loss rates ranging from 0% to 50% based on the aging for classes with different credit risk characteristics and exposures. The expected credit loss rates are estimated based on the historical credit losses experienced over the expected life of the debtors and are adjusted to reflect current and forward-looking information on macroeconomic factors affecting the ability of the customers to settle the receivables.

On that basis, the loss allowance as at 31st December 2019 and 2018 are as follows for trade receivables:

31st December 2019 HK\$'M	Current	1 – 30 days	31 – 60 days	61 – 90 days	Over 90 days	Total
Weighted average expected loss rate	0%	0%	0%	0%	52.9%	
Gross carrying amount – trade receivables	3,262.8	145.7	90.4	100.4	468.5	4,067.8
Loss allowance	–	–	–	–	248.0	248.0
31st December 2018 HK\$'M	Current	1 – 30 days	31 – 60 days	61 – 90 days	Over 90 days	Total
Weighted average expected loss rate	0%	0%	0%	0%	49.9%	
Gross carrying amount – trade receivables	2,937.5	169.4	107.7	126.4	443.7	3,784.7
Loss allowance	–	–	–	–	221.2	221.2

3 Financial risk management (Continued)

Financial risk factors (Continued)

(b) Credit risk (Continued)

The closing loss allowances for trade receivables as at 31st December 2019 and 2018 reconcile to the opening loss allowances as follows:

	Trade receivables	
	2019 HK\$'M	2018 HK\$'M
At 1st January	221.2	201.4
Increase in loan loss allowance recognised in the profit or loss during the year	53.7	37.5
Receivables written off during the year as uncollectible	(21.2)	(6.8)
Unused amount reversed	(4.1)	(6.8)
Exchange differences	(1.6)	(4.1)
At 31st December	248.0	221.2

Trade receivables are written off when there is no reasonable expectation of recovery. Indicators that there is no reasonable expectation of recovery include, amongst others, the failure of a debtor to engage in a repayment plan with the Group, and a failure to make contractual payments for a period of greater than 90 days past due.

Other receivables and loans and other receivables from associates, joint ventures and non-controlling shareholders

The loss allowance for other receivables and loans and other receivables from associates, joint ventures and non-controlling shareholders as a result of applying the expected credit loss model was immaterial.

Other financial investments

All of the Group's debt investments at FVOCI are considered to have low credit risk, and the loss allowance recognised during the year was therefore limited to 12-month expected credit losses. Management consider 'low credit risk' for most of the listed bonds to be an investment grade credit rating with at least one major rating agency. The issuer has a strong capacity to meet its contractual cash flow obligations in the near term.

Taking into account the good credit rating of the counterparties and securities pledged by the counterparties management consider 'low credit risk' for the derivative financial instruments.

3 Financial risk management (Continued)

Financial risk factors (Continued)

(c) Liquidity risk

Prudent liquidity risk management implies maintaining sufficient cash and marketable securities, the availability of funding through an adequate amount of credit facilities and the ability to close out market positions. Due to the dynamic nature of the underlying businesses, Group Treasury aims to maintain flexibility in funding by keeping adequate free cash and credit lines available.

The Group determines that there is no significant liquidity risk in view of the adequate and stable sources of funds and unutilised banking facilities.

The table below analyses the Group's major financial liabilities into relevant maturity groupings based on the remaining period at the date of statement of financial position to the contractual maturity date. The amounts disclosed in the table are the contractual undiscounted cash flows, except for derivative financial instruments. Balances due within 12 months equal their carrying balances, as the impact of discounting is not significant.

	Less than 1 year HK\$'M	Between 1 and 2 years HK\$'M	Between 2 and 5 years HK\$'M	Over 5 years HK\$'M
At 31st December 2019				
Trade and other payables	4,862.9	-	-	-
Loan and other payables to joint ventures	943.2	-	-	-
Loan and other payables to non-controlling shareholders	100.4	-	-	-
Borrowings	10,467.4	6,851.0	15,669.8	12,423.0
Lease liabilities	111.5	90.0	97.8	76.6
Derivative financial instruments	-	105.3	465.7	-
At 31st December 2018				
Trade and other payables	4,784.4	-	-	-
Loan and other payables to joint ventures	1,049.5	-	-	-
Loan and other payables to non-controlling shareholders	148.0	-	-	-
Borrowings	11,592.5	2,734.6	18,832.2	12,009.0
Derivative financial instruments	114.9	-	558.9	-

The customers' deposits are not presented in the above liquidity analysis as management considers it is not practical to allocate the deposits into maturity groupings and the movement in customers' deposits is not significant based on past experience.

3 Financial risk management (Continued)

Capital risk management

The Group's objectives when managing capital are to safeguard the Group's ability to continue as a going concern in order to provide returns for shareholders and benefits for other stakeholders and to maintain an optimal capital structure to reduce the cost of capital.

In order to maintain or adjust the capital structure, the Group may adjust the amount of dividends paid to shareholders, return capital to shareholders, buy back existing shares, drawdown and repay borrowings, issue and redeem perpetual capital securities, issue new shares or sell assets to reduce debt.

The Group monitors capital on the basis of the gearing ratio. This ratio is calculated as net borrowing excluding redeemable perpetual securities divided by shareholders' funds plus perpetual capital securities and net borrowing. Net borrowing is calculated as total borrowings, less time deposits, cash and bank deposits as shown in the consolidated statement of financial position. Lease liabilities are excluded from the calculation of this ratio.

The gearing ratios at 31st December 2019 and 2018 are as follows:

	2019 HK\$'M	2018 HK\$'M
Total borrowings	(37,936.2)	(38,021.6)
Less: Time deposits, cash and bank deposits	8,007.5	8,839.4
Redeemable perpetual securities (note)	–	2,349.6
Net borrowing excluding redeemable perpetual securities	(29,928.7)	(26,832.6)
Shareholders' funds	(64,209.4)	(62,400.7)
Perpetual capital securities	(2,384.2)	–
Net borrowing (note)	(29,928.7)	(29,182.2)
	(96,522.3)	(91,582.9)
Gearing ratio	31%	29%

Note

As at 31st December 2018, for the purpose of providing a more meaningful gearing ratio analysis, management has reclassified the redeemable perpetual securities from total borrowings to equity, for the Group refinanced the redeemable perpetual securities by issuing perpetual capital securities in February 2019.

Fair value estimation

The Group's financial instruments are measured in the statement of financial position at fair value, this requires disclosure of fair value measurements by level of the following fair value measurement hierarchy:

- Quoted prices (unadjusted) in active markets for identical assets or liabilities (level 1).
- Inputs other than quoted prices included within level 1 that are observable for the asset or liability, either directly (that is, as prices) or indirectly (that is, derived from prices) (level 2).
- Inputs for the asset or liability that are not based on observable market data (that is, unobservable inputs) (level 3).

3 Financial risk management (Continued)

Fair value estimation (Continued)

The following table presents the Group's assets and liabilities that are measured at fair value at 31st December 2019 and 2018. See note 17 for disclosures of the investment properties that are measured at fair value.

HK\$'M	Level 1		Level 2		Level 3		Total	
	2019	2018	2019	2018	2019	2018	2019	2018
Assets								
Financial assets at FVPL								
– Equity securities	2,236.3	264.1	50.5	39.4	2,932.3	3,506.7	5,219.1	3,810.2
Derivative financial instruments	–	–	90.4	93.6	265.1	–	355.5	93.6
Financial assets at FVOCI								
– Debt securities	213.9	204.6	–	–	–	–	213.9	204.6
– Equity investments	2,606.2	348.3	–	–	321.8	574.1	2,928.0	922.4
Total assets	5,056.4	817.0	140.9	133.0	3,519.2	4,080.8	8,716.5	5,030.8
Liabilities								
Other payables	–	–	–	–	154.0	154.0	154.0	154.0
Derivative financial instruments	–	–	571.0	673.8	–	–	571.0	673.8
Total liabilities	–	–	571.0	673.8	154.0	154.0	725.0	827.8

There are no changes in valuation techniques during the year.

The fair value of financial instruments traded in active markets is based on quoted market prices at the end of the reporting year. A market is regarded as active if quoted prices are readily and regularly available from an exchange, dealer, broker, industry group, pricing service, or regulatory agency, and those prices represent actual and regularly occurring market transactions on an arm's length basis. The quoted market price used for financial assets held by the Group is the current bid price. These instruments are included in level 1.

The fair value of financial instruments that are not traded in an active market (for example, over-the-counter derivatives) is determined by using valuation techniques. These valuation techniques maximise the use of observable market data where it is available and rely as little as possible on entity specific estimates. If all significant inputs required to fair value an instrument are observable, the instrument is included in level 2.

Specific valuation techniques used to value financial instruments include:

- Quoted market prices or dealer quotes for similar instruments.
- The fair value of cross currency swaps is calculated as the present value of the estimated future cash flows based on observable foreign exchange rates and yield curves.
- The fair value of interest rate swaps is calculated as the present value of the estimated future cash flows based on observable yield curves.
- The fair value of forward foreign exchange contracts is calculated as the present value of future cash flows based on the forward exchange rates at the end of the reporting period.

3 Financial risk management (Continued)

Fair value estimation (Continued)

If one or more of the significant inputs is not based on observable market data, the instrument is included in level 3.

- Financial assets include a total of approximately HK\$2.9 billion of an unlisted equity investment and its related derivative, which are considered entirely as financial assets at FVPL. In respect of this unlisted equity investment, the fair value is determined based on the discounted cash flow model. The significant unobservable inputs include discount rate of 13.0 per cent, sales price, sales volume and expected free cash flows of the investee. The fair value decreases with the increase in the discount rate, and increases with the increase in the sales price, sales volume or expected free cash flows of the investee. In respect of the related derivative, the fair value is determined based on the binomial and black scholes models. The significant unobservable inputs, except for those included in the fair value of the unlisted equity investment, mainly include expected volatility of the fair value of the unlisted equity investment. The fair value increases with the increase in the volatility.
- Financial assets also include derivative financial instrument of approximately HK\$0.3 billion, the fair value is determined based on the binomial model. The significant unobservable inputs include discount rate of 10.1 per cent and stock price expected volatility of the fair value of the underlying equity instrument of 31.7 per cent. The fair value increases with the decrease in discount rate and increase in stock price volatility or decreases with the increase in the discount rate and decrease in stock price volatility.
- Financial assets also include unlisted equity investments of approximately HK\$0.3 billion, the fair values of which are determined based on the attributable net assets value, being significant unobservable input. The fair value increases with the increase in the attributable net assets value.
- Financial liability represents contingent consideration which is generated from the further acquisition of a subsidiary in 2015 under other payables in level 3. The fair value is determined based on discounted cash flow model. The significant unobservable inputs include discount rate of 3.1 per cent and the rate of probability on the outflow of resources will be required to settle the obligation. The fair value decreases with the increase in the discount rate, and increases with the increase in the rate of probability.

The following table presents the changes in level 3 instruments for the year ended 31st December 2019 and 2018.

	Financial assets		Financial liability	
	2019 HK\$'M	2018 HK\$'M	2019 HK\$'M	2018 HK\$'M
At 1st January	4,080.8	4,150.4	154.0	154.0
Additions	349.0	-	-	-
Change in fair value	(35.8)	176.1	-	9.8
Exchange difference	(82.8)	(245.7)	-	(9.8)
Reclassification to level 1 instruments	(792.0)	-	-	-
At 31st December	3,519.2	4,080.8	154.0	154.0

The carrying amounts of financial assets and financial liabilities recorded at amortised cost in the consolidated financial statements approximate their fair values.

4 Critical accounting estimates and judgements

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

The Group makes estimates and assumptions concerning the future. The resulting accounting estimates will, by definition, seldom equal the related actual results. The estimates and assumptions that have a significant risk of causing a material adjustment to the carrying amounts of assets and liabilities within the next financial year are discussed below.

(a) Estimated impairment of assets

The Group tests annually whether goodwill has suffered any impairment, in accordance with the accounting policy stated in the consolidated financial statements note 2(k). Other assets are reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount of the assets exceeds its recoverable amount. The recoverable amounts of cash-generating units have been determined based on the higher of fair value less cost of disposal and value-in-use calculations. These value-in-use calculations require the use of estimates which includes the following key assumptions as detailed below.

Mining and oil properties in mainland China and Thailand

In respect to the Group's mining and oil properties in mainland China and Thailand respectively (under new energy business segment), the Group tested them for impairment by estimating the recoverable amount of these projects as at 31st December 2019. The key assumptions adopted in the test were coal and oil reserves, future business growth, selling price, production volume and discount rate of 10.0 to 11.0 per cent. Based on the result of the tests, an impairment loss of HK\$560.0 million was recognised in the profit or loss for the year ended 31st December 2019. Assuming projected revenue decreased by 5 per cent and 3 per cent for mining and oil properties respectively or the discount rate increased by 100 basis point, the value-in-use calculated for each of these projects would not result in a further material loss to the Group.

Goodwill, property, plant and equipment in relation to city-gas business in mainland China

In 2017 and 2019, the National Development and Reform Commission issued "Guiding Opinion on Strengthening Gas Distribution Price Regulation" and the "Guiding Opinion on the Regulation of Installation Fees for Gas Facilities in Cities and Towns" respectively (collectively "Guiding Opinions"), which set out proposed return rates for both gas distribution and gas facility installation businesses of city-gas enterprises. In this regards, the Group has carried out assessment on the goodwill and property, plant and equipment of individual gas projects in mainland China, including those held through the Group's interests in associates and joint ventures.

The assessment for each of the city-gas projects is based on value-in-use approach using the discounted cash flow method. The estimated cash flows used in the assessment are derived based on the most recent financial budget as of 31st December 2019 for the next five years approved by management. Cash flows beyond five year period until the end of the relevant concession periods are determined by considering both internal and external factors relating to the cash-generating units. The Group is of the view that, in order to achieve a smooth transition to both the gas project operators and the society, the existing gas pricing mechanism would be adopted continuously for certain years and thereafter gradually implemented in a considerable period of time. The connecting fee margin was also reduced by management to address the rationale that drove the issue of the Guiding Opinions. The terminal value is determined by management with reference to applicable valuation basis and relevant rules and regulations. Discount rate ranged between 8.0 per cent to 11.0 per cent was used to reflect specific risk relating to the investments. In relation to city-gas business in mainland China operated by the Group's subsidiaries, the carrying values of property, plant and equipment and goodwill related to these individual city-gas projects as at 31st December 2019 amounting to approximately HK\$30.0 billion (after impairment as detailed below). The Group's share of property, plant and equipment, together with goodwill related to individual city-gas projects accounted for as associates and joint ventures of the Group as at 31st December 2019 were carried at approximately HK\$9.0 billion and HK\$15.0 billion respectively (after impairment as detailed below). Based on the assessment, a total provision for impairment of HK\$1,030.0 million was recognised in the consolidated income statement for the year ended 31st December 2019, of which HK\$380.0 million was related to subsidiaries, and, through equity accounting, HK\$69.0 million and HK\$581.0 million were related to associates and joint ventures respectively.

4 Critical accounting estimates and judgements (Continued)

(a) Estimated impairment of assets (Continued)

Goodwill, property, plant and equipment in relation to city-gas business in mainland China (Continued)

The assumptions used in the assessment are highly judgemental, and heavily dependent on the timing and the extent the pricing mechanism as detailed in the Guiding Opinions will be implemented as well as the discount rate used and the terminal value. If the discount rate is increased by 50 basis points and all other variables are held constant, the profit attributable to the shareholders of the Company would be decreased by approximately HK\$400.0 million. If the terminal value is decreased by 10 per cent and all other variables are held constant, the profit attributable to the shareholders of the Company would be decreased by approximately HK\$200.0 million.

(b) Property, plant and equipment

The Group's management determines the estimated useful lives and related depreciation charges for its property, plant and equipment. This estimate is based on the historical experience of the actual useful lives of the property, plant and equipment of similar nature and functions. It could change significantly as a result of technical innovation. Management will change the depreciation charge where useful lives are different from the previously estimated lives. It will also write off or write down technically obsolete or non-strategic assets that have been abandoned or sold. For cost incurred and capitalised as property, plant and equipment, management assessed whether the Group has control over these assets based on relevant regulations and the terms as stipulated in the relevant agreements, where applicable.

(c) Estimate of fair value of investment property

The valuation of investment properties (including those held by an associate) are performed in accordance with the "The HKIS Valuation Standards (2017 Edition)" published by the HKIS and the 'International Valuation Standards' published by the International Valuation Standards Committee. The valuation is reviewed annually by qualified valuers by considering the information from a variety of sources including:

- current prices in an active market for properties of different nature, condition or location, adjusted to reflect those differences;
- recent prices of similar properties in less active markets, with adjustments to reflect any changes in economic conditions since the date of the transactions that occurred at those prices; and
- rental income derived from the terms of any existing lease and other contracts, and (where possible) from external evidence such as current market rents for similar properties in the same location and condition, and using capitalisation rates that reflect current market assessments of the uncertainty in the amount and timing of the rental income.

If information on current or recent prices of investment properties is not available, the fair values of investment properties are mainly determined using income capitalisation valuation techniques. The Group uses assumptions that are mainly based on market conditions existing at each date of statement of financial position.

The principal assumptions underlying management's estimation of fair value are those related to the capitalisation rate and market rentals. These valuations are regularly compared to actual market yield data, and actual transactions by the Group and those reported by the market.

4 Critical accounting estimates and judgements (Continued)

(d) Estimate of gas and water consumption

Revenue for gas and water supply may include an estimation of the gas and water supplied to the customers of which actual meter reading is not available. The estimation is done mainly based on the past consumption records and recent consumption pattern of the customers. As of the year-end date, the overall billed gas and water sales are in line with the gas and water supplied to the customers.

(e) Recognition of gas connection income and allocation of transaction price

Critical judgements in recognising revenue

Gas connection income is recognised when or as the control of the underlying performance over time, the progress towards complete satisfaction of the performance obligation is measured using input method. Management are required to exercise significant judgement in their review and revision of the estimates of the total contract costs and actual costs incurred up to the end of the reporting period for each contract as the contract progresses, based on past experience and specific circumstances.

Critical judgements in allocating the transaction price

Some gas connection contracts include installation services. Because these contracts include performance obligations, the transaction price must be allocated to the performance obligations on a relative stand-alone selling price basis.

Management estimates that the stand-alone selling price at contract inception based on expected cost plus a margin approach for installation services and residual approach for connection services.

(f) Reserves estimates

Reserves are estimates of the amount of product that can be economically and legally extracted from the Group's mining and oil properties for coal mines in mainland China and oil concession in Thailand. In order to calculate reserves, estimates and assumptions are required about a range of geological, technical and economic factors, including quantities, grades, production techniques, recovery rates, production costs, transport costs, commodity demand and commodity prices.

Estimating the quantity and/or grade of reserves requires the size, shape and depth of ore bodies or fields to be determined by analysing geological data such as drilling samples. This process may require complex and difficult geological judgements and calculations to interpret the data.

Because the economic assumptions used to estimate reserves changes from period to period, and because additional geological data is generated during the course of operations, estimates of reserves may change from period to period. Changes in reported reserves may affect the Group's financial results and financial position in a number of ways, including the following:

- Asset carrying values may be affected due to changes in estimated future cash flows.
- Depreciation charged in the profit or loss may change where such charges are determined by the units of production basis, or where the useful economic lives of assets change.
- Decommissioning, site restoration and environmental provisions may change where changes in estimated reserves affect expectations about the timing or cost of these activities.

(g) Estimate of fair value of equity investments

The fair value of financial assets that are not traded in an active market is determined by using valuation techniques. The Group uses its judgement to select a variety of methods (such as discounted cash flow model) and makes assumptions that are mainly based on market conditions existing at each date of statement of financial position. Details of the key assumptions used and the impact of changes to these assumptions are described in note 3.

5 Segment information

The Group's principal activities are the production, distribution and marketing of gas, water supply and emerging environmentally-friendly energy businesses ("New Energy") in Hong Kong and mainland China. The revenue comprises the following:

	2019 HK\$'M	2018 HK\$'M
Gas sales before fuel cost adjustment	29,632.9	27,922.4
Fuel cost adjustment	771.9	1,025.1
Gas sales after fuel cost adjustment	30,404.8	28,947.5
Connection income	3,253.2	3,292.7
Equipment sales and maintenance services	2,950.2	2,801.2
Water and related sales	1,314.3	1,365.8
Oil and coal related sales	961.8	1,338.2
Other sales	1,743.8	1,327.6
	40,628.1	39,073.0

The chief operating decision-maker has been identified as the executive committee members (the "ECM") of the Company. The ECM reviews the Group's internal reporting in order to assess performance and allocate resources. The ECM considers the business from both a product and geographical perspective. From a product perspective, management assesses the performance of (a) gas, water and related businesses; (b) New Energy and (c) property business. Gas, water and related businesses is further evaluated on a geographic basis (Hong Kong and mainland China).

The ECM assesses the performance of the operating segments based on a measure of adjusted EBITDA. Other information provided, except as noted below, to the ECM is measured in a manner consistent with that in the consolidated financial statements.

5 Segment information (Continued)

The segment information provided to the ECM for the reportable segments is as follows:

2019 HK\$'M	Gas, water and related businesses		New Energy	Property	Other segments	Total
	Hong Kong	Mainland China				
Revenue recognised at a point in time	9,798.5	26,114.9	2,298.1	-	228.0	38,439.5
Revenue recognised over time	-	1,001.4	-	-	716.4	1,717.8
Finance and rental income	-	-	413.0	57.8	-	470.8
	9,798.5	27,116.3	2,711.1	57.8	944.4	40,628.1
Adjusted EBITDA	4,764.5	5,919.2	614.5	30.2	165.3	11,493.7
Depreciation and amortisation	(828.2)	(1,410.5)	(337.8)	-	(149.4)	(2,725.9)
Unallocated expenses						(744.1)
						8,023.7
Other gains, net						1,048.7
Interest expense						(1,230.4)
Share of results of associates	-	1,135.8	(72.7)	753.3	4.0	1,820.4
Share of results of joint ventures	-	730.5	1.1	9.3	0.6	741.5
Profit before taxation						10,403.9
Taxation						(2,289.6)
Profit for the year						8,114.3

Share of results of associates includes HK\$199.7 million (2018: HK\$2,030.0 million) being the Group's share of change in valuation of investment properties at the International Finance Centre (the "IFC") complex for the year and HK\$69.0 million (2018: nil) being provision for assets for a piped city-gas associate.

Share of results of joint ventures includes HK\$581.0 million (2018: nil) being provision for assets for the piped city-gas joint ventures.

5 Segment information (Continued)

2018 HK\$'M	Gas, water and related businesses		New Energy	Property	Other segments	Total
	Hong Kong	Mainland China				
Revenue recognised at a point in time	10,081.7	23,974.6	2,715.5	-	270.2	37,042.0
Revenue recognised over time	-	1,016.8	-	-	553.8	1,570.6
Finance and rental income	-	-	394.3	66.1	-	460.4
	10,081.7	24,991.4	3,109.8	66.1	824.0	39,073.0
Adjusted EBITDA	4,769.2	5,673.4	945.8	41.6	137.8	11,567.8
Depreciation and amortisation	(747.4)	(1,302.6)	(354.7)	-	(109.8)	(2,514.5)
Unallocated expenses						(670.1)
						8,383.2
Other gains, net						20.0
Interest expense						(1,176.6)
Share of results of associates	-	951.5	32.4	2,599.2	6.4	3,589.5
Share of results of joint ventures	-	1,513.9	1.2	9.2	(0.9)	1,523.4
Profit before taxation						12,339.5
Taxation						(1,907.6)
Profit for the year						10,431.9

The segment assets at 31st December 2019 and 2018 are as follows:

2019 HK\$'M	Gas, water and related businesses		New Energy	Property	Other segments	Total
	Hong Kong	Mainland China				
Segment assets	17,358.7	71,570.4	17,756.7	16,165.4	4,588.2	127,439.4
Unallocated assets:						
Financial assets at FVOCI						3,141.9
Financial assets at FVPL						5,219.1
Time deposits, cash and bank balances excluded from segment assets						3,423.9
Others (note)						1,245.8
Total assets						140,470.1

5 Segment information (Continued)

2018 HK\$'M	Gas, water and related businesses		New Energy	Property	Other segments	Total
	Hong Kong	Mainland China				
Segment assets	17,278.3	67,989.8	17,579.3	15,899.2	4,194.1	122,940.7
Unallocated assets:						
Financial assets at FVOCI						1,127.0
Financial assets at FVPL						3,810.2
Time deposits, cash and bank balances excluded from segment assets						3,973.1
Others (note)						842.1
Total assets						132,693.1

Note

Other unallocated assets mainly include other receivables other than those included under segment assets, retirement benefit assets, derivative financial instruments and loan and other receivables from non-controlling shareholders.

The Company is domiciled in Hong Kong. The Group's revenue from external customers in Hong Kong for the year ended 31st December 2019 is HK\$11,333.5 million (2018: HK\$11,521.5 million), and the revenue from external customers in mainland China and other geographical locations is HK\$29,294.6 million (2018: HK\$27,551.5 million).

At 31st December 2019, the total of non-current assets other than financial instruments located in Hong Kong is HK\$31,014.8 million (2018: HK\$30,437.3 million), and the total of non-current assets other than financial instruments located in mainland China and other geographical locations is HK\$77,782.9 million (2018: HK\$74,092.4 million).

For the years ended 31st December 2019 and 2018, the percentage of revenues attributable to the Group's five largest customers is less than 30 per cent.

6 Total operating expenses

	2019 HK\$'M	2018 HK\$'M
Stores and materials used	21,803.8	20,597.9
Manpower costs (note 11)	3,485.2	3,295.1
Depreciation and amortisation	2,753.5	2,537.2
Other operating items	4,561.9	4,259.6
	32,604.4	30,689.8

7 Other gains, net

	2019 HK\$'M	2018 HK\$'M
Net investment gains (note 8)	2,228.0	230.0
Fair value gain on investment property (note 17)	16.0	12.5
Provision for assets (note)	(1,184.9)	(200.0)
Ineffective portion on cash flow hedges (note 25)	0.2	5.8
Others	(10.6)	(28.3)
	1,048.7	20.0

Note

The amount included an impairment provision of HK\$560.0 million (2018: HK\$200.0 million) in relation to mining and oil properties under New Energy business segment and HK\$380.0 million (2018: nil) in relation to goodwill and property, plant and equipment related to individual city-gas projects in mainland China.

8 Net investment gains

	2019 HK\$'M	2018 HK\$'M
(a) Interest income		
Bank deposits	117.7	188.0
Listed financial assets at FVOCI	7.9	8.0
Loans to associates and joint ventures	66.1	90.1
Others	27.9	13.2
	219.6	299.3
(b) Net realised and unrealised gains and interest income on financial assets at FVPL and derivative financial instruments		
Listed securities	1,651.4	(64.4)
Unlisted securities	211.0	148.6
Exchange differences	(0.7)	(1.2)
	1,861.7	83.0
(c) Net (losses)/gains on financial assets at FVOCI		
Exchange differences	(3.7)	2.8
	(3.7)	2.8
(d) Dividend income		
Listed financial assets at FVPL	5.9	3.6
Listed financial assets at FVOCI	18.4	21.0
Unlisted financial assets at FVOCI	81.1	101.2
	105.4	125.8
(e) Exchange gains/(losses)	45.0	(280.9)
	2,228.0	230.0

9 Interest expense

	2019 HK\$'M	2018 HK\$'M
Interest on bank loans and overdrafts wholly repayable within five years	921.9	753.8
Interest on guaranteed notes wholly repayable within five years	197.6	413.3
Interest on guaranteed notes not wholly repayable within five years	294.7	326.3
Interest on lease liabilities	16.3	–
	1,430.5	1,493.4
Less: amount capitalised	(200.1)	(316.8)
	1,230.4	1,176.6

The interest expense is capitalised at average rates from 0.47 per cent to 6.37 per cent (2018: 1.35 per cent to 6.18 per cent) per annum.

10 Profit before taxation

Profit before taxation is stated after charging and (crediting) the following:

	2019 HK\$'M	2018 HK\$'M
Cost of inventories sold	23,924.2	22,666.0
Depreciation and amortisation	2,753.5	2,537.2
Loss/(gain) on disposal/write off of property, plant and equipment	25.8	(1.2)
Gain on disposal of right-of-use assets/leasehold land	(0.1)	(40.3)
Impairment loss of trade receivables	53.7	37.5
Operating lease rentals		
– land and buildings	–	146.5
– plant and equipment	–	13.8
Rental income from investment property		
– gross rental income	(57.7)	(66.1)
– outgoing expenses	27.2	24.2
Auditors' remuneration	29.3	27.6
Net loss on residential maintenance (note)	69.7	56.1
Note		
Analysis of net loss on residential maintenance:		
Residential maintenance revenue	(213.3)	(209.0)
Less expenses:		
Manpower costs	162.5	152.3
Other operating and administrative expenses	120.5	112.8
Net loss	69.7	56.1

11 Manpower costs

(a) Staff costs

	2019 HK\$'M	2018 HK\$'M
Salaries and wages	3,033.7	2,857.1
Pension costs – defined contribution retirement schemes	435.2	422.8
Pension costs – defined benefit retirement scheme (note 26)	16.3	15.2
	3,485.2	3,295.1

(b) Five highest paid individuals

The five individuals whose emoluments were the highest in the Group for the year include two (2018: two) directors whose emoluments are reflected in the analysis shown in note 12. Details of the emoluments payable to the remaining three (2018: three) individuals during the year are as follows:

	2019 HK\$'M	2018 HK\$'M
Fee, salaries, allowances and benefits in kind	9.5	9.1
Performance bonus	11.6	13.4
Contributions to retirement scheme	3.3	3.4
	24.4	25.9

Number of individuals whose emoluments fell within:

Emoluments band (HK\$'M)	2019	2018
10.0 – 11.0	1	1
9.0 – 10.0	–	–
8.0 – 9.0	–	1
7.0 – 8.0	2	–
6.0 – 7.0	–	1

(c) Emoluments of senior management

Senior management for the years ended 31st December 2019 and 2018 were all executive directors of the Company whose emoluments have been shown in note 12.

12 Benefits and interests of directors

(a) Directors' emoluments

Name of director	Emoluments paid or receivable in respect of a person's services as a director, whether of the Company or its subsidiary undertaking					Total HK\$'M
	Fees HK\$'M	Salary, allowances and benefits in kind HK\$'M	Performance bonus HK\$'M	Contributions to retirement scheme HK\$'M	Others HK\$'M	
2019						
Alfred Chan Wing-kin (Managing Director) (note (i))	0.4	6.4	21.3	5.8	–	33.9
Peter Wong Wai-yee (note (i))	0.4	4.8	9.4	2.6	–	17.2
Lee Shau-kee (note (ii))	0.7	0.3	–	–	–	1.0
Colin Lam Ko-yin	0.3	0.1	–	–	–	0.4
Lee Ka-kit	0.7	–	–	–	–	0.7
Lee Ka-shing	0.7	–	–	–	–	0.7
David Li Kwok-po	0.7	–	–	–	–	0.7
Poon Chung-kwong	0.7	–	–	–	–	0.7
Moses Cheng Mo-chi (note (iii))	0.7	–	–	–	–	0.7
	5.3	11.6	30.7	8.4	–	56.0

Note

- (i) Mr. Alfred Chan Wing-kin and Mr. Peter Wong Wai-yee who are also directors of Towngas China Company Limited ("Towngas China"), a significant subsidiary of the Group. In this connection, the above emoluments included Mr. Alfred Chan Wing-kin and Mr. Peter Wong Wai-yee each received directors' emoluments from Towngas China of HK\$0.2 million and HK\$6.8 million (2018: HK\$0.2 million and HK\$6.3 million) respectively, and no share-based payments were received during the year and 2018.
- (ii) Dr. Lee Shau-kee retired on 28th May 2019.
- (iii) Dr. Moses Cheng Mo-chi was appointed as director on 14th January 2019.

12 Benefits and interests of directors (Continued)

(a) Directors' emoluments (Continued)

Name of director	Emoluments paid or receivable in respect of a person's services as a director, whether of the Company or its subsidiary undertaking					Total HK\$'M
	Fees HK\$'M	Salary, allowances and benefits in kind HK\$'M	Performance bonus HK\$'M	Contributions to retirement scheme HK\$'M	Others HK\$'M	
2018						
Alfred Chan Wing-kin (Managing Director) (note (i))	0.4	6.4	25.0	6.0	-	37.8
Peter Wong Wai-yee (note (i))	0.4	4.6	8.7	2.6	-	16.3
Lee Shau-kee	0.7	0.3	-	-	-	1.0
Leung Hay-man	0.4	-	-	-	-	0.4
Colin Lam Ko-yin	0.3	0.1	-	-	-	0.4
Lee Ka-kit	0.3	-	-	-	-	0.3
Lee Ka-shing	0.3	-	-	-	-	0.3
David Li Kwok-po	0.7	-	-	-	-	0.7
Poon Chung-kwong	0.7	-	-	-	-	0.7
	4.2	11.4	33.7	8.6	-	57.9

The above remuneration paid to directors of the Company also represents the amount of short-term employee benefits of HK\$47.6 million (2018: HK\$49.3 million) and post-employment benefits of HK\$8.4 million (2018: HK\$8.6 million) paid to the Group's senior management during the year ended 31st December 2019. There were no other long-term benefits, termination benefits and share-based payment paid to the Group's senior management during the year (2018: nil).

(b) Directors' material interests in transactions, arrangements or contracts

No significant transactions, arrangements or contracts in relation to the Group's business to which the Company was a party, and in which a director of the Company had a material interest, whether directly or indirectly, subsisted at the end of the year or at any time during the year.

13 Taxation

The amount of taxation charged to the profit or loss represents:

	2019 HK\$'M	2018 HK\$'M
Current taxation – provision for Hong Kong Profits Tax at the rate of 16.5% (2018: 16.5%) on the estimated assessable profits for the year	703.0	713.6
Current taxation – provision for other countries income tax at the prevailing rates on the estimated assessable profits for the year (note)	867.2	822.0
Current taxation – under/(over) provision in prior years	1.1	(4.5)
Deferred taxation – origination and reversal of temporary differences	603.7	287.5
Withholding tax	114.6	89.0
	2,289.6	1,907.6

13 Taxation (Continued)

Note

The prevailing tax rates of mainland China and Thailand range from 15 per cent to 25 per cent (2018: 15 per cent to 25 per cent) and 50 per cent (2018: 50 per cent) respectively.

The taxation on the Group's profit before taxation differs from the theoretical amount that would arise using the taxation rate of Hong Kong as follows:

	2019 HK\$'M	2018 HK\$'M
Profit before taxation	10,403.9	12,339.5
Less: Share of results of associates	(1,820.4)	(3,589.5)
Share of results of joint ventures	(741.5)	(1,523.4)
	7,842.0	7,226.6
Calculated at a tax rate of 16.5% (2018: 16.5%)	1,293.9	1,192.4
Effect of different tax rates in other countries	516.4	359.7
Income not subject to taxation	(188.1)	(138.7)
Expenses not deductible for taxation purposes	523.2	350.8
Utilisation of previously unrecognised tax losses	(24.7)	(29.7)
Under/(over) provision in prior years	1.1	(4.5)
Withholding tax	114.6	89.0
Others	53.2	88.6
	2,289.6	1,907.6

Share of associates' taxation for the year ended 31st December 2019 of HK\$498.0 million (2018: HK\$463.6 million) is included in the profit or loss as share of results of associates.

Share of joint ventures' taxation for the year ended 31st December 2019 of HK\$306.3 million (2018: HK\$614.8 million) is included in the profit or loss as share of results of joint ventures.

14 Dividends

	2019 HK\$'M	2018 HK\$'M
Interim, paid of HK12 cents per ordinary share (2018: HK12 cents per ordinary share)	2,031.0	1,846.4
Final, proposed of HK23 cents per ordinary share (2018: HK23 cents per ordinary share)	3,892.8	3,538.9
	5,923.8	5,385.3

At a meeting held on 19th March 2020, the directors of the Company declared a final dividend of HK23 cents per ordinary share for the year ended 31st December 2019. This proposed dividend is not reflected as a dividend payable in these consolidated financial statements, but will be reflected as an appropriation of retained earnings for the year ended 31st December 2019.

15 Earnings per share

The calculation of basic earnings per share is based on the profit attributable to shareholders of HK\$6,965.7 million (2018: HK\$9,312.8 million) and the weighted average of 16,925,052,244 shares (2018: 16,925,052,244 shares ¹) in issue during the year.

As there were no diluted potential ordinary shares outstanding during the year (2018: nil), the diluted earnings per share for the year ended 31st December 2019 is the same as the basic earnings per share.

¹ Adjusted for the bonus share issue in 2019

16 Property, plant and equipment

	Buildings, plant and equipment HK\$'M	Mains and risers HK\$'M	Meters and installations HK\$'M	Mining and oil properties HK\$'M	Others HK\$'M	Capital work in progress HK\$'M	Total HK\$'M
Cost							
At 1st January 2019	22,385.4	38,043.8	3,993.0	4,041.2	926.2	10,682.8	80,072.4
Additions	839.2	609.0	306.8	71.6	0.5	5,284.5	7,111.6
Acquisition of business (note 42(a))	3.1	14.2	-	-	-	-	17.3
Transfers from capital work in progress	1,295.9	3,169.6	13.4	2.4	5.7	(4,487.0)	-
Disposals/write off	(222.4)	(19.1)	(114.3)	(71.4)	-	(10.7)	(437.9)
Impairment	(46.6)	(47.0)	-	(560.0)	-	(116.5)	(770.1)
Exchange differences	(286.5)	(508.0)	(2.2)	310.8	(16.0)	(150.5)	(652.4)
At 31st December 2019	23,968.1	41,262.5	4,196.7	3,794.6	916.4	11,202.6	85,340.9
Accumulated depreciation							
At 1st January 2019	9,018.9	9,248.1	2,711.2	944.4	171.0	-	22,093.6
Charge for the year	1,088.9	1,085.3	296.7	49.5	17.7	-	2,538.1
Disposals/write off	(169.5)	(8.9)	(86.9)	-	-	-	(265.3)
Exchange differences	(91.2)	(94.2)	(1.4)	82.3	(3.7)	-	(108.2)
At 31st December 2019	9,847.1	10,230.3	2,919.6	1,076.2	185.0	-	24,258.2
Net book value							
At 31st December 2019	14,121.0	31,032.2	1,277.1	2,718.4	731.4	11,202.6	61,082.7
At 31st December 2018	13,366.5	28,795.7	1,281.8	3,096.8	755.2	10,682.8	57,978.8

The carrying values of the property, plant and equipment related to city-gas projects in mainland China as at 31st December 2019 amounted to approximately HK\$27.5 billion in total.

16 Property, plant and equipment (Continued)

	Buildings, plant and equipment HK\$'M	Mains and risers HK\$'M	Meters and installations HK\$'M	Mining and oil properties HK\$'M	Others HK\$'M	Capital work in progress HK\$'M	Total HK\$'M
Cost							
At 1st January 2018	20,342.7	36,025.6	3,777.9	4,215.5	931.9	10,845.1	76,138.7
Additions	1,208.5	864.9	300.0	41.5	35.7	4,660.5	7,111.1
Acquisition of businesses	0.9	-	-	-	-	39.6	40.5
Transfers from capital work in progress	1,811.5	2,618.5	5.7	5.7	6.9	(4,448.3)	-
Disposals/write off	(180.4)	(64.9)	(84.7)	(4.9)	-	(1.5)	(336.4)
Impairment	-	-	-	(200.0)	-	-	(200.0)
Exchange differences	(797.8)	(1,400.3)	(5.9)	(16.6)	(48.3)	(412.6)	(2,681.5)
At 31st December 2018	22,385.4	38,043.8	3,993.0	4,041.2	926.2	10,682.8	80,072.4
Accumulated depreciation							
At 1st January 2018	8,323.8	8,475.3	2,496.8	856.4	159.0	-	20,311.3
Charge for the year	1,061.9	1,035.6	283.7	86.9	22.5	-	2,490.6
Disposals/write off	(120.1)	(14.8)	(65.4)	(0.9)	-	-	(201.2)
Exchange differences	(246.7)	(248.0)	(3.9)	2.0	(10.5)	-	(507.1)
At 31st December 2018	9,018.9	9,248.1	2,711.2	944.4	171.0	-	22,093.6
Net book value							
At 31st December 2018	13,366.5	28,795.7	1,281.8	3,096.8	755.2	10,682.8	57,978.8
At 31st December 2017	12,018.9	27,550.3	1,281.1	3,359.1	772.9	10,845.1	55,827.4

17 Investment property

	2019 HK\$'M	2018 HK\$'M
At 1st January	778.0	764.0
Additions	36.0	1.5
Fair value gain (note 7)	16.0	12.5
At 31st December	830.0	778.0

The Group's interest in the commercial investment property is located in Hong Kong under a land lease of over 50 years. The investment property was revalued at 31st December 2019 by an independent professionally qualified valuer, Knight Frank Petty Limited which conform to The HKIS Valuation Standards (2017 Edition) shown in note 2(i).

Fair value measurements using significant unobservable inputs

Fair value of completed commercial property in Hong Kong is generally derived using the income capitalisation method. This valuation method is based on the capitalisation of the net income and reversionary income potential by adopting appropriate capitalisation rates, which are derived from analysis of sale transactions and valuer's interpretation of prevailing investor requirements or expectations. The prevailing market rents adopted in the valuation have reference to valuer's view of recent lettings, within the subject properties and other comparable properties.

Information about fair value measurements using significant unobservable inputs is as follows:

Unobservable inputs	Commercial complex	Car park	Relationship of unobservable inputs to fair value
Capitalisation rate	5.4%	8.75%	The higher the capitalisation rate, the lower the fair value
Monthly rent	HK\$19.0 /sq.ft.	N/A	The higher the market rent, the higher the fair value

Valuation processes of the Group

The Group's finance division includes a team that review and analyse the valuation performed by the independent valuer for financial reporting purposes. At each financial year end the finance division:

- Verifies all major inputs to the independent valuation report;
- Assesses property valuation movements when compared with the prior year valuation report;
- Holds discussions with the independent valuer.

18 Right-of-use assets/Leasehold land

(a) Right-of-use assets

	Prepaid leasehold land HK\$'M	Buildings, plant and equipment and others HK\$'M	Total HK\$'M
At 1st January 2019, as restated	2,214.5	401.3	2,615.8
Additions	301.6	53.3	354.9
Acquisition of business (note 42(a))	4.8	-	4.8
Depreciation and amortisation	(65.3)	(142.8)	(208.1)
Disposals	(7.0)	-	(7.0)
Exchange differences	(30.3)	(4.9)	(35.2)
At 31st December 2019	2,418.3	306.9	2,725.2

The Group leases various land, office buildings and customer service centres. Rental contracts are made for a range of fixed periods but may have extension options. Lease terms are negotiated on an individual basis and contain a wide range of different terms and conditions. The lease agreements do not impose any covenants, but leased assets may not be used as security for borrowing purposes.

Some leases contain variable payment terms that are linked to sales or net profits generated. Variable lease payments that depend on sales or net profits are recognised in the profit or loss in the period in which the condition that triggers those payments occurs. Most leases are subject to fixed payments.

Extension and termination options are included in a number of leases across the Group. These terms are used to maximise operational flexibility in terms of managing contracts. The majority of extension and termination options held are exercisable only by the Group and not by the respective lessor. There are minimal lease contracts with extension or termination options.

(b) Leasehold land

The Group's interests in leasehold land and land use rights movements during the year ended 31st December 2018 are as follows:

	2018 HK\$'M
At 1st January	2,229.3
Additions	179.0
Disposals	(25.7)
Amortisation	(62.0)
Exchange differences	(106.1)
At 31st December	2,214.5

The adoption of HKFRS 16 resulted in changes in terminology used. Prepaid leasehold land previously presented as leasehold land was reclassified to right-of-use assets.

19 Intangible assets

	2019 HK\$'M	2018 HK\$'M
(a) Goodwill		
At 1st January	5,280.5	5,443.3
Acquisition of business (note 42(a))	20.4	5.9
Impairment	(333.0)	-
Exchange differences	(54.3)	(168.7)
At 31st December	4,913.6	5,280.5
(b) Other intangible asset		
Cost		
At 1st January	504.9	527.7
Exchange differences	(7.4)	(22.8)
At 31st December	497.5	504.9
Accumulated amortisation		
At 1st January	(103.3)	(87.4)
Amortisation	(17.6)	(18.0)
Exchange differences	0.9	2.1
At 31st December	(120.0)	(103.3)
Net book value		
At 31st December	377.5	401.6
Total intangible assets	5,291.1	5,682.1

Goodwill is allocated to cash-generating units that are expected to benefit from the business combination in which the goodwill arose, majority related to segment - gas, water and related businesses in mainland China. The goodwill balance included HK\$2,242.0 million (2018: HK\$2,242.0 million) related to the Group's investments in Towngas China. The remaining balance mainly represents goodwill associated with individual city-gas projects (approximately HK\$2.5 billion as of 31st December 2019) (after impairment as detailed in note 4(a)). The Group tests goodwill annually for impairment, or more frequently if there are indications that it might be impaired. For the purpose of impairment test, the recoverable amount of the cash-generating units is determined based on either fair value less costs of disposal or value-in-use calculations. The fair value less costs of disposal is by referencing to active market information. The key assumptions used in value-in-use calculations are detailed in note 4(a).

Based on impairment tests performed, impairment provision of HK\$333.0 million was recognised as at 31st December 2019 (2018: nil).

20 Subsidiaries

Material non-controlling interests

The total non-controlling interest as at 31st December 2019 is HK\$8,803.1 million (2018: HK\$7,792.6 million) of which HK\$6,557.2 million (2018: HK\$5,662.4 million) is attributable to Towngas China and the non-controlling interest in respect of other individual subsidiaries of the Group is not material.

Set out below are the summarised financial information of Towngas China. The information below is the amount before inter-company eliminations.

	Towngas China	
	2019 HK\$'M	2018 HK\$'M
Summarised statement of financial position		
Assets		
Non-current assets	29,679.1	25,962.2
Current assets	4,992.0	4,499.0
	34,671.1	30,461.2
Liabilities		
Non-current liabilities	(8,595.1)	(8,118.5)
Current liabilities	(9,284.8)	(8,138.1)
	(17,879.9)	(16,256.6)
Net assets	16,791.2	14,204.6

	Towngas China	
	2019 HK\$'M	2018 HK\$'M
Summarised income statement and comprehensive income statement		
Revenue	12,924.4	11,787.0
Profit before taxation	2,014.1	1,892.1
Taxation	(501.5)	(479.0)
Profit for the year	1,512.6	1,413.1
Other comprehensive income/(loss)	1,106.6	(912.3)
Total comprehensive income	2,619.2	500.8
Total comprehensive income attributable to non-controlling interests	147.8	64.1
Dividend paid to non-controlling shareholders	90.8	91.2

20 Subsidiaries (Continued)

	Towngas China	
	2019 HK\$'M	2018 HK\$'M
Summarised cash flows statement		
Net cash generated from operating activities	1,753.3	1,284.4
Net cash used in investing activities	(2,213.1)	(2,142.9)
Net cash inflow from financing activities	806.3	967.5
Net increase in cash and cash equivalents	346.5	109.0
Cash and cash equivalents at beginning of year	1,611.5	1,605.3
Effect of foreign exchange rate changes	(20.6)	(102.8)
Cash and cash equivalents at end of year	1,937.4	1,611.5

21 Associates

	2019 HK\$'M	2018 HK\$'M
Investments in associates, including goodwill	26,628.4	25,499.4
Loans to associates – non-current	847.1	814.7
	27,475.5	26,314.1
Loan and other receivables from associates – current	526.7	356.9
Fair value of listed investments	12,242.0	10,712.5

The Group's share of property, plant and equipment, together with goodwill related to individual city-gas projects accounted for as associates of the Group as at 31st December 2019 were carried at approximately HK\$9.0 billion. An impairment loss was recognised for these underlying assets of an associate and the Group's share of such impairment loss of HK\$69.0 million, which has been included in the Group's share of results of associates for the year ended 31st December 2019.

Loan and other receivables from associates are analysed below:

- (i) Loans to associates in mainland China of HK\$1,299.7 million (2018: HK\$1,107.1 million) with effective interest rates ranging from 4.35 per cent to 7.20 per cent per annum (2018: 4.35 per cent to 7.20 per cent per annum) are unsecured and fully repayable in 2020 to 2021 (2018: 2019 to 2020).
- (ii) The remaining balances are unsecured, interest free and have no fixed terms of repayment.
- (iii) Loan and other receivables from associates are considered to have low credit risk and the loss allowance recognised during the year was therefore limited to 12-month expected credit loss.
- (iv) Loan and other receivables are denominated in the following currencies:

	2019 HK\$'M	2018 HK\$'M
USD	586.0	560.1
RMB	785.8	609.1
HKD	2.0	2.4
	1,373.8	1,171.6

21 Associates (Continued)

Particulars of the principal associates as at 31st December 2019 are listed below:

Name	Note	Issued share capital/ registered capital	Percentage of the Group's equity interest	Place of incorporation/ operation	Principal activity
China-Singapore Suzhou Industrial Park Broad Energy Services Co., Ltd.		RMB71.1 million	25	PRC	Cooling and heating system business
Hainan Petrochina Kunlun Hong Kong & China Gas Co., Ltd.		RMB50.4 million	49	PRC	Gas sales and related businesses
Shenzhen Gas Corporation Limited		RMB2,876.8 million	26.5	PRC	Gas sales and related businesses
港華儲氣有限公司		RMB200 million	39	PRC	Gas storage project
Central Waterfront Property Investment Holdings Limited	(i)	US\$100	15.8	British Virgin Islands	Investment holding
GH-Fusion Limited	(ii)	US\$200	50	British Virgin Islands	Investment holding
江蘇海企港華燃氣股份有限公司		RMB216.7 million	32.9	PRC	LNG refilling station for vessels
Hangzhou Natural Gas Company Limited		RMB1,195.0 million	24	PRC	Mid-stream natural gas and piped city-gas project
Anhui Province Natural Gas Development Company Limited		RMB336.0 million	20.6	PRC	Mid-stream natural gas project
Hebei Natural Gas Company Limited		RMB1,680.0 million	43	PRC	Mid-stream natural gas project
河南省中原石油天然氣管網有限公司		RMB60.0 million	49	PRC	Mid-stream natural gas project
河北金建佳天然氣有限公司		RMB90.0 million	20	PRC	LNG receiving terminal; pier
¹ 泰州城投天然氣管網有限公司		RMB150.0 million	47.6	PRC	Natural gas pipeline project
[#] 佛山水務環保股份有限公司		RMB831.8 million	26.7	PRC	Water project
Towngas DETA Telecom (Dalian) Co., Ltd.		RMB10.0 million	49	PRC	Telecommunications business
中經名氣網絡技術(北京)有限公司		RMB10.0 million	49	PRC	Telecommunications business
¹ Ying Tong TGT Network Services (Shenzhen) Co. Ltd.		RMB100.0 million	49	PRC	Telecommunications business

¹ Newly formed during the year

[#] Direct associate of the Company

Notes

- (i) The Group has an effective interest of approximately 15.8 per cent in the IFC complex through its interest in Central Waterfront Property Investment Holdings Limited ("CWPI"). With the Group's presence on the board of directors of CWPI and participation in the financial and operating policies of the IFC complex, the Group could exercise significant influence over CWPI and accordingly the investment is accounted for as an associate.
- (ii) The Group can only exercise significant influence over the board of directors in the associates.

21 Associates (Continued)

Particulars of the principal associates as at 31st December 2019 are listed below: (Continued)

Name	Issued share capital/ registered capital	Percentage of the Group's equity interest	Place of incorporation/ operation	Principal activity
Shanxi Yuanping Guoxin Compressed Natural Gas Co., Ltd.	RMB20.0 million	42	PRC	Vehicular fuel refilling station
China-Singapore Suzhou Industrial Park Environmental Technology Co., Ltd.	RMB185.0 million	49	PRC	Water treatment project
Held by Towngas China and the respective equity interest held by Towngas China is shown accordingly.				
Changchun Gas Co., Ltd.	RMB609.0 million	28.2	PRC	Gas sales and related businesses
Dalian DETA Hong Kong and China Gas Co., Ltd.	RMB137.2 million	40	PRC	Gas sales and related businesses
Foran Energy Group Co., Ltd. (Formerly named as Foshan Gas Group Co., Ltd.)	RMB556.0 million	38.7	PRC	Gas sales and related businesses
撫州市撫北天然氣有限公司	RMB16.0 million	40	PRC	Gas sales and related businesses
臨朐港華燃氣有限公司	US\$5.7 million	42.4	PRC	Gas sales and related businesses
Shandong Jihua Gas Co., Ltd.	RMB400.0 million	49	PRC	Gas sales and related businesses
石家莊華博燃氣有限公司	RMB45.0 million	45	PRC	Gas sales and related businesses
Zibo Lubo Gas Company Limited	RMB100.0 million	27	PRC	Gas sales and related businesses
Anhui Province Wenery Towngas Natural Gas Company Limited	RMB240.0 million	49	PRC	Mid-stream natural gas project
四川能投分布式能源有限公司	RMB512.6 million	24.4	PRC	Distributed energy systems businesses
Zhuojia Public Engineering (Maanshan) Co., Ltd.	RMB120.0 million	37.5	PRC	Gas pipe assembly

21 Associates (Continued)

The following amounts represent the Group's share of income and results of the associates and are included in the consolidated income statement and statement of comprehensive income:

	2019 HK\$'M	2018 HK\$'M
Income	18,082.5	17,049.9
Expenses, including taxation	(16,262.1)	(13,460.4)
Profit after taxation	1,820.4	3,589.5
Other comprehensive income	81.8	3.6
Total comprehensive income	1,902.2	3,593.1

Set out below are the summarised financial information of CWPI which is considered to be the only material associate in the Group and it is accounted for using the equity method. CWPI holds IFC complex as the commercial investment property for rental income in Hong Kong.

	CWPI	
Summarised statement of financial position	2019 HK\$'M	2018 HK\$'M
Assets		
Non-current assets	116,502.0	115,205.6
Current assets	1,294.2	582.3
	117,796.2	115,787.9
Liabilities		
Non-current liabilities	(18,395.7)	(18,371.1)
Current liabilities	(2,814.5)	(2,199.7)
	(21,210.2)	(20,570.8)
Net assets	96,586.0	95,217.1

21 Associates (Continued)

Summarised income statement and statement of comprehensive income	CWPI	
	2019 HK\$'M	2018 HK\$'M
Income	7,604.6	19,373.9
Expenses, including taxation	(2,834.0)	(2,911.8)
Profit after taxation	4,770.6	16,462.1
Other comprehensive income	68.3	23.1
Total comprehensive income	4,838.9	16,485.2
Share of total comprehensive income (15.79%)	764.1	2,603.0
Dividend received from the associate	547.9	619.0

The information above reflects the amounts presented in the financial statements of the associate adjusted for differences in accounting policies between the Group and the associate.

Reconciliation of the summarised financial information presented to the carrying amount of its interest in the associate:

	CWPI	
	2019 HK\$'M	2018 HK\$'M
Net assets		
At 1st January	95,217.1	82,651.9
Profit for the year	4,770.6	16,462.1
Other comprehensive income	68.3	23.1
Dividend paid	(3,470.0)	(3,920.0)
At 31st December	96,586.0	95,217.1
	2019 HK\$'M	2018 HK\$'M
Carrying value		
Interest in an associate (15.79%)	15,250.9	15,034.8

22 Joint ventures

	2019 HK\$'M	2018 HK\$'M
Investments in joint ventures, including goodwill	10,613.5	10,910.4
Loans to joint ventures – non-current	–	39.9
	10,613.5	10,950.3
Loan and other receivables from joint ventures – current	800.4	822.6
Amounts due to joint ventures – current	(943.2)	(1,049.5)

The Group's share of property, plant and equipment, together with goodwill related to individual city-gas projects accounted for as joint ventures of the Group as at 31st December 2019 were carried at approximately HK\$15.0 billion. Impairment losses were recognised for these underlying assets of certain joint ventures and the Group's share of such impairment losses, in aggregate, of HK\$581.0 million, which have been included in the Group's share of results of joint ventures for the year ended 31st December 2019.

Loan and other receivables from joint ventures are analysed below:

- (i) Loans to joint ventures in mainland China of HK\$332.0 million (2018: HK\$466.1 million) with effective interest rates ranging from 4.35 per cent to 4.79 per cent per annum (2018: 4.35 per cent to 5.88 per cent per annum) are unsecured and fully repayable in 2020 (2018: 2019 to 2020).
- (ii) Loan to a joint venture in Hong Kong of HK\$67.3 million (2018: HK\$62.0 million) is unsecured, interest free and has no fixed terms of repayment.
- (iii) The remaining balances are unsecured, interest free and with no fixed terms of repayment.
- (iv) Loan and other receivables from joint ventures are considered to have low credit risk and the loss allowance recognised during the year was therefore limited to 12-month expected credit loss.
- (v) Loans and other receivables are denominated in the following currencies:

	2019 HK\$'M	2018 HK\$'M
RMB	710.5	786.2
HKD	89.9	76.3
	800.4	862.5

Amounts due to joint ventures are analysed below:

- (i) Loan from a joint venture of HK\$454.0 million (2018: HK\$533.5 million) with effective interest rate of 4.44 per cent per annum (2018: 4.44 per cent per annum) is unsecured and repayable in 2020.
- (ii) Loans from joint ventures of HK\$489.1 million (2018: HK\$516.0 million) with effective interest rate of 2.58 per cent per annum (2018: 2.78 – 2.785 per cent per annum) are unsecured and have no fixed terms of repayment.
- (iii) The remaining balances are unsecured, interest free and with no fixed terms of repayment.
- (iv) Loan and other payables to joint ventures are denominated in RMB (2018: denominated in RMB).

22 Joint ventures (Continued)

Particulars of the principal joint ventures as at 31st December 2019 are listed below:

Name	Note	Issued share capital/ registered capital	Percentage of the Group's equity interest	Place of incorporation/ operation	Principal activity
Hua Yan Environmental Industry Development (Suzhou) Co., Ltd.	(i)	RMB75.0 million	55	PRC	Food and green waste treatment project
# Beijing Beiran & HKCG Gas Company Limited		RMB44.4 million	49	PRC	Gas sales and related businesses
Changzhou Hong Kong and China Gas Company Limited		RMB166.0 million	50	PRC	Gas sales and related businesses
Jinan Hong Kong and China Gas Company Limited		RMB470.0 million	49	PRC	Gas sales and related businesses
Nanjing Hong Kong and China Gas Company Limited		RMB700.0 million	49	PRC	Gas sales and related businesses
Suzhou Hong Kong and China Gas Company Limited	(i)	RMB200.0 million	55	PRC	Gas sales and related businesses
# Tongling Hong Kong and China Gas Company Limited	(i)	RMB100.0 million	70	PRC	Gas sales and related businesses
Wuhan Natural Gas Company Limited		RMB420.0 million	49	PRC	Gas sales and related businesses
# Xian Qinhu Natural Gas Company Limited		RMB1,000.0 million	49	PRC	Gas sales and related businesses
Zhangjiagang Hong Kong and China Gas Company Limited		RMB100.0 million	50	PRC	Gas sales and related businesses
Jilin Province Natural Gas Limited Company		RMB220.0 million	49	PRC	Mid-stream natural gas project
¹ S&T International Natural Gas Trading Company Limited		HK\$10.0 million	40	Hong Kong	Natural gas trading
Yieldway International Limited		HK\$2.0	50	Hong Kong	Property development
Maanshan ECO Auto Fuel Company Limited		RMB10.5 million	30	PRC	Vehicular fuel refilling station
Suzhou Industrial Park Qingyuan Hong Kong & China Water Company Limited		RMB1,200.0 million	50	PRC	Water supply and sewage treatment

Direct joint ventures of the Company

¹ Newly formed during the year

Note

(i) The Group can only exercise joint control over the board of directors in the joint ventures.

22 Joint ventures (Continued)

Particulars of the principal joint ventures as at 31st December 2019 are listed below: (Continued)

Name	Issued share capital/ registered capital	Percentage of the Group's equity interest	Place of incorporation/ operation	Principal activity
Held by Towngas China and the respective equity interest held by Towngas China is shown accordingly.				
Anqing Hong Kong and China Gas Company Limited	RMB73.0 million	50	PRC	Gas sales and related businesses
重慶港華燃氣有限公司	RMB20.0 million	50	PRC	Gas sales and related businesses
Hangzhou Hong Kong and China Gas Company Limited	US\$20.0 million	50	PRC	Gas sales and related businesses
Maanshan Hong Kong and China Gas Company Limited	US\$13.0 million	50	PRC	Gas sales and related businesses
Taian Taishan Hong Kong and China Gas Company Limited	RMB150.0 million	49	PRC	Gas sales and related businesses
Weifang Hong Kong and China Gas Company Limited	US\$16.9 million	50	PRC	Gas sales and related businesses
Weihai Hong Kong and China Gas Company Limited	RMB99.2 million	50	PRC	Gas sales and related businesses
Wuhu Hong Kong & China Gas Company Limited	RMB52.8 million	50	PRC	Gas sales and related businesses
Zibo Hong Kong and China Gas Company Limited	RMB100.0 million	50	PRC	Gas sales and related businesses
泰安市泰港燃氣有限公司	RMB139.2 million	49	PRC	Mid-stream natural gas project

The following amounts represent the Group's share of income and results of the joint ventures and are included in the consolidated income statement and statement of comprehensive income:

	2019 HK\$'M	2018 HK\$'M
Income	15,840.2	15,031.7
Expenses, including taxation	(15,098.7)	(13,508.3)
Profit after taxation and total comprehensive income	741.5	1,523.4

No individual joint ventures are considered to be material in the Group.

23 Financial assets at fair value through other comprehensive income

	2019 HK\$'M	2018 HK\$'M
Debt securities (note (a))	213.9	204.6
Equity securities (note (b))	2,928.0	922.4
	3,141.9	1,127.0

Notes

	2019 HK\$'M	2018 HK\$'M
(a) Debt securities		
Listed – Hong Kong	81.9	84.0
Listed – overseas	132.0	120.6
	213.9	204.6

	2019 HK\$'M	2018 HK\$'M
(b) Equity securities		
Listed – Hong Kong	227.8	216.8
Listed – overseas	2,378.4	131.5
Unlisted	321.8	574.1
	2,928.0	922.4

Included in the equity securities, it comprises HK\$168.6 million (2018: HK\$157.5 million) of perpetual bonds and HK\$2,759.4 million (2018: HK\$764.9 million) of investments that are engaged in the provision of natural gas and related services and gas pipeline construction services. These are strategic investments and the Group considers the classification of FVOCI to be more relevant.

Financial assets at FVOCI are denominated in the following currencies:

	2019 HK\$'M	2018 HK\$'M
RMB	2,625.8	617.9
HKD	133.6	147.0
USD	382.5	362.1
	3,141.9	1,127.0

24 Financial assets at fair value through profit or loss

	2019 HK\$'M	2018 HK\$'M
Equity securities (note (a))		
Current	188.5	303.5
Non-current	5,030.6	3,506.7
	5,219.1	3,810.2

Note

	2019 HK\$'M	2018 HK\$'M
(a) Equity securities		
Listed – Hong Kong	111.4	232.6
Listed – overseas	2,124.9	31.5
Unlisted	2,982.8	3,546.1
	5,219.1	3,810.2

Financial assets at FVPL are denominated in the following currencies:

	2019 HK\$'M	2018 HK\$'M
HKD	111.4	232.6
USD	77.1	70.9
RMB	5,030.6	3,506.7
	5,219.1	3,810.2

25 Derivative financial instruments

	2019		2018	
	Assets HK\$'M	Liabilities HK\$'M	Assets HK\$'M	Liabilities HK\$'M
Non-current				
Cross currency swap and interest rate swap contracts – cash flow hedges	42.8	(571.0)	27.9	(558.9)
Cross currency swap contracts – held-for-trading	42.9	-	22.1	-
Interest rate swap contracts – held-for-trading	3.3	-	5.4	-
Put option – held-for-trading (note 3)	265.1	-	-	-
	354.1	(571.0)	55.4	(558.9)
Current				
Cross currency swap and interest rate swap contracts – cash flow hedges	-	-	37.2	(50.6)
Foreign currency forward contracts – held-for-trading	1.4	-	1.0	(64.3)
	1.4	-	38.2	(114.9)

The fair value of hedging derivatives is classified as current assets or liabilities when the remaining maturity of the hedged item is less than 12 months.

The fair values of hedging derivatives are classified as non-current assets or liabilities when the remaining maturity of the hedged items is more than 12 months.

Hedge ineffectiveness

Hedge effectiveness is determined at the inception of the hedge relationship, and through periodic prospective effectiveness assessments to ensure that an economic relationship exists between the hedged item and hedging instrument.

The ineffective portion recognised in the profit or loss that arises from cash flow hedges amounts to a gain of HK\$0.2 million (2018: HK\$5.8 million).

25 Derivative financial instruments (Continued)

The major terms of the outstanding derivative contracts as at 31st December 2019 are as follows:

Notional amount	Maturity	Forward contract rate	Interest rate (per annum)		Exchange frequency	
			Receive	Pay	Receive	Pay
Cross currency swap and interest rate swap contracts – cash flow hedges						
RMB400 million	2021	HKD1 to RMB0.88	4.45%	1 month HIBOR + 0.58%	Annually	Monthly
USD100 million	2021	USD1 to RMB6.87	3 month LIBOR + 0.70%	4.43%	Quarterly	Quarterly
AUD50 million	2021	AUD1 to HKD7.78	6.43%	3.42%	Semi-annually	Semi-annually
AUD86 million	2022	AUD1 to HKD7.90 – HKD8.21	5.37% – 5.85%	2.75% – 3.42%	Semi-annually or annually	Semi-annually or annually
AUD25 million	2025	AUD1 to HKD5.42	3.83%	2.99%	Semi-annually	Semi-annually
JPY10 billion	2022	JPY100 to HKD9.705 – HKD9.897	1.19% – 1.36%	3.33% – 3.46%	Semi-annually	Semi-annually
RMB491 million	2022	HKD1 to RMB0.8539	3 month HIBOR + 0.80%	3.82%	Quarterly	Quarterly
USD50 million	2024	USD1 to RMB6.927	3 month LIBOR + 0.80%	4.05%	Quarterly	Quarterly
JPY2 billion	2027	JPY100 to HKD6.877	0.35%	2.9%	Annually	Quarterly
Foreign currency forward contracts – held-for-trading						
USD2 million/ USD4 million	2020	USD1 to HKD7.7475	Nil	Nil	Monthly	Monthly
USD2 million/ USD4 million	2020	USD1 to HKD7.7480	Nil	Nil	Monthly	Monthly
USD2 million/ USD4 million	2020	USD1 to HKD7.7490	Nil	Nil	Monthly	Monthly
Cross currency swap contracts – held-for-trading						
USD300 million	2024	USD1 to HKD7.8479	4.75%	4.24% – 4.25%	Semi-annually	Quarterly
Interest rate swap contracts – held-for-trading						
HKD270 million	2021	Not applicable	3%	1 month HIBOR + 0.55%	Annually	Annually

Gains and losses recognised in the hedging reserve in equity (note 36) on the swaps as of 31st December 2019 will be continuously released to the profit or loss until the repayment of relevant borrowings.

26 Retirement benefit assets/(liabilities)

	2019 HK\$'M	2018 HK\$'M
At 31st December	66.3	(23.8)

The Group operates a defined benefit retirement scheme in Hong Kong, namely the Workmen Retirement Scheme which is a final salary defined benefit scheme.

The amounts recognised in the consolidated statement of financial position are shown as follows:

	2019 HK\$'M	2018 HK\$'M
Fair value of plan assets	632.6	546.7
Present value of funded obligations	(566.3)	(570.5)
Net assets/(liabilities) in the consolidated statement of financial position	66.3	(23.8)

The plan assets did not include any shares of the Company as at 31st December 2019 (2018: nil).

The cost of the defined benefit retirement scheme recognised in the consolidated income statement is as follows:

	2019 HK\$'M	2018 HK\$'M
Current service cost	15.8	16.4
Net interest cost/(income)	0.4	(1.3)
Administrative expenses	0.1	0.1
Total (note 11)	16.3	15.2

The amounts recognised in the other comprehensive income are as follows:

	2019 HK\$'M	2018 HK\$'M
Actuarial loss due to liability experience	2.4	18.8
Actuarial gain due to financial assumption changes	(7.1)	(6.0)
Actuarial loss/(gain) due to demographic assumption changes	0.1	(9.7)
Actuarial (gains)/losses	(4.6)	3.1
Return on plan assets, excluding amounts included in interest income	(97.5)	70.3
Total	(102.1)	73.4

26 Retirement benefit assets/(liabilities) (Continued)

The movements in the defined benefit obligations are as follows:

	2019 HK\$'M	2018 HK\$'M
At 1st January	570.5	564.5
Current service cost	15.8	16.4
Interest cost	11.6	11.0
Benefits paid	(27.0)	(24.5)
Actuarial (gains)/losses	(4.6)	3.1
At 31st December	566.3	570.5

The movements in the fair value of plan assets are as follows:

	2019 HK\$'M	2018 HK\$'M
At 1st January	546.7	624.9
Return on plan assets, excluding amounts included in interest income	97.5	(70.3)
Interest income recognised in consolidated income statement	11.2	12.3
Contribution paid by employer	4.3	4.4
Benefits paid	(27.0)	(24.5)
Administrative expenses	(0.1)	(0.1)
At 31st December	632.6	546.7

The movements in the assets/(liabilities) recognised in the consolidated statement of financial position are as follows:

	2019 HK\$'M	2018 HK\$'M
At 1st January	(23.8)	60.4
Remeasurement effects recognised in other comprehensive income	102.1	(73.4)
Total cost of defined benefit retirement scheme (note 11)	(16.3)	(15.2)
Contribution paid by employer	4.3	4.4
At 31st December	66.3	(23.8)

26 Retirement benefit assets/(liabilities) (Continued)

The major categories of plan assets as a percentage of total plan assets are as follows:

	2019 %	2018 %
Equity securities	79.0	75.0
Debt securities	19.0	23.0
Cash	2.0	2.0

The principal actuarial assumptions used are as follows:

	2019 %	2018 %
Discount rate	1.8	2.1
Expected rate of future salary increases	4.0	4.5

The sensitivity of the defined benefit obligation to changes in the weighted principal assumptions is:

	Impact on defined benefit obligation		
	Change in assumption	Increase in assumption	Decrease in assumption
Discount rate	0.25%	Decrease by 2.5%	Increase by 2.6%
Salary increase rate	0.25%	Increase by 2.4%	Decrease by 2.4%
Maximum salary scale increase rate	0.25%	Increase by 0.0%	Decrease by 0.1%

The above sensitivity analyses are based on a change in an assumption while holding all other assumptions constant. In practice, this is unlikely to occur, and changes in some of the assumptions may be correlated. When calculating the sensitivity of the defined benefit obligation to significant actuarial assumptions the same method (present value of the defined benefit obligation calculated with the projected unit credit method at the end of the reporting period) has been applied as when calculating the pension liability recognised within the statement of financial position.

The methods and types of assumptions used in preparing the sensitivity analysis did not change compared to the previous year.

Expected contributions to the scheme for the year ending 31st December 2020 are HK\$4.2 million.

26 Retirement benefit assets/(liabilities) (Continued)

Through its defined benefit pension plans, the Group is exposed to a number of risks, the most significant of which are detailed below:

Investment risk	Strong investment returns tend to increase the fair value of scheme assets and therefore improve the scheme's financial position as measured by the net defined benefit liability/asset, whilst poor or negative investment returns tend to weaken the position. The scheme assets are invested in a diversified portfolio of equities, bonds and cash, covering major geographical locations around the world. The diversification of asset classes and geographical locations helps to reduce the concentration of risk associated with the scheme investments.
Interest rate risk	The defined benefit obligation (the "DBO") is calculated using a discount rate based on market bond yields. A decrease in the bond yields will increase the DBO.
Salary risk	The DBO is calculated with reference to the future salaries of members because the scheme's benefits are salary-related. Salary increases that are higher than expected will increase the DBO.

The weighted average duration of the benefit obligation is 10.2 years. Expected maturity analysis of benefit undiscounted payments:

	Within 5 years HK\$'M	Beyond 5 years but within 10 years HK\$'M	Beyond 10 years HK\$'M
At 31st December 2019			
Expected benefit payments	135.1	194.6	548.0

27 Other non-current assets

	2019 HK\$'M	2018 HK\$'M
Aviation fuel facility construction receivable (note (a))	2,827.2	2,702.7
Other receivables and prepayments (note (b))	902.6	771.3
	3,729.8	3,474.0

Notes

- (a) Aviation fuel facility construction receivable is denominated in HKD, unsecured and will be recovered by monthly instalments up to 2047.
- (b) The balance includes prepayments for inventory and capital expenditures to suppliers.

28 Inventories

	2019 HK\$'M	2018 HK\$'M
Stores and materials	1,654.2	1,844.7
Work in progress	709.5	636.0
	2,363.7	2,480.7

The Group wrote down the carrying value of inventories by HK\$14.4 million (2018: HK\$5.7 million) to its net realisable value during the year ended 31st December 2019.

29 Trade and other receivables

	2019 HK\$'M	2018 HK\$'M
Trade receivables (note (a))	3,819.8	3,563.5
Payments in advance (note (b))	1,735.9	1,581.5
Other receivables	2,445.5	2,470.9
	8,001.2	7,615.9

Trade and other receivables are denominated in the following currencies:

	2019 HK\$'M	2018 HK\$'M
RMB	4,973.2	4,845.4
HKD	2,961.9	2,730.7
USD	60.0	33.8
Others	6.1	6.0
	8,001.2	7,615.9

Notes

- (a) The Group has established credit policies for different types of customers. The credit periods offered for trade receivables, which are subject to periodic review by management, range from 30 to 60 days except for gas receivables of the Company which are due by 8 working days after billing date. The aging analysis of the trade receivables, net of impairment provision, is as follows:

	2019 HK\$'M	2018 HK\$'M
0 – 30 days	3,408.5	3,106.9
31 – 60 days	90.4	107.7
61 – 90 days	100.4	126.4
Over 90 days	220.5	222.5
	3,819.8	3,563.5

29 Trade and other receivables (Continued)

Notes (Continued)

(a) (Continued)

The Group applies the HKFRS 9 simplified approach to measuring expected credit losses which uses a lifetime expected credit loss allowance for trade receivables. Note 3(b) provides for details about the calculation of the allowance.

The loss allowance further increased from HK\$221.2 million to HK\$248.0 million during the year.

(b) Balance mainly represents prepayment for purchase of materials and services in relation to the Group's gas, water and New Energy businesses in Hong Kong and mainland China. As at 31st December 2019, the directors of the Company reviewed the composition of the balance and considered the amount is recoverable.

30 Time deposits, cash and bank balances

	2019 HK\$'M	2018 HK\$'M
Time deposits over three months	158.6	338.6
Time deposits up to three months	2,463.6	3,643.7
Cash and bank balances	5,385.3	4,857.1
	7,848.9	8,500.8

The average effective interest rates on time deposits in Hong Kong and mainland China are 3.02 per cent and 1.79 per cent per annum respectively (2018: 2.70 per cent and 1.82 per cent per annum). These deposits have average maturity dates within 56 days (2018: 58 days).

Time deposits, cash and bank balances are denominated in the following currencies:

	2019 HK\$'M	2018 HK\$'M
USD	106.7	1,771.5
RMB	5,249.1	5,366.8
HKD	2,604.6	1,660.0
THB	24.9	37.0
Others	22.2	4.1
	8,007.5	8,839.4

The conversion of Renminbi denominated balances into foreign currencies and the remittance of foreign currencies denominated bank balances and cash out of the PRC are subject to relevant rules and regulations of foreign exchange control promulgated by the PRC government.

31 Trade payables and other liabilities

	2019 HK\$'M	2018 HK\$'M
Trade payables (note (a))	3,006.5	3,078.1
Other payables and accruals (note (b))	4,289.7	4,225.5
Contract liabilities (note (c))	7,310.3	6,625.8
Lease liabilities (note (d))	111.5	-
	14,718.0	13,929.4

Notes

(a) The aging analysis of the trade payables is as follows:

	2019 HK\$'M	2018 HK\$'M
0 – 30 days	1,292.7	1,404.7
31 – 60 days	499.2	399.3
61 – 90 days	304.5	300.0
Over 90 days	910.1	974.1
	3,006.5	3,078.1

(b) The balances mainly represent accrual for services or goods received from suppliers.

(c) The balances mainly represent non-refundable advance received from customers for utility connection services, provision of gas and provision of maintenance services.

The following table shows the amount of the revenue recognised in the current reporting period relates to contract liability balance at the beginning of the year:

	2019 HK\$'M	2018 HK\$'M
Revenue recognised that was included in the contract liabilities balance at the beginning of the year	3,265.4	3,378.3

As at 31st December 2019, the amount of unsatisfied performance obligations expected to be recognised within one year and after one year are HK\$3,773.2 million (2018: HK\$3,664.9 million) and HK\$4,032.5 million (2018: HK\$4,246.5 million) respectively.

(d) As at 31st December 2019, the weighted average incremental borrowing rate applied to the lease liabilities were 3% for leases in Hong Kong and 5% for leases in mainland China.

Trade payables and other liabilities are denominated in the following currencies:

	2019 HK\$'M	2018 HK\$'M
RMB	12,497.7	11,648.3
HKD	2,037.3	2,064.9
USD	163.6	199.5
Others	19.4	16.7
	14,718.0	13,929.4

32 Borrowings

	2019 HK\$'M	2018 HK\$'M
Non-current		
Bank and other loans	14,646.2	14,400.7
Guaranteed notes (note (a))	14,049.4	13,208.6
	28,695.6	27,609.3
Current		
Bank and other loans	9,240.6	7,563.0
Guaranteed notes (note (a))	–	499.7
Redeemable perpetual securities (note (b))	–	2,349.6
	9,240.6	10,412.3
Total borrowings	37,936.2	38,021.6

Notes

(a) Guaranteed notes comprise:

The HK\$11,966.0 million, RMB400.0 million, AUD161.0 million and JPY12,000.0 million (2018: HK\$11,608.0 million, RMB400.0 million, AUD161.0 million and JPY12,000.0 million) (which in aggregate is equivalent to HK\$14,154.3 million (2018: HK\$13,809.3 million)) guaranteed notes were issued by HKCG (Finance) Limited, a wholly-owned subsidiary of the Company, between 2nd June 2009 and 28th October 2019. The notes are unsecured and guaranteed by the Company as to repayment, carry fixed coupon rates ranging from 0.35 per cent to 6.43 per cent per annum payable quarterly, half-yearly or annually in arrear and have maturity terms between 3 to 40 years.

(b) Redeemable perpetual securities

In January 2014, the Group issued its first perpetual subordinated guaranteed capital securities (the “perpetual capital securities”), amounting to US\$300.0 million through, Towngas (Finance) Limited, a wholly-owned subsidiary for cash. The perpetual capital securities are guaranteed by the Company, bear distribution at a rate of 4.75 per cent per annum for the first five years and thereafter will have a floating distribution rate. The perpetual capital securities are perpetual and are redeemable, at the option of the Group, in January 2019 or thereafter every six months on the distribution payment date. The distribution payment can be deferred at the discretion of the Group. Therefore, they are classified as equity instruments, and recorded in equity in the consolidated statement of financial position up to 17th December 2018, on which a redemption notice was issued that the issuer would redeem all of the perpetual capital securities on 28th January 2019 (the “First Call Date”) at their principal amount together with any distribution accrued to the First Call Date. In such case, the perpetual capital securities were reclassified to redeemable perpetual securities under current borrowings as at 31st December 2018.

New perpetual capital securities of the same amount, i.e. US\$300.0 million, were issued subsequently in February 2019 (note 37) to refinance the redemption and were treated as equity in the consolidated statement of financial position as at 31st December 2019. The carrying value of these securities as at 31st December 2019 is HK\$2,384.2 million.

32 Borrowings (Continued)

Notes (Continued)

(c) The maturity of borrowings is as follows:

	Bank and other loans		Guaranteed notes and redeemable perpetual securities	
	2019 HK\$'M	2018 HK\$'M	2019 HK\$'M	2018 HK\$'M
Within 1 year	9,240.6	7,563.0	–	2,849.3
Between 1 and 2 years	4,775.7	1,841.3	988.4	–
Between 2 and 5 years	9,686.3	12,541.0	3,990.7	4,039.3
Wholly repayable within 5 years	23,702.6	21,945.3	4,979.1	6,888.6
Wholly repayable over 5 years	184.2	18.4	9,070.3	9,169.3

(d) The exposure of the Group's borrowings to interest rate changes and the contractual repricing dates are all within 6 months from the date of statement of financial position, except for guaranteed notes and some bank loans as they are subjected to fixed interest rate and with maturity term ranged from 1 to 40 years. The effective interest rates of the Group's borrowings at the date of statement of financial position are as follows:

	2019					2018				
	HKD	USD	RMB	AUD	JPY	HKD	USD	RMB	AUD	JPY
Bank and other loans	3.3%	4.3%	4.3%	N/A	1.2%	2.9%	4.4%	4.6%	N/A	1.2%
Guaranteed notes and redeemable perpetual securities	3.4%	N/A	2.9%	3.1%	3.3%	3.5%	4.8%	2.9%	3.1%	3.3%

(e) Saved as disclosed above, carrying value of borrowings approximate their fair value as the balances either at variable rates or the impact of discounting is not significant.

(f) The carrying amounts of the borrowings are denominated in the following currencies:

	2019 HK\$'M	2018 HK\$'M
HKD	20,694.2	21,994.9
RMB	14,305.0	11,118.7
USD	1,181.7	3,146.6
AUD	880.2	888.6
JPY	875.1	872.8
	37,936.2	38,021.6

33 Deferred taxation

The movements in the deferred taxation are as follows:

	2019 HK\$'M	2018 HK\$'M
At 1st January	6,099.1	5,723.1
Changes in accounting policy	(5.7)	92.0
At 1st January (restated)	6,093.4	5,815.1
Charged to the profit or loss	718.3	376.5
Charged to other comprehensive income	497.2	19.6
Withholding tax	(45.1)	(33.1)
Exchange differences	(83.3)	(79.0)
At 31st December	7,180.5	6,099.1

Prior to offsetting of balances within the same taxation jurisdiction, the movements in deferred tax liabilities and assets during the year are as follows:

Deferred tax liabilities	Accelerated tax depreciation		Mining and oil properties		Financial instruments		Others		Total	
	2019 HK\$'M	2018 HK\$'M	2019 HK\$'M	2018 HK\$'M	2019 HK\$'M	2018 HK\$'M	2019 HK\$'M	2018 HK\$'M	2019 HK\$'M	2018 HK\$'M
At 1st January	3,499.0	3,257.3	1,679.1	1,679.0	110.0	-	830.1	805.9	6,118.2	5,742.2
Changes in accounting policy	-	-	(0.3)	-	-	92.0	(5.4)	-	(5.7)	92.0
At 1st January (restated)	3,499.0	3,257.3	1,678.8	1,679.0	110.0	92.0	824.7	805.9	6,112.5	5,834.2
Charged/(credited) to profit or loss	275.0	307.3	(88.7)	(10.6)	434.9	-	97.1	79.8	718.3	376.5
Charged to other comprehensive income	-	-	-	-	497.2	19.6	-	-	497.2	19.6
Withholding tax	-	-	-	-	-	-	(45.1)	(33.1)	(45.1)	(33.1)
Exchange differences	(166.0)	(65.6)	128.2	10.7	(8.1)	(1.6)	(37.4)	(22.5)	(83.3)	(79.0)
At 31st December	3,608.0	3,499.0	1,718.3	1,679.1	1,034.0	110.0	839.3	830.1	7,199.6	6,118.2

Deferred tax assets	Provisions		Tax losses		Total	
	2019 HK\$'M	2018 HK\$'M	2019 HK\$'M	2018 HK\$'M	2019 HK\$'M	2018 HK\$'M
At 1st January and 31st December	(8.3)	(8.3)	(10.8)	(10.8)	(19.1)	(19.1)
Net deferred tax liabilities at 31st December					7,180.5	6,099.1

Deferred tax assets are recognised for tax loss carry-forwards to the extent that the realisation of the related tax benefit through future taxable profits is probable. The Group did not recognise deferred tax assets of HK\$762.6 million (2018: HK\$705.4 million) in respect of losses amounting to HK\$3,270.7 million (2018: HK\$3,025.1 million) that can be carried forward and set off against future taxable income. These tax losses have no expiry dates except for the tax losses of HK\$2,622.2 million (2018: HK\$2,425.9 million) which will expire at various dates up to and including 2024 (2018: 2023).

34 Other non-current liabilities

	2019 HK\$'M	2018 HK\$'M
Customers' deposits (note (a))	1,389.3	1,371.5
Contract liabilities (note (b))	734.3	637.7
Loan payable to non-controlling shareholders	30.2	-
Lease liabilities (note (c))	226.9	-
	2,380.7	2,009.2

Notes

- (a) Customers' deposits mainly represent deposits received from customers pursuant to gas supply contracts agreed with customers and are repayable upon termination of gas supply contracts. The carrying values of the deposits approximate the fair value as the impact of discount is not significant.
- (b) Contract liabilities include only the non-current portion. The current portion is disclosed in note 31 in the report.
- (c) Lease liabilities include only lease with contractual maturities over 1 year, the current portion is disclosed in note 31 in the report.

35 Share capital

	Number of shares		Share capital	
	2019	2018	2019 HK\$'M	2018 HK\$'M
Issued and fully paid:				
At beginning of year	15,386,411,131	13,987,646,483	5,474.7	5,474.7
Bonus shares	1,538,641,113	1,398,764,648	-	-
At end of year	16,925,052,244	15,386,411,131	5,474.7	5,474.7

36 Reserves

	Investment revaluation reserve HK\$'M	Hedging reserve HK\$'M	Exchange reserve HK\$'M	Retained profits HK\$'M	Total HK\$'M
As at 1st January 2019	93.3	53.7	(651.3)	57,430.3	56,926.0
Adjustment on adoption of HKFRS 16, net of taxation (note 2(b))	-	-	-	(30.6)	(30.6)
As at 1st January 2019 (restated)	93.3	53.7	(651.3)	57,399.7	56,895.4
Profit attributable to shareholders	-	-	-	6,965.7	6,965.7
Other comprehensive income:					
Remeasurements of retirement benefit	-	-	-	102.1	102.1
Change in value of financial assets at FVOCI	1,030.6	-	-	-	1,030.6
Change in fair value of cash flow hedges	-	(15.1)	-	-	(15.1)
Share of other comprehensive income of associates	71.0	10.8	-	-	81.8
Exchange differences	-	-	(777.0)	-	(777.0)
Total comprehensive income for the year	1,101.6	(4.3)	(777.0)	7,067.8	7,388.1
Further acquisition of subsidiaries (note 42(b))	-	-	-	21.1	21.1
2018 final dividend paid	-	-	-	(3,538.9)	(3,538.9)
2019 interim dividend paid	-	-	-	(2,031.0)	(2,031.0)
At 31st December 2019	1,194.9	49.4	(1,428.3)	58,918.7	58,734.7
Balance after 2019 final dividend proposed	1,194.9	49.4	(1,428.3)	55,025.9	54,841.9
2019 final dividend proposed	-	-	-	3,892.8	3,892.8
	1,194.9	49.4	(1,428.3)	58,918.7	58,734.7

36 Reserves (Continued)

	Investment revaluation reserve HK\$'M	Hedging reserve HK\$'M	Exchange reserve HK\$'M	Retained profits HK\$'M	Total HK\$'M
At 1st January 2018	7.0	138.8	1,651.4	53,166.9	54,964.1
Changes in accounting policies	119.6	-	-	134.9	254.5
As at 1st January 2018 (restated)	126.6	138.8	1,651.4	53,301.8	55,218.6
Profit attributable to shareholders	-	-	-	9,312.8	9,312.8
Other comprehensive income:					
Remeasurements of retirement benefit	-	-	-	(73.4)	(73.4)
Change in value of financial assets at FVOCI	(33.3)	-	-	-	(33.3)
Change in fair value of cash flow hedges	-	(88.7)	-	-	(88.7)
Share of other comprehensive income of an associate	-	3.6	-	-	3.6
Exchange differences	-	-	(2,302.7)	-	(2,302.7)
Total comprehensive income for the year	(33.3)	(85.1)	(2,302.7)	9,239.4	6,818.3
Partial disposal of a subsidiary	-	-	-	12.0	12.0
Further acquisition of subsidiaries	-	-	-	(22.2)	(22.2)
Redemption of perpetual capital securities	-	-	-	(37.1)	(37.1)
2017 final dividend paid	-	-	-	(3,217.2)	(3,217.2)
2018 interim dividend paid	-	-	-	(1,846.4)	(1,846.4)
At 31st December 2018	93.3	53.7	(651.3)	57,430.3	56,926.0
Balance after 2018 final dividend proposed	93.3	53.7	(651.3)	53,891.4	53,387.1
2018 final dividend proposed	-	-	-	3,538.9	3,538.9
	93.3	53.7	(651.3)	57,430.3	56,926.0

37 Perpetual capital securities

In December 2018, a redemption notice was issued that the issuer will redeem all of the old perpetual capital securities on 28th January 2019 (the “First Call Date”) at their principal amount together with any distribution accrued to the First Call Date. In such case, the perpetual capital securities were reclassified to current borrowings as at 31st December 2018.

In February 2019, the Group issued the new perpetual capital securities, amounting to US\$300 million through, Towngas (Finance) Limited, a wholly-owned subsidiary for cash.

The perpetual capital securities are guaranteed by the Company, bear distribution at a rate of 4.75 per cent per annum for the first five years and thereafter at a fixed distribution rate. With no fixed maturity and the distribution payment can be deferred at the discretion of the Group, and these perpetual capital securities are redeemable at the Group’s option on or after 12th February 2024, they are classified as equity instruments, and recorded in equity in the consolidated statement of financial position.

38 Contingent liabilities

The Company and the Group did not have any material contingent liabilities as at 31st December 2019 and 2018.

39 Commitments

(a) Capital expenditures for property, plant and equipment

	2019 HK\$'M	2018 HK\$'M
Contracts had been entered into but not brought into the consolidated financial statements at 31st December	4,491.2	3,496.0

(b) Share of capital expenditures for property, plant and equipment of joint ventures

	2019 HK\$'M	2018 HK\$'M
Contracts had been entered into but not brought into the consolidated financial statements at 31st December	3,062.6	2,912.1

(c) The Group has committed to provide sufficient funds in the forms of capital and loan contributions to finance certain gas and New Energy projects under various contracts in mainland China. The directors of the Company estimate that as at 31st December 2019, the Group's commitments to these projects were approximately HK\$2,303.8 million (2018: HK\$1,848.6 million).

(d) Lease commitments

Lessor

The Group leases out the building facilities of the commercial complex and car parks of Grand Waterfront (further details of the carrying value of the property are contained in note 17). Except for certain car parks rented out on an hourly or a monthly basis, these leases typically run for a period of 2 to 5 years. At 31st December 2019, future aggregate minimum lease payments receivable under non-cancellable operating leases are as follows:

	2019 HK\$'M	2018 HK\$'M
Not later than 1 year	16.4	23.7
Later than 1 year and not later than 5 years	14.4	14.5
	30.8	38.2

40 Related party transactions

Henderson Land Development Company Limited (“Henderson”) is a related party of the Group by virtue of its significant interest in and influence over the Group. Other related parties include subsidiaries of Henderson and one bank with a common director with the Company during the year. During the year, the transactions carried out and year end balances with the associates, joint ventures and other related parties are shown as follows:

(a) Interest income and sales of goods and services

	2019 HK\$'M	2018 HK\$'M
Associates		
Sale of goods and services (note (i))	18.2	20.2
Loan interest income (note (ii))	53.7	79.8
Joint ventures		
Sale of goods and services (note (i))	85.4	69.6
Loan interest income (note (ii))	9.5	12.8
Other related parties		
Sale of goods and services (note (i))	25.0	65.7
Interest income from bank deposits (note (i))	1.3	3.3

40 Related party transactions (Continued)

(b) Interest expense and purchase of goods and services

	2019 HK\$'M	2018 HK\$'M
Associates		
Purchase of goods and services (note (i))	538.6	468.2
Joint ventures		
Purchase of goods and services (note (i))	44.6	75.7
Loan interest expenses (note (ii))	32.5	27.6
Other related parties		
Purchase of goods and services (note (i))	22.5	21.9
Interest expense on bank loans (note (i))	18.2	25.0

Notes

- (i) These related party transactions were conducted at prices and terms as agreed by parties involved.
- (ii) For the terms and year end balances of loans, please refer to notes 21 and 22.
- (c) Year end balances arising from interest income, interest expense and sale or purchase of goods and services from other related parties

	2019 HK\$'M	2018 HK\$'M
Time deposits and interest receivables	404.9	-
Bank loans and interest payables	156.4	443.1
Trade receivables	3.8	4.5
Trade payables	0.1	-

Note

For the terms and year end balances of time deposits and interest receivables, bank loans and interest payables, trade receivables and trade payables, please refer to notes 29, 30, 31 and 32.

- (d) Other related party transactions are also disclosed in note 12.

41 Notes to consolidated cash flow statement

(a) Reconciliation of profit before taxation to net cash from operating activities

	2019 HK\$'M	2018 HK\$'M
Profit before taxation	10,403.9	12,339.5
Share of results of associates	(1,820.4)	(3,589.5)
Share of results of joint ventures	(741.5)	(1,523.4)
Fair value gain on investment property	(16.0)	(12.5)
Impairment of trade receivables	53.7	37.5
Provision for assets	851.9	200.0
Ineffective portion on cash flow hedges	(0.2)	(5.8)
Interest income	(219.6)	(299.3)
Interest expense	1,230.4	1,176.6
Dividend income from investments in securities	(105.4)	(125.8)
Depreciation and amortisation	2,753.5	2,537.2
Impairment provision on goodwill	333.0	-
Loss/(gain) on disposal/write off of property, plant and equipment	25.8	(1.2)
Gain on disposal of right-of-use assets/leasehold land	(0.1)	(40.3)
Net realised loss/(gain) on financial assets at FVOCI	3.7	(2.8)
Net realised and unrealised gain on investments in financial assets at FVPL and derivative financial instruments	(1,861.7)	(83.0)
Tax paid	(930.0)	(1,542.7)
Exchange differences	(45.0)	280.9
Changes in working capital		
Increase in customers' deposits	17.9	39.9
Decrease in inventories	92.8	44.8
Increase in trade and other receivables	(953.7)	(621.9)
Increase in trade payables and other liabilities	797.9	618.2
Increase in asset retirement obligations	29.5	1.7
Changes in retirement benefit assets	12.0	10.8
Net cash from operating activities	9,912.4	9,438.9

41 Notes to consolidated cash flow statement (Continued)

(b) Reconciliation of liabilities arising from financing activities

	Leases HK\$'M	Borrowings HK\$'M
At 31st December 2018	–	38,021.6
Recognised on adoption of HKFRS 16 (note 2(b))	432.4	–
At 1st January 2019	432.4	38,021.6
Cash flows	(144.9)	2,570.8
Exchange differences	(7.3)	(245.9)
Redemption of perpetual capital securities	–	(2,405.4)
Other non-cash movement	58.2	(4.9)
At 31st December 2019	338.4	37,936.2

- (c) During the year ended 31st December 2019, total cash outflow for lease was included in the statement of cash flows in (a) interest paid of HK\$16.3 million under “financing activities”, (b) principal elements of lease payments of HK\$128.6 million under “financing activities”.

42 Business combinations

(a) Business combination under Towngas China

For the year ended 31st December 2019, Towngas China acquired the following business:

	Purchase consideration HK\$'M
青島匯森石油天然氣有限公司	42.5

The inclusion of the acquired business does not have a significant impact of the Group's turnover and profit for the year.

42 Business combinations (Continued)

(a) Business combination under Towngas China (Continued)

The details of fair value of net identifiable assets acquired and goodwill are as follows:

	Acquiree's fair value at acquisition date HK\$'M
Property, plant and equipment (note 16)	17.3
Right-of-use assets (note 18(a))	4.8
Trade and other receivables	0.2
Trade and other payables	(0.2)
Net assets	22.1
Non-controlling interests	-
Net identifiable assets acquired	22.1
Goodwill (note 19(a))	20.4
Purchase consideration	42.5

The goodwill is attributable to the future profitability of the acquired business and the synergies expected to arise after the Group's acquisition.

Net cash flow arising on acquisition:

	HK\$'M
Purchase consideration for acquisition of business, settled in cash	42.5
Cash and cash equivalents in business acquired	-
Cash outflow on acquisition of business	42.5

(b) Further acquisition of subsidiaries

During the year, the Group has further acquired the interest in several subsidiaries. The total consideration for all further acquisitions is approximately HK\$37.5 million. The difference between the share of net assets value acquired and total consideration of HK\$21.1 million was recognised directly in equity for these transactions with non-controlling interests.

(c) Apart from the above, there were no other material acquisitions during the year ended 31st December 2019.

43 Statement of financial position of the Company

	2019 HK\$'M	2018 HK\$'M
Assets		
Non-current assets		
Property, plant and equipment	12,510.2	12,111.1
Right-of-use assets	285.5	–
Leasehold land	–	211.0
Subsidiaries	22,169.1	19,508.2
Associate	664.7	631.0
Joint ventures	831.7	831.7
Retirement benefit assets	66.3	–
	36,527.5	33,293.0
Current assets		
Inventories	1,039.4	1,125.2
Trade and other receivables	2,203.4	2,114.5
Loan and other receivables from associates	21.6	21.6
Other receivables from joint ventures	32.6	24.3
Derivative financial instruments	0.5	–
Time deposits up to three months, cash and bank balances	1,006.2	1,587.2
	4,303.7	4,872.8
Current liabilities		
Trade payables and other liabilities	(1,500.5)	(1,537.9)
Provision for taxation	(663.6)	(187.4)
Borrowings	(1,650.0)	–
	(3,814.1)	(1,725.3)
Total assets less current liabilities	37,017.1	36,440.5
Non-current liabilities		
Loan and other payables to subsidiaries	(13,456.2)	(12,333.4)
Deferred taxation	(1,439.4)	(1,393.5)
Retirement benefit liabilities	–	(23.8)
Borrowings	(791.8)	(1,040.8)
Other non-current liabilities	(1,413.3)	(1,355.4)
	(17,100.7)	(16,146.9)
Net assets	19,916.4	20,293.6

43 Statement of financial position of the Company (Continued)

	2019 HK\$'M	2018 HK\$'M
Capital and reserves		
Share capital	5,474.7	5,474.7
Retained profits (note (a))	14,441.7	14,818.9
	19,916.4	20,293.6

Approved by the Board of Directors on 19th March 2020

Lee Ka-kit
Director

David Li Kwok-po
Director

43 Statement of financial position of the Company (Continued)

Note

(a) Retained profits

	HK\$'M
At 1st January 2019	14,818.9
Changes in accounting policy (in relation to HKFRS 16)	(1.4)
At 1st January 2019 (restated)	14,817.5
Profit attributable to shareholders	5,092.0
Other comprehensive income:	
Remeasurements of retirement benefit	102.1
Total comprehensive income for the year	5,194.1
2018 final dividend paid	(3,538.9)
2019 interim dividend paid	(2,031.0)
At 31st December 2019	14,441.7
Balance after 2019 final dividend proposed	10,548.9
2019 final dividend proposed	3,892.8
	14,441.7
At 1st January 2018	14,730.0
Profit attributable to shareholders	5,225.9
Other comprehensive income:	
Remeasurements of retirement benefit	(73.4)
Total comprehensive income for the year	5,152.5
2017 final dividend paid	(3,217.2)
2018 interim dividend paid	(1,846.4)
At 31st December 2018	14,818.9
Balance after 2018 final dividend proposed	11,280.0
2018 final dividend proposed	3,538.9
	14,818.9

44 Event after the reporting period

The outbreak of the Coronavirus Disease 2019 (the "COVID-19") causing pneumonia has been expanded across China and globally after the year end of 2019. While the impact of the COVID-19 on the mainland economy for the whole of 2020 is still uncertain, it will inevitably, unfavourably affect commercial and industrial gas sales in the short term. With public utilities as its core business, the Group has a relatively strong resilience to the impact of economic downturns, given its continuing efforts to broaden sources of revenue and cut expenditure and operating costs. It is expected that when the epidemic is over, the Group's businesses will return to normal within a relatively short period of time. Meanwhile, management will continue to assess the impact on the Group's operations and financial performance and closely monitor the Group's exposure to the risks and uncertainties in connection with the coronavirus pneumonia epidemic.

Subsidiaries

The following is a list of the principal subsidiaries as at 31st December 2019:

Name	Issued share capital/ registered capital	Percentage of issued/ registered capital held	Place of incorporation/ operation	Principal activity
Gas and related businesses in Hong Kong				
Summit Result Developments Limited	HK\$100	100	Hong Kong	Customers centre
Towngas Enterprise Limited	HK\$2	100	Hong Kong	Café, restaurant and retail sales
Uticom Limited	HK\$100	100	Hong Kong	Development of automatic meter reading system
# Quality Testing Services Limited	HK\$10,000	100	Hong Kong	Laboratory testing
Gas, water and related businesses in mainland China				
Chaozhou Hong Kong and China Gas Company Limited	HK\$100.0 million	60	PRC	Gas sales and related businesses
Danyang Hong Kong and China Gas Company Limited	RMB60.0 million	80	PRC	Gas sales and related businesses
Fengcheng Hong Kong and China Gas Company Limited	RMB88.0 million	55	PRC	Gas sales and related businesses
Guangzhou Dongyong Hong Kong & China Gas Company Limited	HK\$71.3 million	82.6	PRC	Gas sales and related businesses
Guangzhou Hong Kong and China Gas Company Limited	RMB105.0 million	80	PRC	Gas sales and related businesses
Jiangxi Hong Kong and China Gas Company Limited	RMB25.9 million	56	PRC	Gas sales and related businesses
Jilin Hong Kong and China Gas Company Limited	RMB100.0 million	63	PRC	Gas sales and related businesses
Jingxian Hong Kong and China Gas Company Limited	RMB79.0 million	81	PRC	Gas sales and related businesses
† Peixian Hong Kong and China Gas Company Limited	RMB100.0 million	100	PRC	Gas sales and related businesses
† Pingxiang Hong Kong & China Gas Company Limited	RMB104.8 million	100	PRC	Gas sales and related businesses
† Suining Hong Kong and China Gas Company Limited	RMB66.5 million	100	PRC	Gas sales and related businesses
Taizhou Hong Kong and China Gas Company Limited	RMB83.0 million	65	PRC	Gas sales and related businesses
Taizhou Yongan Hong Kong and China Gas Company Limited	US\$10.0 million	93.9	PRC	Gas sales and related businesses
Wujiang Hong Kong and China Gas Company Limited	RMB60.0 million	80	PRC	Gas sales and related businesses
Xuzhou Hong Kong and China Gas Company Limited	RMB125.0 million	80	PRC	Gas sales and related businesses
Yixing Hong Kong and China Gas Company Limited	RMB124.0 million	80	PRC	Gas sales and related businesses
† Zhang Shu Hong Kong & China Gas Company Limited	US\$5.0 million	100	PRC	Gas sales and related businesses
Zhongshan Hong Kong and China Gas Limited	RMB96.0 million	70	PRC	Gas sales and related businesses
常州金壇港華燃氣有限公司	RMB60.0 million	60	PRC	Gas sales and related businesses
† 豐縣港華燃氣有限公司	US\$4.5 million	100	PRC	Gas sales and related businesses
饒平港華燃氣有限公司	HK\$126.0 million	60	PRC	Gas sales and related businesses
† 新密港華燃氣有限公司	US\$12.5 million	100	PRC	Gas sales and related businesses

Direct subsidiaries of the Company

† Wholly foreign-owned enterprises

Subsidiaries (Continued)

The following is a list of the principal subsidiaries as at 31st December 2019: (Continued)

Name	Issued share capital/ registered capital	Percentage of issued/ registered capital held	Place of incorporation/ operation	Principal activity
Gas, water and related businesses in mainland China (Continued)				
† 港華支付科技(深圳)有限公司	RMB28.0 million	100	PRC	Payment gateway and related businesses
瀋陽三全工程監理諮詢有限公司	RMB3.0 million	60	PRC	Project management
† Maanshan Hong Kong and China Water Company Limited	RMB212.6 million	100	PRC	Water supply and related businesses
# Wuhu Hong Kong and China Water Company Limited	RMB400.0 million	75	PRC	Water supply and related businesses
Wujiang Hong Kong and China Water Company Limited	RMB860.0 million	80	PRC	Water supply and related businesses
† 安徽省江北華衍水務有限公司	RMB374.4 million	100	PRC	Water supply and related businesses
† Hong Kong & China Gas Investment Limited	US\$75.0 million	100	PRC	Investment holding
* Towngas China Company Limited	2,870,687,008 shares of HK\$0.1 each	67.8	Cayman Islands/ Hong Kong	Investment holding
¹ Hong Kong and China Gas Agricultural Investment (Nanjing) Limited	RMB30.0 million	100	PRC	Agricultural and related businesses
港華儲氣(金壇)有限公司	RMB300.0 million	100	PRC	Gas storage project
The following subsidiaries engaged in gas businesses are held by Towngas China and the respective equity interest held by Towngas China is shown accordingly.				
† An Shan Hong Kong and China Gas Company Limited	US\$15.0 million	100	PRC	Gas sales and related businesses
Baotou Hong Kong & China Gas Company Limited	RMB20.0 million	85	PRC	Gas sales and related businesses
Beipiao Hong Kong and China Gas Company Limited	RMB56.0 million	80	PRC	Gas sales and related businesses
Ben Xi Hongkong and China Gas Company Limited	RMB335.0 million	80	PRC	Gas sales and related businesses
Boxing Hong Kong & China Gas Co., Ltd	RMB40.0 million	65	PRC	Gas sales and related businesses
† Cang Xi Hong Kong and China Gas Company Limited	RMB20.0 million	100	PRC	Gas sales and related businesses
Cangxian Hong Kong & China Gas Co., Ltd.	RMB10.0 million	90	PRC	Gas sales and related businesses
Changting Hong Kong and China Gas Company Limited	RMB22.0 million	90	PRC	Gas sales and related businesses
Chaoyang Hongkong and China Gas Company Limited	US\$10.8 million	90	PRC	Gas sales and related businesses
潮州楓溪港華燃氣有限公司	RMB60.0 million	60	PRC	Gas sales and related businesses
Chi Ping Hongkong and China Gas Co. Ltd.	RMB40.0 million	85	PRC	Gas sales and related businesses
† Chizhou Hong Kong and China Gas Company Ltd	RMB70.0 million	100	PRC	Gas sales and related businesses
Dafeng Hong Kong and China Gas Company Limited	RMB80.0 million	51	PRC	Gas sales and related businesses

† Wholly foreign-owned enterprises

Direct subsidiaries of the Company

* A listed company in The Stock Exchange of Hong Kong Limited

¹ Newly formed during the year

Subsidiaries (Continued)

The following is a list of the principal subsidiaries as at 31st December 2019: (Continued)

Name	Issued share capital/ registered capital	Percentage of issued/ registered capital held	Place of incorporation/ operation	Principal activity
Gas, water and related businesses in mainland China (Continued)				
† Dalian Changxing Hong Kong and China Gas Co. Ltd.	US\$14.0 million	100	PRC	Gas sales and related businesses
† Dalian Lvshun Hong Kong and China Gas Co. Ltd.	US\$15.0 million	100	PRC	Gas sales and related businesses
Da Yi Hong Kong and China Gas Company Limited	RMB20.0 million	100	PRC	Gas sales and related businesses
† Feicheng Hong Kong and China Gas Company Limited	RMB32.0 million	100	PRC	Gas sales and related businesses
† 阜新大力燃氣有限責任公司	RMB13.9 million	100	PRC	Gas sales and related businesses
Fuxin Hongkong and China Gas Company Limited	RMB77.2 million	90	PRC	Gas sales and related businesses
† 阜新新邱港華燃氣有限公司	RMB34.0 million	100	PRC	Gas sales and related businesses
† Gao Chun Hong Kong and China Gas Co., Ltd.	US\$7.5 million	100	PRC	Gas sales and related businesses
† Gongzhuling Hong Kong and China Gas Company Limited	RMB88.0 million	100	PRC	Gas sales and related businesses
† 廣西中威管道燃氣發展集團有限責任公司	RMB30.0 million	100	PRC	Gas sales and related businesses
† Guilin Hong Kong & China Gas Co., Ltd.	RMB30.0 million	100	PRC	Gas sales and related businesses
† Huang Shan Hong Kong & China Gas Co., Ltd.	RMB40.0 million	100	PRC	Gas sales and related businesses
† Huangshan Huizhou Hong Kong & China Gas Co., Ltd.	US\$2.1 million	100	PRC	Gas sales and related businesses
† Huang Shan Taiping Hong Kong & China Gas Co., Ltd.	US\$3.5 million	100	PRC	Gas sales and related businesses
Huzhou Hong Kong and China Gas Company Limited	US\$10.5 million	98.9	PRC	Gas sales and related businesses
Jiajiang Hong Kong & China Gas Company Limited	RMB20.0 million	70	PRC	Gas sales and related businesses
Jianping Hong Kong and China Gas Company Limited	RMB58.0 million	80	PRC	Gas sales and related businesses
簡陽港華燃氣有限公司	RMB150.0 million	100	PRC	Gas sales and related businesses
Ji Nan Ping Yin Hong Kong & China Gas Co., Ltd.	RMB200.0 million	82.2	PRC	Gas sales and related businesses
九江港華燃氣有限公司	RMB10.0 million	60	PRC	Gas sales and related businesses
† Kazuo Hong Kong & China Gas Co., Ltd.	US\$6.4 million	100	PRC	Gas sales and related businesses
† Laiyang Hong Kong and China Gas Co., Ltd.	US\$11.5 million	100	PRC	Gas sales and related businesses
† Lezhi Hong Kong and China Gas Company Limited	RMB30.0 million	100	PRC	Gas sales and related businesses
† Liuzhou Hong Kong & China Gas Co., Ltd.	RMB50.0 million	100	PRC	Gas sales and related businesses
† Longkou Hongkong and China Gas Company Limited	US\$7.1 million	100	PRC	Gas sales and related businesses
† Luliang Hong Kong & China Gas Company Limited	RMB52.0 million	100	PRC	Gas sales and related businesses
Maanshan Bowang Hong Kong & China Gas Co., Ltd.	US\$10.0 million	75.1	PRC	Gas sales and related businesses
† Maanshan Jiangbei Hong Kong and China Towngas Company Limited	US\$10.0 million	100	PRC	Gas sales and related businesses
Mengcun Hong Kong & China Gas Co., Ltd.	RMB10.0 million	90	PRC	Gas sales and related businesses

† Wholly foreign-owned enterprises

Subsidiaries (Continued)

The following is a list of the principal subsidiaries as at 31st December 2019: (Continued)

Name	Issued share capital/ registered capital	Percentage of issued/ registered capital held	Place of incorporation/ operation	Principal activity
Gas, water and related businesses in mainland China (Continued)				
Mianzhu Hong Kong and China Gas Co., Ltd	RMB30.0 million	80	PRC	Gas sales and related businesses
† Mianyang Hong Kong & China Gas Co., Ltd	RMB90.0 million	100	PRC	Gas sales and related businesses
Mianyang Heqing Towngas Co., Ltd.	RMB10.0 million	80	PRC	Gas sales and related businesses
Mianzhu Yuquan Hong Kong and China Gas Co., Ltd.	RMB5.0 million	80	PRC	Gas sales and related businesses
Miluo Hong Kong and China Gas Co. Ltd	RMB50.0 million	70	PRC	Gas sales and related businesses
Mei Shan Peng Shan Hong Kong and China Gas Company Limited	RMB20.0 million	70	PRC	Gas sales and related businesses
Peng Xi Hong Kong and China Gas Company Limited	RMB20.0 million	100	PRC	Gas sales and related businesses
平昌港華燃氣有限公司	RMB20.0 million	90	PRC	Gas sales and related businesses
Qingdao Dong Yi Hong Kong and China Gas Company Limited	RMB30.0 million	60	PRC	Gas sales and related businesses
Qingdao Zhongji Hong Kong and China Gas Company Limited	RMB73.5 million	90	PRC	Gas sales and related businesses
清遠港華燃氣有限公司	RMB50.0 million	80	PRC	Gas sales and related businesses
Qinhuangdao Hong Kong & China Gas Co., Ltd.	RMB15.0 million	51	PRC	Gas sales and related businesses
齊齊哈爾港華燃氣有限公司	RMB128.6 million	61.7	PRC	Gas sales and related businesses
韶關港華燃氣有限公司	RMB50.0 million	100	PRC	Gas sales and related businesses
† Shenyang Hong Kong & China Gas Company Limited	US\$24.5 million	100	PRC	Gas sales and related businesses
Siping Hong Kong & China Gas Company Limited	RMB45.0 million	80	PRC	Gas sales and related businesses
松陽港華燃氣有限公司	RMB80.0 million	51.4	PRC	Gas sales and related businesses
Tie Ling Hong Kong and China Gas Company Limited	RMB233.0 million	80	PRC	Gas sales and related businesses
† Tongshan Hong Kong and China Gas Co. Ltd	RMB124.0 million	100	PRC	Gas sales and related businesses
Tongxiang Hong Kong and China Gas Company Limited	US\$7.0 million	76	PRC	Gas sales and related businesses
† Towngas Natural Gas Sales Co., Ltd.	RMB50.0 million	100	PRC	Procurement of natural gas sources
威遠港華燃氣有限公司	RMB30.0 million	100	PRC	Gas sales and related businesses
† Wuhu Jiangbei Hong Kong & China Gas Company Limited	RMB200.0 million	100	PRC	Gas sales and related businesses
Wulian Hong Kong & China Gas Company Limited	RMB20.0 million	70	PRC	Gas sales and related businesses
† Wuning Hong Kong & China Gas Co., Ltd.	RMB40.0 million	100	PRC	Gas sales and related businesses
成都新都港華燃氣有限公司	RMB30.0 million	100	PRC	Gas sales and related businesses
Xin Jin Hong Kong and China Gas Company Limited	RMB40.0 million	60	PRC	Gas sales and related businesses
Xingyi Hong Kong & China Gas Company Limited	RMB50.0 million	70	PRC	Gas sales and related businesses
修水港華燃氣有限公司	RMB30.0 million	80	PRC	Gas sales and related businesses
† Yang Jiang Hong Kong and China Gas Company Limited	RMB50.0 million	100	PRC	Gas sales and related businesses

† Wholly foreign-owned enterprises

Subsidiaries (Continued)

The following is a list of the principal subsidiaries as at 31st December 2019: (Continued)

Name	Issued share capital/ registered capital	Percentage of issued/ registered capital held	Place of incorporation/ operation	Principal activity
Gas, water and related businesses in mainland China (Continued)				
Yan Shan Hong Kong & China Gas Co., Ltd.	RMB10.0 million	90	PRC	Gas sales and related businesses
Yangxin Hongkong & China Gas Company Limited	RMB18.0 million	51	PRC	Gas sales and related businesses
† Yifeng Hongkong and China Gas Co., Ltd.	RMB32.0 million	100	PRC	Gas sales and related businesses
† Yingkou Hong Kong and China Gas Co., Ltd.	US\$9.4 million	100	PRC	Gas sales and related businesses
Yue Chi Hong Kong and China Gas Company Limited	RMB30.0 million	90	PRC	Gas sales and related businesses
† Zhao Yuan Hong Kong & China Gas Co., Ltd.	RMB22.0 million	100	PRC	Gas sales and related businesses
† Zhong Jiang Hong Kong and China Gas Company Limited	RMB30.0 million	100	PRC	Gas sales and related businesses
† Zhongxiang Hong Kong & China Gas Co., Ltd.	RMB42.0 million	100	PRC	Gas sales and related businesses
資陽港華燃氣有限公司	RMB30.0 million	90	PRC	Gas sales and related businesses
大連瓦房店港華燃氣有限公司	RMB40.0 million	90	PRC	Gas sales and related businesses
Heilongjiang Hong Kong & China Lianfu New Energy Company Limited	RMB13.0 million	55	PRC	Vehicle gas refilling stations
† Qiqihar Xingqixiang Gas Company Limited	RMB60.0 million	100	PRC	Vehicle gas refilling stations
內蒙古港億天然氣有限公司	RMB80.0 million	85	PRC	Mid-stream natural gas project
† Towngas China Energy Investment Limited	RMB250.0 million	100	PRC	Investment holding
† Towngas Investments Limited	US\$200.0 million	100	PRC	Investment holding
青島嶗山灣港華能源有限公司	RMB30.0 million	60	PRC	Gas sales and related businesses
唐山港能投智慧能源有限公司	RMB80.0 million	49	PRC	Distributed energy systems businesses
Tangshan Fengnan Towngas China Energy Co., Ltd.	RMB96.0 million	45	PRC	Distributed energy systems businesses
† 廣西港華智慧能源有限公司	RMB10.0 million	100	PRC	Distributed energy systems businesses
Maanshan Towngas China Energy Co., Ltd.	RMB50.0 million	85	PRC	Distributed energy systems businesses
青島港能投智慧能源有限公司	RMB10.0 million	96	PRC	Distributed energy systems businesses
瀋陽智慧能源系統科技有限公司	RMB100.0 million	55	PRC	Distributed energy systems businesses
徐州工業園區中港熱力有限公司	RMB160.0 million	49.8	PRC	Distributed energy systems businesses
Xuzhou Economic and Technological Development Zone Towngas China Energy Co., Ltd.	RMB80.0 million	70	PRC	Distributed energy systems businesses
陽信港能投智慧能源有限公司	RMB15.0 million	67.8	PRC	Distributed energy systems businesses
† Shenzhen Towngas China Energy Co., Ltd.	RMB6.0 million	100	PRC	Distributed energy systems businesses
† U-Tech (Guang Dong) Engineering Construction Co., Ltd	RMB10.0 million	100	PRC	Engineering and related business

† Wholly foreign-owned enterprises

Subsidiaries (Continued)

The following is a list of the principal subsidiaries as at 31st December 2019: (Continued)

Name	Issued share capital/ registered capital	Percentage of issued/ registered capital held	Place of incorporation/ operation	Principal activity
New Energy businesses				
ECO Aviation Fuel Development Limited	HK\$2	100	Hong Kong	Aviation fuel facility
ECO Aviation Fuel Services Limited	HK\$10,000	100	Hong Kong	Aviation fuel facility
ECO Landfill Gas (NENT) Limited	HK\$100	100	Hong Kong	Landfill gas project
P-Tech Landfill Gas (SENT) Company Limited	HK\$100	100	Hong Kong	Landfill gas project
ECO Biochemical Technology (Zhangjiagang) Company Limited	US\$59.9 million	100	PRC	Chemical business
¹ Hebei ECO Biofuel Company Limited	RMB200.0 million	100	PRC	Chemical business
Hubei ECO Bioenergy Company Limited	RMB15.0 million	100	PRC	Chemical business
Inner Mongolia ECO Coal Chemical Technology Company Limited	RMB1,017.0 million	100	PRC	Chemical business
唐山易高農業科技有限公司	RMB3.0 million	100	PRC	Chemical business
河北易高生物能源有限公司	RMB140.0 million	100	PRC	Chemical business
Inner Mongolia Ke Jian Coal Company Limited	RMB486.0 million	100	PRC	Coal related business
Qinhuangdao YiTeng Trade Co. Ltd.	US\$20.0 million	100	PRC	Coal related business
濟寧易祥煤炭貿易有限公司	RMB2.0 million	100	PRC	Coal related business
易高卓新節能技術(上海)有限公司	RMB14.0 million	100	PRC	Consultancy service
易高清潔能源管理服務(西安)有限公司	US\$1.5 million	100	PRC	Engineering service
易高新能源工程管理服務(深圳)有限公司	RMB15.0 million	100	PRC	Engineering service
易高卓新(上海)融資租賃有限公司	RMB170.0 million	100	PRC	Financing
Shanxi ECO Coalbed Methane Co., Ltd.	RMB200.0 million	70	PRC	LNG business
Xuzhou ECO ZhongTai New Energy Co., Ltd.	US\$24.5 million	80	PRC	LNG business
山東嘉祥易隆港務有限公司	RMB180.0 million	88	PRC	Logistics business
ECO Orient Resources (Thailand) Ltd.	THB425.0 million	100	Thailand	Oil business
[†] ECO Services Management Company Limited	RMB80.0 million	100	PRC	Project management
易高環保能源科技(張家港)有限公司	US\$3.3 million	100	PRC	Research and development
Chifeng ECO Clean Energy Co., Ltd.	RMB14.9 million	100	PRC	Vehicular fuel refilling station
Chiping ECO Yi Yun Gas Co. Ltd.	RMB15.0 million	100	PRC	Vehicular fuel refilling station
Dong Ping ECO Energy Co. Ltd.	RMB25.5 million	91	PRC	Vehicular fuel refilling station
Fengxiang ECO Clean Energy Company Limited	RMB15.0 million	100	PRC	Vehicular fuel refilling station
Guangzhou ECO Environmental Energy Co., Ltd.	US\$2.1 million	100	PRC	Vehicular fuel refilling station
Hanzhong ECO Clean Energy Co., Ltd.	US\$2.1 million	100	PRC	Vehicular fuel refilling station
Hebei ECO Hua Tong Clean Energy Co., Ltd.	RMB31.0 million	100	PRC	Vehicular fuel refilling station
[†] Henan ECO Clean Energy Co., Ltd.	US\$2.2 million	100	PRC	Vehicular fuel refilling station
Jiaxiang ECO Energy Co., Ltd.	RMB28.0 million	100	PRC	Vehicular fuel refilling station
Kaifeng ECO Clean Energy Co., Ltd.	US\$2.4 million	100	PRC	Vehicular fuel refilling station

¹ Newly formed during the year[†] Wholly foreign-owned enterprises

Subsidiaries (Continued)

The following is a list of the principal subsidiaries as at 31st December 2019: (Continued)

Name	Issued share capital/ registered capital	Percentage of issued/ registered capital held	Place of incorporation/ operation	Principal activity
New Energy businesses (Continued)				
Liaocheng ECO Clean Energy Co. Ltd.	US\$2.1 million	100	PRC	Vehicular fuel refilling station
Linzhou City ECO Clean Energy Co., Ltd.	US\$3.3 million	100	PRC	Vehicular fuel refilling station
MeiXian ECO Clean Energy Co., Ltd.	RMB14.2 million	100	PRC	Vehicular fuel refilling station
Nanyang ECO Clean Energy Co., Ltd.	RMB10.1 million	100	PRC	Vehicular fuel refilling station
Qingtongxia ECO Clean Energy Co., Ltd.	RMB15.4 million	100	PRC	Vehicular fuel refilling station
† Shaan Xi ECO Clean Energy Co., Ltd.	RMB27.0 million	100	PRC	Vehicular fuel refilling station
Shanxian ECO Clean Energy Co., Ltd.	US\$2.3 million	100	PRC	Vehicular fuel refilling station
Shanxian ECO RLM Clean Energy Co., Ltd.	RMB13.0 million	90	PRC	Vehicular fuel refilling station
Shanxi ECO Nova Clean Energy Co., Ltd.	RMB20.0 million	75	PRC	Vehicular fuel refilling station
Urad Middle Banner Xinran Natural Gas Co., Ltd.	RMB8.3 million	100	PRC	Vehicular fuel refilling station
Weishan ECO Energy Co., Ltd.	US\$4.7 million	100	PRC	Vehicular fuel refilling station
Wuzhong ECO Clean Energy Co., Ltd.	RMB10.5 million	100	PRC	Vehicular fuel refilling station
Xiwuzhumuqin Country ECO Clean Energy Co., Ltd.	RMB14.9 million	100	PRC	Vehicular fuel refilling station
Xuzhou ECO Energy Co., Ltd.	RMB20.0 million	80	PRC	Vehicular fuel refilling station
Zhongwei ECO Clean Energy Co., Ltd.	RMB12.4 million	100	PRC	Vehicular fuel refilling station
察哈爾右翼前旗易高清潔能源有限公司	RMB14.9 million	100	PRC	Vehicular fuel refilling station
神木易高耀清能源有限公司	RMB38.2 million	100	PRC	Vehicular fuel refilling station
內蒙古易高清潔能源有限公司	RMB14.0 million	90	PRC	Vehicular fuel refilling station
江西易高凌峰清潔能源有限公司	RMB30.0 million	70	PRC	Vehicular fuel refilling station
邢台市易高港興清潔能源有限公司	RMB17.1 million	80	PRC	Vehicular fuel refilling station
邢台市易高興化清潔能源有限公司	RMB23.3 million	80	PRC	Vehicular fuel refilling station
錫林郭勒盟易高清潔能源有限公司	RMB14.9 million	100	PRC	Vehicular fuel refilling station
化德易高清潔能源有限公司	RMB14.4 million	100	PRC	Vehicular fuel refilling station
烏拉特前旗新德寶商貿有限責任公司	RMB6.8 million	100	PRC	Vehicular fuel refilling station
中衛海興易高清潔能源有限公司	RMB14.8 million	100	PRC	Vehicular fuel refilling station
陝西易高億達清潔能源有限公司	RMB12.0 million	100	PRC	Vehicular fuel refilling station
山西忻州易高清潔能源有限公司	RMB14.9 million	100	PRC	Vehicular fuel refilling station
烏蘭察布市豐華商貿有限公司	RMB10.7 million	100	PRC	Vehicular fuel refilling station
巴彥淖爾市耀進燃氣有限公司	RMB10.0 million	90	PRC	Vehicular fuel refilling station
杭錦後旗耀進燃氣有限公司	RMB10.0 million	90	PRC	Vehicular fuel refilling station
韓城市易高美源清潔能源有限公司	RMB41.0 million	90	PRC	Vehicular fuel refilling station
漯河易高清潔能源有限公司	RMB14.5 million	85	PRC	Vehicular fuel refilling station
† ECO Environmental Energy Investments Limited	US\$100.0 million	100	PRC	Investment holding
† ECO Environmental Resources Investments Limited	US\$299.0 million	100	PRC	Investment holding

† Wholly foreign-owned enterprises

Subsidiaries (Continued)

The following is a list of the principal subsidiaries as at 31st December 2019: (Continued)

Name	Issued share capital/ registered capital	Percentage of issued/ registered capital held	Place of incorporation/ operation	Principal activity
Other businesses				
HDC Data Centre Limited	HK\$100	100	Hong Kong	Telecommunications business
Towngas Telecommunications Fixed Network Limited	HK\$35.0 million	100	Hong Kong	Telecommunications business
† Towngas Telecom (Fengxian) Company Limited	RMB7.5 million	100	PRC	Telecommunications business
† Towngas Telecom (Peixian) Company Limited	RMB9.0 million	100	PRC	Telecommunications business
Towngas Telecom (Shandong) Company Limited	RMB40.0 million	90.1	PRC	Telecommunications business
Towngas Chibo Data Service (Jinan) Co., Ltd.	RMB168.0 million	87.4	PRC	Telecommunications business
† Towngas Telecommunications (Shenzhen) Limited	RMB6.0 million	100	PRC	Telecommunications business
TGT China Cloud Data Services (Harbin) Co., Ltd.	RMB63.0 million	80	PRC	Telecommunications business
TGT Union Financial Data Services (Dongguan) Co., Ltd.	RMB80.0 million	60	PRC	Telecommunications business
大連億達名氣通數據有限公司	RMB76.0 million	90	PRC	Telecommunications business
北京馳波名氣通數據服務有限公司	RMB10.0 million	98.7	PRC	Telecommunications business
名氣通網絡(深圳)有限公司	RMB179.5 million	100	PRC	Telecommunications business
萊陽名氣通電訊有限公司	US\$1.6 million	90	PRC	Telecommunications business
卓銳智高(武漢)科技有限公司 (Formerly named as Hong Kong and China Technology (Wuhan) Company Limited)	RMB51.2 million	100	PRC	System development & consulting services
珠海卓銳高科信息技術有限公司	RMB7.0 million	100	PRC	System development & consulting services
M-Tech Instrument (Hong Kong) Limited	HK\$100	100	Hong Kong	Gas meter and related businesses
† 卓度計量技術(深圳)有限公司	RMB60.0 million	100	PRC	Gas meter and related businesses
† 卓通管道系統(中山)有限公司	RMB41.0 million	100	PRC	PE piping system business
U-Tech Engineering Company Limited	HK\$20.0 million	100	Hong Kong	Engineering and related businesses
P-Tech Engineering Company Limited	HK\$2	100	Hong Kong	Engineering and related businesses
Starmax Assets Limited	HK\$90.0 million	100	British Virgin Islands/ Hong Kong	Property development

† Wholly foreign-owned enterprises

Subsidiaries (Continued)

The following is a list of the principal subsidiaries as at 31st December 2019: (Continued)

Name	Issued share capital/ registered capital	Percentage of issued/ registered capital held	Place of incorporation/ operation	Principal activity
Financing & securities investments				
# Eagle Legend International Limited	HK\$100	100	Hong Kong	Financing
HKCG (Finance) Limited	HK\$100	100	Hong Kong	Financing
TCCL (Finance) Limited	HK\$1	67.8	Hong Kong	Financing
Towngas (Finance) Limited	HK\$100	100	British Virgin Islands	Financing
Barnaby Assets Limited	US\$1	100	British Virgin Islands/ Hong Kong	Securities investment
Danetop Services Limited	US\$1	100	British Virgin Islands/ Hong Kong	Securities investment
Investstar Limited	HK\$100	100	Hong Kong	Securities investment
Superfun Enterprises Limited	US\$1	100	British Virgin Islands/ Hong Kong	Securities investment
Upwind International Limited	US\$1	100	British Virgin Islands/ Hong Kong	Securities investment
Investment holding				
Apex Time Holdings Limited	HK\$100	100	Hong Kong	Investment holding
¹ ECO Biofuel Technology Company Limited	HK\$100	100	Hong Kong	Investment holding
¹ ECO Biotechnology Company Limited	HK\$100	100	Hong Kong	Investment holding
ECO Coal Chemical Technology (Inner Mongolia) Limited	HK\$100	100	Hong Kong	Investment holding
ECO Environmental Investments Limited	HK\$2	100	Hong Kong	Investment holding
ECO Environmental Energy (China) Limited	HK\$100	100	Hong Kong	Investment holding
ECO Environmental Investments (China) Limited	HK\$100	100	Hong Kong	Investment holding
ECO Environmental Investments (China) Limited	US\$1	100	British Virgin Islands	Investment holding
ECO Advanced Carbon Materials Company Limited	HK\$100	100	Hong Kong	Investment holding
ECO Natural Gas (China) Limited	US\$1	100	British Virgin Islands/ Hong Kong	Investment holding
ECO Natural Gas (Xian) Limited	US\$1	100	British Virgin Islands/ Hong Kong	Investment holding
ECO Orient Energy (Thailand) Ltd.	US\$12,000	100	Bermuda	Investment holding
Fanico Investments Limited	HK\$1	100	Hong Kong	Investment holding
G-Tech Piping Technologies Limited	HK\$100	100	Hong Kong	Investment holding
¹ Hong Kong & China Gas LNG International Trading Limited	US\$1	100	British Virgin Islands	Investment holding
Hong Kong & China Gas (Anhui) Limited	US\$1	100	British Virgin Islands/ Hong Kong	Investment holding
Hong Kong & China Gas (Changzhou) Limited	US\$1	100	British Virgin Islands/ Hong Kong	Investment holding
Hong Kong & China Gas (Chaozhou) Limited	US\$1	100	British Virgin Islands/ Hong Kong	Investment holding
Hong Kong & China Gas (China) Limited	HK\$10,000	100	British Virgin Islands/ Hong Kong	Investment holding

Direct subsidiaries of the Company

¹ Newly formed during the year

Subsidiaries (Continued)

The following is a list of the principal subsidiaries as at 31st December 2019: (Continued)

Name	Issued share capital/ registered capital	Percentage of issued/ registered capital held	Place of incorporation/ operation	Principal activity
Investment holding (Continued)				
Hong Kong & China Gas (Danyang) Limited	US\$1	100	British Virgin Islands/ Hong Kong	Investment holding
Hong Kong & China Gas (Fengcheng) Limited	US\$1	100	British Virgin Islands/ Hong Kong	Investment holding
Hong Kong & China Gas (Guangzhou) Limited	HK\$1,000	100	British Virgin Islands/ Hong Kong	Investment holding
Hong Kong & China Gas (Hebei) Limited	US\$1	100	British Virgin Islands/ Hong Kong	Investment holding
Hong Kong & China Gas (Jilin Province) Limited	US\$1	100	British Virgin Islands/ Hong Kong	Investment holding
Hong Kong & China Gas (Jinan) Limited	US\$1	100	British Virgin Islands/ Hong Kong	Investment holding
Hong Kong & China Gas (Jintan) Limited	US\$1	100	British Virgin Islands/ Hong Kong	Investment holding
Hong Kong & China Gas (Nanjing) Limited	US\$1	100	British Virgin Islands/ Hong Kong	Investment holding
Hong Kong & China Gas (Panyu) Limited	HK\$1,000	100	British Virgin Islands/ Hong Kong	Investment holding
Hong Kong and China Gas (Qianhai) Limited	HK\$100	100	Hong Kong	Investment holding
Hong Kong & China Gas (Suzhou) Limited	US\$1	100	British Virgin Islands/ Hong Kong	Investment holding
Hong Kong & China Gas (Taizhou) Limited	US\$1	100	British Virgin Islands/ Hong Kong	Investment holding
Hong Kong & China Gas (Wuhan) Limited	US\$1	100	British Virgin Islands/ Hong Kong	Investment holding
Hong Kong & China Gas (Wujiang) Limited	US\$1	100	British Virgin Islands/ Hong Kong	Investment holding
Hong Kong & China Gas (Xuzhou) Limited	US\$1	100	British Virgin Islands/ Hong Kong	Investment holding
Hong Kong & China Gas (Yixing) Limited	US\$1	100	British Virgin Islands/ Hong Kong	Investment holding
Hong Kong & China Gas (Zhangjiagang) Limited	US\$1	100	British Virgin Islands/ Hong Kong	Investment holding
Hong Kong & China Gas (Zhongshan) Limited	HK\$1,000	100	British Virgin Islands/ Hong Kong	Investment holding
Hong Kong and China Water (Maanshan) Limited	HK\$100	100	Hong Kong	Investment holding
Hong Kong & China Water (Suzhou) Limited	US\$1	100	British Virgin Islands/ Hong Kong	Investment holding
Hong Kong & China Water (Wujiang) Limited	US\$1	100	British Virgin Islands/ Hong Kong	Investment holding
Hong Kong & China Water Limited	US\$1	100	British Virgin Islands	Investment holding

Subsidiaries (Continued)

The following is a list of the principal subsidiaries as at 31st December 2019: (Continued)

Name	Issued share capital/ registered capital	Percentage of issued/ registered capital held	Place of incorporation/ operation	Principal activity
Investment holding (Continued)				
Hong Kong and China Gas (Hainan) Limited	HK\$100	100	Hong Kong	Investment holding
¹ Hong Kong and China Gas (Jiangsu) Agricultural Limited	HK\$100	100	Hong Kong	Investment holding
Hong Kong and China Gas (Jiangxi) Limited	HK\$100	100	Hong Kong	Investment holding
Hong Kong and China Gas (Jingxian) Limited	HK\$100	100	Hong Kong	Investment holding
Hong Kong and China Gas (Xinmi) Limited	HK\$100	100	Hong Kong	Investment holding
Hong Kong and China Gas (Zhangshu) Limited	HK\$100	100	Hong Kong	Investment holding
Hong Kong and China Gas (Zhengzhou) Limited	HK\$100	100	Hong Kong	Investment holding
Hong Kong and China Water (Anhui Jiangbei) Limited	HK\$100	100	Hong Kong	Investment holding
M-Tech Instrument Corporation (Holding) Limited	HK\$119	100	Hong Kong	Investment holding
Meter Technologies Limited	HK\$100	100	Hong Kong	Investment holding
Sky Global Limited	US\$100	100	British Virgin Islands/ Hong Kong	Investment holding
TGT Harbin Company Limited	HK\$100	100	Hong Kong	Investment holding
TGT BROADBANDgo Company Limited	US\$1	100	British Virgin Islands	Investment holding
TGT Destic Company Limited	HK\$100	100	Hong Kong	Investment holding
TGT Shanghai Data Services Company Limited	HK\$100	100	Hong Kong	Investment holding
TGT TGgo Company Limited	US\$1	100	British Virgin Islands	Investment holding
# Towngas International Company Limited	US\$1	100	British Virgin Islands/ Hong Kong	Investment holding
# Towngas Investment Company Limited	HK\$2	100	Hong Kong	Investment holding
Towngas Telecommunications (China) Limited	US\$1	100	British Virgin Islands	Investment holding

¹ Newly formed during the year

Direct subsidiaries of the Company

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