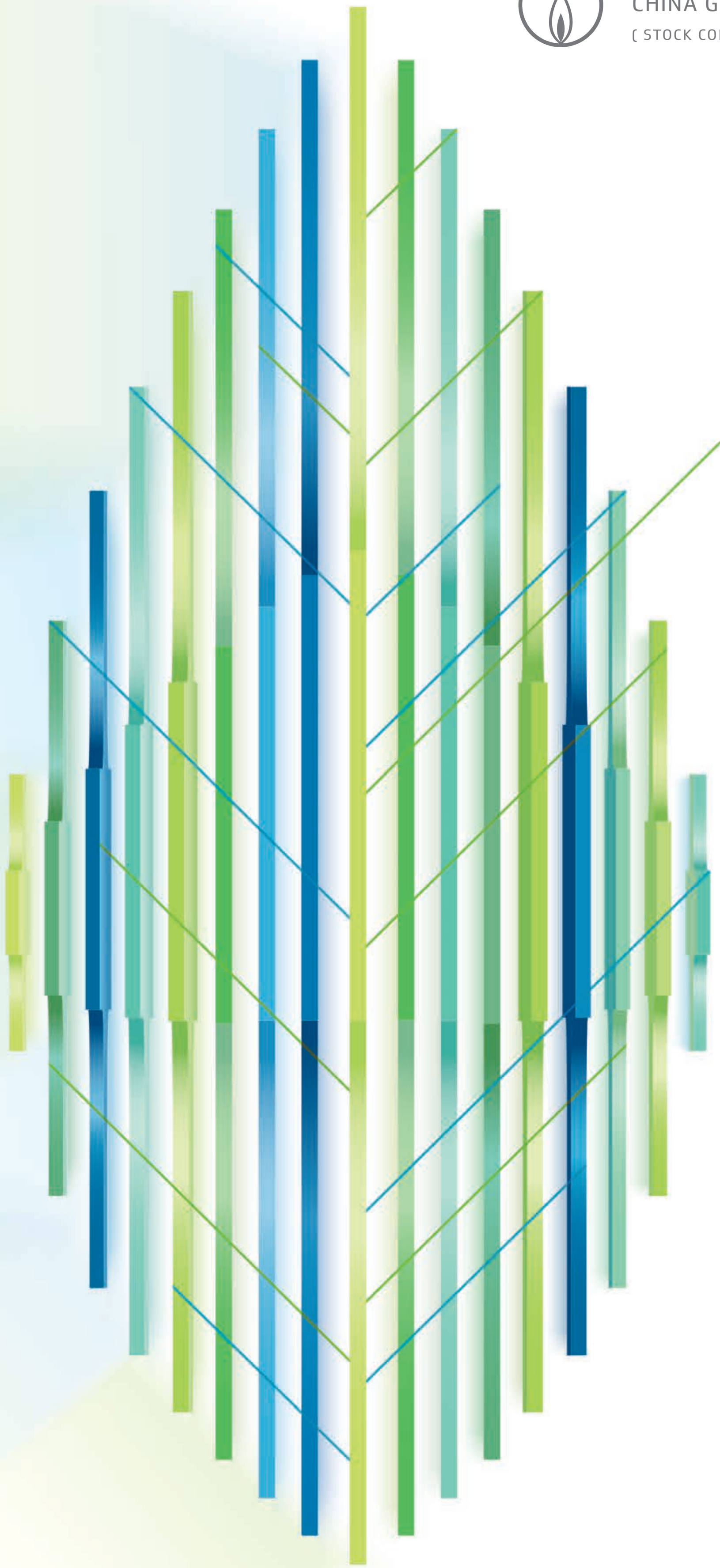
THE HONG KONG AND CHINA GAS COMPANY LIMITED
( STOCK CODE: 3 )



# ANNUAL REPORT 2017

# growth driven by innovation

CONTENTS

# 2017
# AWARDS AND RECOGNITIONS

## 2016 BOCHK Corporate Environmental Leadership Awards

– Gold Award in manufacturing sector

*by The Federation of Hong Kong Industries and Bank of China (Hong Kong) Limited*

## Global Chinese Business 1000

*by Yazhou Zhoukan*

## Global 2000

*by Forbes*

## The 16th Hong Kong Occupational Safety & Health Award

– Safety Management System (Other Industries) – Gold Award

– Safety Enhancement Programme – Gold Award

*by Occupational Safety & Health Council*

## Business for Social Good Award

*by Our Hong Kong Foundation*

## HR Asia Best Companies to Work for in Asia 2017

*by HR Asia*

## Constituent Companies of the Hang Seng Corporate Sustainability Index Series

*(Towngas & Towngas China)*

*by Hang Seng Indexes Company Limited*

## IFAPC Outstanding Listed Company Award 2017

*by The Hong Kong Institute of Financial Analysts and Professional Commentators Limited*

# vision for
# a greener future

In our new vision for Towngas, we aspire “to be Asia’s leading clean energy supplier and quality service provider, with a focus on innovation and environmental-friendliness.” We are making substantial progress towards the fulfilment of this vision by providing green energy to residential, commercial and industrial customers, as well as products that make modern living more comfortable and convenient. Supporting these customers with the highest quality of service, we are creating positive energy and helping to ensure a more sustainable future for our stakeholders and society at large.

# BUSINESS COVERAGE IN 2017

## Towngas

(Stock Code: 3)

### Piped City-Gas Projects

#### Guangdong Province

1. Panyu
2. Zhongshan
3. Dongyong
4. Shenzhen
5. Chaoan
6. Chaozhou Raoping

#### Central China

7. Wuhan
8. Xinmi

#### Eastern China

9. Yixing
10. Taizhou
11. Zhangjiagang
12. Wujiang
13. Xuzhou
14. Suining
15. Fengxian
16. Peixian
17. Danyang
18. Jintan
19. Tongling
20. Suzhou Industrial Park
21. Changzhou
22. Nanjing
23. Fengcheng
24. Pingxiang
25. Jiangxi
26. Zhangshu
27. Yonganzhou
28. Hangzhou

#### Shandong Province

29. Jinan East

#### Northern China

30. Jilin
31. Beijing Economic-technological Development Area
32. Hebei Jingxian

#### Northwestern China

33. Xi'an

#### Hainan Province

34. Qionghai

### Midstream Projects

35. Guangdong LNG
36. Anhui NG
37. Hebei NG
38. Jilin NG
39. Henan NG
40. Jintan NG
41 Huanghua Port LNG

### LNG Refilling Station

42. Nanjing (Marine)

### Water Projects

43. Wujiang
44. Suzhou Industrial Park
45. Wuhu
46. Suzhou Industrial Park (Industrial Wastewater Treatment)
47. Maanshan
48. Jiangbei
49. Suzhou Industrial Park (Food Waste Processing and Utilisation)

### New Energy Projects

#### Coal Mining

50. Jiangxi Fengcheng
51. Inner Mongolia Ordos Kejian

#### Coal-based Chemicals

52. Jiangxi Fengcheng
53. Inner Mongolia Ordos

#### CNG/LNG Refilling Stations

54. Shaanxi Xianyang
55. Shaanxi Huitai
56. Shaanxi Lueyang
57. Shaanxi Fengxiang
58. Shaanxi Shenmu
59. Shaanxi Baoji
60. Shaanxi Zhouzhi
61. Shaanxi Weinan Gushi
62. Shaanxi Weinan Tianshi
63. Shaanxi Hancheng
64. Shanxi Yuanping
65. Shanxi Lingshi
66. Shanxi Xinzhou
67. Shandong Chiping
68. Shandong Jining
69. Shandong Dongping
70. Shandong Jiaxiang
71. Shandong Weishan
72. Shandong Shanxian
73. Shandong Linqing
74. Shandong Heze
75. Hebei Shijiazhuang
76. Xingtai (Gangxing)
77. Xingtai (Xinghua)
78. Henan Xinmi
79. Henan Anyang
80. Henan Kaifeng
81. Henan Linzhou
82. Henan Nanyang
83. Henan Luoyang Yanshi
84 Henan Wuyang
85. Inner Mongolia Huhhot
86. Inner Mongolia Wulatezhong Qi
87. Inner Mongolia Xiwuzhumuqin Qi
88. Inner Mongolia Chifeng
89. Inner Mongolia Chaha'eryouyiqian Qi
90. Inner Mongolia Xilingol
91. Inner Mongolia Ulanqab Huade
92. Inner Mongolia Ulanqab Chahar
93. Inner Mongolia Bayannur Uradqian Qi
94. Inner Mongolia Bayannur Linhe
95. Inner Mongolia Bayannur Hanggin
96. Ningxia Guangwuxian
97. Ningxia Qingtongxia
98. Ningxia Jinyintan
99. Ningxia Zhongwei
100. Ningxia Zhongwei Haixing Development Zone
101. Jiangxu Xuzhou
102. Anhui Maanshan
103. Jiangxi Pengze
104. Guangdong Guangzhou

#### Upstream Projects

105. Shanxi LCBM
106. Jilin Tianyuan
107. Xuzhou COG
108. Heze COG

#### Coal Logistic Project

109. Shandong Jining Jiaxianggang Logistic Port

#### Biomass

110. Zhangjiagang
111 Hubei Xingzhou

### Oilfield Project

112. Phetchabun Province in Thailand

### Telecommunication Projects

113. Shandong Jinan
114. Shandong Jinan Chibo
115. Shandong Laiyang
116. Xuzhou Fengxian
117. Xuzhou Peixian
118. Liaoning Dalian DETA
119. Dalian Yida
120. Harbin
121. Beijing Zhongjing
122. Beijing Chibo
123. Dongguan
124. Shenzhen (Qianhai)
125. Shenzhen (Interlink Connectivity)

### Other Projects

126. Shenyang Sanquan Construction Supervisory
127. ECO Engineering Management (Xi'an)
128. Suzhou Industrial Park Broad Energy Services
129. GH Yixing Ecology
130. Dalian (New Energy Technology)
131. M-Tech
132. GH-Fusion
133. G-Tech
134. Towngas Technology
135. S-Tech (Zhuhai)
136. ECO Engineering Management (Shenzhen)
137. Towngas Life Style
138. Towngas Payment Technology (Shenzhen)
139. Hong Kong & China Gas International Energy Trading
140. Mia Cucina Kitchen Cabinets (Shenzhen)
141. Inner Mongolia Ordos Carbon Material

## Towngas China

(Stock Code: 1083)

### Piped City-Gas Projects

#### Guangdong Province

142. Foshan
143. Shaoguan
144. Qingyuan
145. Yangdong
146. Fengxi

#### Eastern China

147. Nanjing Gaochun
148. Dafeng
149. Tongshan
150. Hubei Zhongxiang
151. Maanshan
152. Bowang
153. Zhengpugang Xin Qu Modern Industrial Zone
154. Wuhu Fanchang
155. Wuhu Jiangbei
156. Anqing
157. Chizhou
158. Tunxi
159. Huangshan
160. Huizhou
161. Tongxiang
162. Huzhou
163. Yuhang
164. Songyang
165. Changjiu
166. Fuzhou
167. Jiujiang
168. Wuning
169. Xiushui
170. Yifeng
171. Changting

#### Shandong Province

172. Jimo
173. Laoshan
174. Zibo
175. Zibo Lubo
176. Longkou
177. Jinan West
178. Weifang
179. Weihai
180. Taian
181. Chiping
182. Linqu
183. Laiyang
184. Zhaoyuan
185. Pingyin
186. Feicheng
187. Boxing Economic Development Zone
188. Yangxin
189. Wulian

#### Hunan Province

190. Miluo

#### Northeastern China

191. Benxi
192. Chaoyang
193. Tieling
194. Fuxin
195. Shenyang Coastal Economic Zone
196. Yingkou
197. Dalian Changxingdao
198. Dalian Economic and Technical Development Zone
199. Anshan
200. Lvshun
201. Kazuo
202. Beipiao
203. Wafangdian
204. Xinqiu
205. Jianping
206. Changchun
207. Gongzhuling
208. Siping
209. Qiqihar

#### Hebei Province

210. Qinhuangdao
211. Yanshan
212. Cangxian
213. Mengcun
214. Shijiazhuang
215. Baoding

#### Inner Mongolia

216. Baotou

#### Southwestern China

217. Ziyang
218. Weiyuan
219. Pengxi
220. Lezhi
221. Pingchang
222. Dayi
223. Yuechi
224. Cangxi
225. Chengdu
226. Zhongjiang
227. Jianyang
228. Pengshan
229. Mianyang
230. Xinjin
231. Xindu
232. Mianzhu
233. Jiajiang
234. Qijiang
235. Guilin
236. Zhongwei (Fusui)
237. Xingyi
238. Luliang

### Midstream Projects

239. Xuancheng NG
240. Taian Taigang
241. Inner Mongolia NG

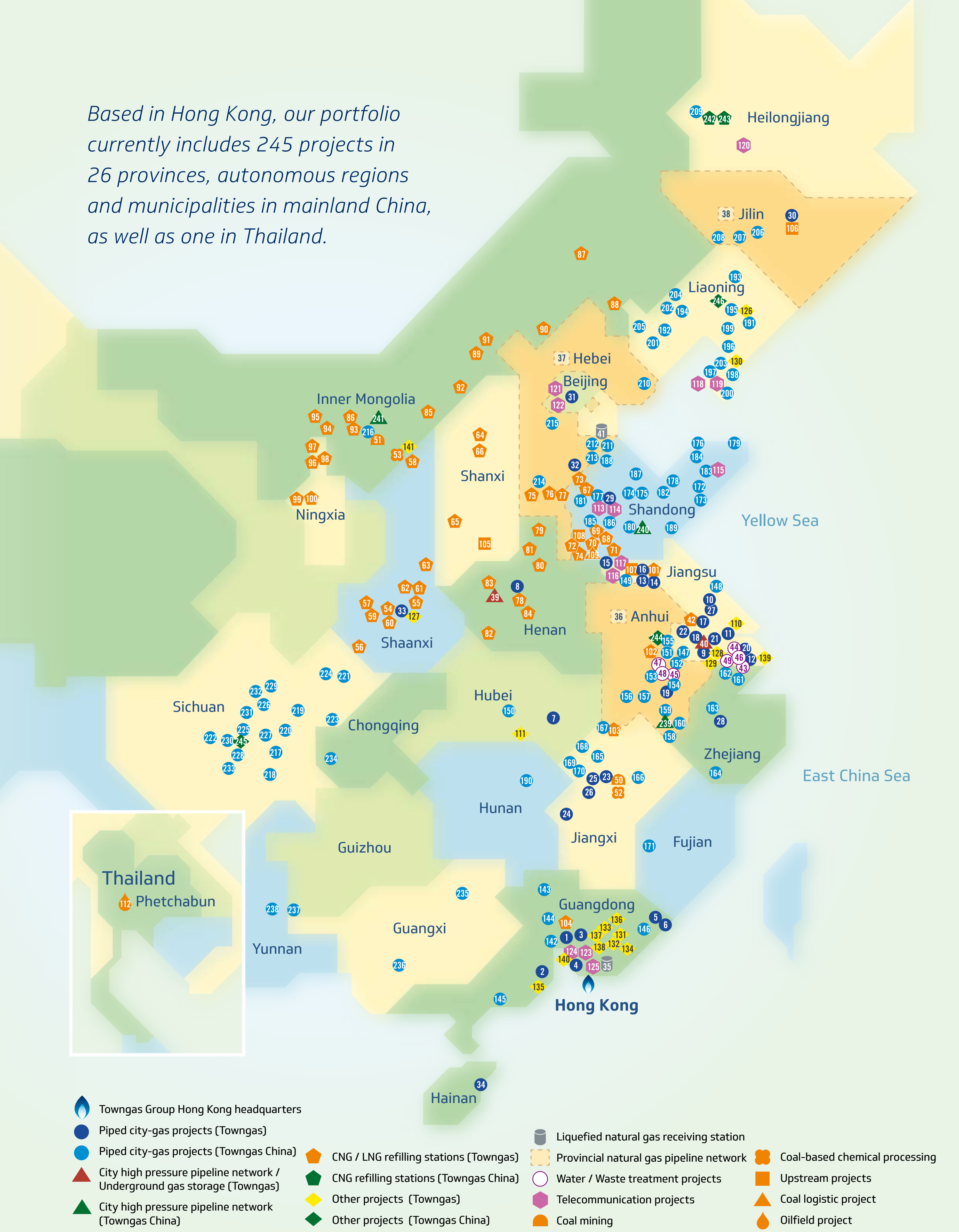
### CNG Refilling Stations

242. Qiqihar (Lianfu)
243. Qiqihar (Xingqixiang)

### Other Projects

244. Zhuojia Public Engineering
245. Sichuan Distributed Energy Systems
246. Shenyang Economic and Technical Development Zone Distributed Energy System

*Based in Hong Kong, our portfolio currently includes 245 projects in 26 provinces, autonomous regions and municipalities in mainland China, as well as one in Thailand.*



# BUSINESS HIGHLIGHTS

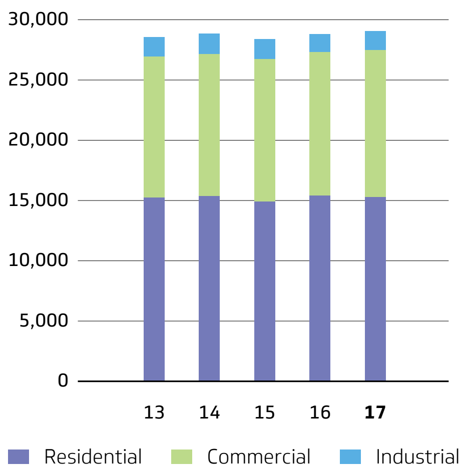
| | **2017** | 2016 | Change % |
|---|---|---|---|
| **Operating (Company)** | | | |
| Number of Customers as at 31st December | **1,883,407** | 1,859,414 | +1 |
| Number of Customers per km of Mains | **558** | 553 | +1 |
| Installed Capacity, thousand $m^3$ per hour | **525** | 525 | – |
| Peak Hourly Demand, thousand $m^3$ | **485** | 538 | -10 |
| Town Gas Sales, million MJ | **29,049** | 28,814 | +1 |
| Number of Employees as at 31st December | **2,022** | 2,019 | – |
| Number of Customers per Employee | **931** | 921 | +1 |
| **Financial** | | | |
| Revenue, HK million dollars | **32,477** | 28,557 | +14 |
| Profit Attributable to Shareholders, HK million dollars | **8,225** | 7,341 | +12 |
| Dividends, HK million dollars | **4,896** | 4,451 | +10 |
| **Shareholders** | | | |
| Issued Shares, million of shares | **13,988** | 12,717 | +10 |
| Shareholders' Funds, HK million dollars | **60,439** | 53,932 | +12 |
| Earnings per Share, HK cents | **58.8** | 52.5* | +12 |
| Dividends per Share, HK cents | **35.0** | 31.8* | +10 |
| Shareholders' Funds, HK dollars per share | **4.32** | 3.86* | +12 |
| Number of Shareholders as at 31st December | **13,550** | 13,541 | – |

* Adjusted for the bonus share issue in 2017

# FIVE-YEAR SUMMARY

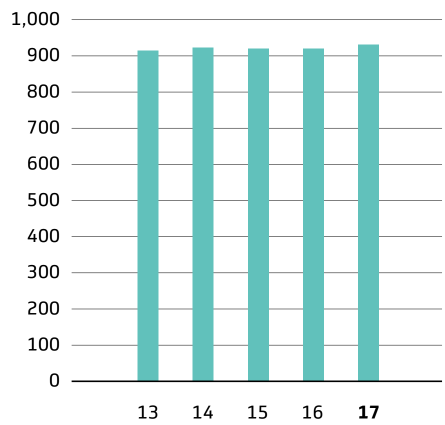
## Town Gas Sales

Company (million MJ)



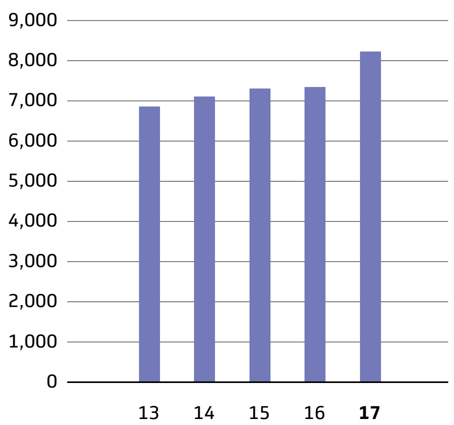

## Number of Customers per Employee

Company



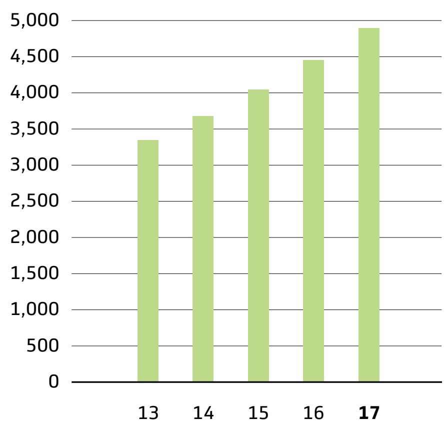

## Profit Attributable to Shareholders

(HK$ million)




## Dividends

(HK$ million)



# Chairman's Statement

## The Year's Results

The Group's town gas business in Hong Kong maintained stable growth in 2017. Concurrently, the Group's city-gas businesses in mainland China and emerging environmentally-friendly energy businesses progressed well, thus bringing good growth to the Group's overall recurrent businesses during the year.

Profit after taxation attributable to shareholders of the Group for the year amounted to HK$8,225 million, an increase of HK$884 million compared to 2016. Earnings per share for the year amounted to HK58.8 cents, an increase of 12.1 per cent compared to 2016. Exclusive of the Group's share of a revaluation surplus from the International Finance Centre complex, the Group's profit after taxation for the year was HK$7,008 million, an increase of approximately 14 per cent compared to 2016 mainly attributable to a rise in profit from the Group's local and mainland businesses.

During the year under review, the Group invested HK$6,141 million in production facilities, pipelines, plants and other fixed assets for the sustainable development of its various existing and new businesses in Hong Kong and mainland China.

## Town Gas Business in Hong Kong

The global economy recovered steadily in 2017, and concurrently, the local economy grew well. Favourable employment conditions and growth in the number of inbound visitors helped stimulate local consumer spending. Benefiting from a rise in commercial and industrial gas sales, total volume of gas sales in

Hong Kong for 2017 reached 29,049 million MJ, an increase of 0.8 per cent compared to 2016 whilst total number of appliances sold in 2017 was over 275,000 units, a similar level to 2016.

As at the end of 2017, the number of customers was 1,883,407, an increase of 23,993 compared to 2016, up slightly by 1.3 per cent.

## Business Development in Mainland China

The Group's mainland businesses continued to progress steadily during 2017. Overall, inclusive of projects of the Group's subsidiary, Towngas China Company Limited ("Towngas China"; stock code: 1083.HK), the Group had 245 projects on the mainland, as at the end of 2017, four more than at the end of 2016, spread across 26 provinces, autonomous regions and municipalities. These projects encompass upstream, midstream and downstream natural gas sectors, water sectors, efficient energy applications and exploration and utilisation of emerging environmentally-friendly energy, as well as telecommunications.

The Group's development of emerging environmentally-friendly energy businesses in mainland China, including coalbed methane liquefaction, coal chemicals, conversion and utilisation of biomass, utilisation of industrial and agricultural waste as well as natural gas refilling stations, through its wholly-owned subsidiary ECO Environmental Investments Limited and the latter's subsidiaries (collectively known as "ECO"), is progressing steadily. Benefiting from a steadily improving economy in mainland China and a gradual rebound of international oil prices, ECO recorded noticeable profit growth in 2017. ECO's in-house research and development of innovative technologies also progressed well with a number of achieved results gradually being applied commercially. Gradual commissioning and development of related projects is expected to contribute to the long-term business growth of the Group.

Diversification and an increase in the number of projects have gradually transformed the Group from a locally-based company in Hong Kong centred on a single town gas business a number of years ago into a sizable, nation-wide, multi-business corporation focused on environmentally-friendly energy ventures and utility sectors.

## Utility Businesses in Mainland China

The Group's city-gas businesses are progressing well. As at the end of 2017, inclusive of Towngas China, the Group had a total of 131 city-gas projects in mainland cities spread across 23 provinces, autonomous regions and municipalities. The total volume of gas sales for these projects in 2017 was approximately 19,500 million cubic metres, an increase of 14 per cent over 2016. As at the end of 2017, the Group's mainland gas customers stood at approximately 25.38 million, an increase of 10 per cent over 2016. The Group continues to have a good reputation as a large-scale city-gas enterprise with outstanding overall performance on the mainland.

The global economy saw moderate recovery in 2017, leading to increasing demand for commodities. As a result, mainland China's economy grew faster in 2017 compared to 2016, with major economic indicators better than expected, including double-digit growth for exports, reversing the decline of the previous two years. The exchange rate of the renminbi also rebounded during the year. Thriving industrial manufacturing boosted the country's demand for energy, including electricity, petroleum and natural gas. In the medium to long term, the Chinese government advocates developing the use of natural gas to reduce air pollution and improve smoggy atmospheric conditions. As natural gas is the most widely used clean energy on the mainland, long-term and steady growth in market demand is anticipated. The Chinese government has formulated a natural gas utilisation policy to strengthen preventative measures to combat air pollution and speed up the pace of greater use of natural gas to replace coal ("coal-to-gas") across the country and to minimise the formation of smog, fostering a growing trend towards natural gas and environmentally-friendly energy. The competitiveness of natural gas relative to other energy sources has been enhanced following reductions in the mainland's non-residential natural gas city-gate prices at the end of 2015. This favourable momentum will continue to benefit the Group's city-gas and natural gas businesses.

In addition, with gradual commissioning of large-scale national natural gas projects, including transmission pipelines from Sichuan province to eastern and southern China and the West-to-East pipeline, and projects for importing piped natural gas from Central Asia and Myanmar, together with a scheduled supply of piped natural gas from Russia, as well as a rise in the sources of imported liquefied natural gas ("LNG"), supply of natural gas on the mainland is becoming ample, which is beneficial to market development. Mainland China is actively participating in international programmes to tackle global warming. As extensive areas of the country are experiencing serious smoggy atmospheric conditions, more and more provinces and cities are now promoting "coal-to-gas" policies. Natural gas as a fuel for household heating in winter is gradually becoming more widespread whilst the government is also advocating the use of natural gas to partially replace coal-fired power by promoting distributed energy systems. Thus, with ample sources of gas supply, expanding pipeline networks, rising living standards and society's aspiration for greater environmental protection, the Group anticipates its mainland city-gas businesses will continue to thrive in future.

In the short term, the mainland's sources of gas supply in winter will still be insufficient but its gas storage capacity is swiftly improving. Construction of the Group's natural gas storage facility in underground salt caverns in Jintan district, Changzhou city, Jiangsu province, is progressing in phases. Upon completion, this facility, with a total storage capacity of approximately 440 million standard cubic metres, will be the first of its kind built by a city-gas enterprise on the mainland. Construction of phase one of this project, developing a storage capacity of approximately 140 million standard cubic metres, was completed, with inspection passed, in January 2018. Construction of phase two, to develop a storage capacity of approximately 300 million standard cubic metres, will commence in late March 2018. This project is in line with the Chinese government's policy of advocating faster development of gas storage capacity, and will help the Group supplement and regulate gas supplies during the peak winter period for a number of its city-gas projects in eastern China, thus facilitating the Group's business development in downstream city-gas markets.

The Group's development of natural gas vehicular refilling stations in mainland China, under the brand name "Towngas", is progressing well, with 122 stations to date spread across different provinces. Apart from this, the Group is also proactively developing a gas refilling business for marine vessels. Given that natural gas is a form of clean energy that is being actively promoted by the Chinese government, vehicular and marine refilling station businesses promise good prospects for the Group.

The Group has been in the mainland water market, under the brand name "Hua Yan Water", for over 12 years and currently invests in, and operates, six water projects. These include water supply joint venture projects in Wujiang district, Suzhou city, Jiangsu province and in Wuhu city, Anhui province; wholly-owned water supply projects in Zhengpugang Xin Qu, Maanshan city and in Jiangbei Xin Qu, Wuhu city, both in Anhui province; and an integrated water supply and wastewater treatment joint venture project, together with an integrated wastewater treatment joint venture project for a special industry, both in Suzhou Industrial Park, Suzhou city, Jiangsu province. In addition, given food waste processing and utilisation is also a sizable environmentally-friendly industry, the Group is constructing a plant in Suzhou Industrial Park to handle 500 tonnes daily of food waste, green waste and landfill leachate for conversion into natural gas, oil products, solid fuel and fertilizers under the "Hua Yan Water" brand. Commissioning is expected in the fourth quarter of 2018; this will be the Group's first project converting waste into valuable products.

The Group invested in an LNG receiving terminal and supporting pier project at Huanghua port, Cangzhou city, Hebei province in early 2018. This state-planned energy project, emanating from mainland China's Thirteenth Five-Year Plan, will be developed in phases. Construction will embrace four LNG storage tanks with a total design receiving capacity of 2.6 million tonnes of LNG per annum, half of which is expected to be commissioned in 2021, and an unloading pier with a capacity of 100,000 tonnes. This project is currently at the preparatory stage and is expected to become a major channel for importing LNG into Hebei province after completion, thus creating synergy with the Group's investment in a midstream natural gas project in this province, which together will then create a total new gas source for the whole of Hebei province. This project will also play an important role in safeguarding gas sources for the province's "coal-to-gas" conversion project, part of the government's air pollution control plan for Beijing city, Tianjin city and Hebei province.

Operation and management of businesses encompassing city-gas, midstream natural gas, city-water and environmental waste processing and utilisation projects create ever-greater synergy and mutual advantages. Furthermore, these businesses generate stable incomes, provide good environmental benefits and exhibit high growth potential. The Group will therefore keep on looking for opportunities to invest in high-quality utility projects on the mainland.

## Emerging Environmentally-Friendly Energy Businesses

ECO's major businesses in Hong Kong – an aviation fuel facility, dedicated liquefied petroleum gas ("LPG") vehicular refilling stations and landfill gas utilisation projects – all operated well in 2017, contributing to ECO's steady profit growth. With a total turnover of approximately 6.55 million tonnes of aviation fuel in 2017, ECO's aviation fuel facility provided a safe and reliable fuel supply to Hong Kong International Airport. ECO's five LPG vehicular refilling stations also operated smoothly in 2017, providing a quality and reliable fuel supply to the territory's taxi and minibus sectors. ECO's landfill gas utilisation project is generating noticeable environmental benefits. In addition to the facility in the North East New Territories, which has been operating for several years, a second landfill gas utilisation project in the South East New Territories was commissioned in November 2017. This further raises the proportion of landfill gas used by the Group, thus making an increasing contribution to energy conservation and emission reduction in Hong Kong.

As smog and air pollution on the mainland are growing concerns, the Chinese government stepped up its efforts in 2017 to promote "coal-to-gas" conversion – using natural gas to replace coal for steam raising, leading to a surge in LNG prices during the winter, benefiting the operating income of ECO's coalbed methane liquefaction facility, located in Jincheng city, Shanxi province. Output from this project increased by 11 per cent, bringing better profit growth in 2017 compared to 2016. In line with the mainland's policy of using LNG to replace diesel as fuel for heavy-duty trucks, ECO is proactively developing networks of natural gas refilling stations which are gradually taking shape and expanding, and the ECO brand name is gradually becoming more well-known in the market.

Conversion of biomass into clean energy and chemical products is an important part of ECO's business strategy which is also in line with the policy direction of mainland China. To this end, a plant, located in Zhangjiagang city, Jiangsu province to process inedible grease feedstock using ECO's self-developed technology, has been constructed. The initial trial production has successfully yielded a first batch of 3,000 tonnes of green and renewable hydro-treated vegetable oil (HVO) for export to European markets. This project has gained "International Sustainability and Carbon Certification" (ISCC), and, on this basis, is well on the way to achieving its aims of maximising both product value and environmental benefits.

Mainland China is a sizeable agricultural production country generating a large quantity of agricultural waste every year. Apart from using a small portion of this in fields or for power generation, there are currently no effective measures to make good use of the rest of this waste. However, ECO's research and development team has successfully developed a world leading approach regarding pyrolysis and hydrolysis technologies which could effectively break down agricultural and forestry waste into hemicellulose, cellulose and lignin for further processing, creating an innovative way to convert this waste into value-added materials. To this end, ECO is planning to launch its first pilot project in a straw-rich mainland region applying hydrolysis technology to convert hemicellulose and cellulose in straw into furfural and paper pulp respectively; both are chemical feedstock and basic materials which will bring noticeable economic and environmental benefits. If successful, this pilot project will drive ECO to cultivate a broad green and low-carbon eco-system.

The operating environment of ECO's clean coal chemical project in Ordos city, Inner Mongolia Autonomous Region improved substantially in 2017, with a rise in the price of methanol and a 26 per cent increase in annual sales compared to 2016. Additionally, construction of a facility to convert a portion of the project's syngas into 120,000 tonnes of ethylene glycol annually has been completed, with trial production targeted to start in the first quarter of 2018. The success of this project will lay a foundation for ECO to further expand its syngas upgrading businesses.

In the past few years, ECO's scientific research focusing on the extraction of high-quality carbon materials from the bitumen part of high-temperature coal tar oil has achieved promising results, successfully producing meso-carbon micro-bead and high-quality activated carbon which meet the specifications required for commercial applications. Meso-carbon micro-bead is an ideal anode material for lithium-ion batteries, whereas high-quality activated carbon can be used for making super capacitors. Given the prevailing trend for promoting new energy electric vehicles and rail transport electrification in mainland China, prospects for these new carbon materials are promising. ECO has started preparatory work on its first pilot project of this kind in Ordos city, Inner Mongolia Autonomous Region, with gradual commissioning expected to start in early 2019.

As mainland China is now experiencing severe atmospheric pollution and carbon emissions, new energy driven reform is imminent. ECO continues to march along its well-defined new energy business development strategy by strengthening its capabilities in research and technological development, and, with that, building up its key businesses relating to low-carbon and clean-coal chemicals, efficient conversion and utilisation of straw, preparation of high-quality carbon materials, hydrogenation and upgrading of bio-grease, etc. In doing so, ECO is gradually migrating from its original emphasis on fuel substitutes to one encompassing higher value-added chemical and new material substitutes. A number of breakthroughs in key technologies have already been achieved, some of which can be commercialised shortly and able to deliver significant economic and environmental benefits. All these successes will create a significant competitive edge for ECO's future development.

## Telecommunications Businesses

The Group's development of telecommunications businesses in Hong Kong and mainland China, including provision of connectivity, data centres and cloud computing services for international and local telecommunications operators as well as large corporations, through its wholly-owned subsidiary Towngas Telecommunications Company Limited and the latter's subsidiaries (collectively known as "TGT"), is progressing steadily. Benefiting from synergy created by laying fiber-optic cables along existing town gas pipelines, and leveraging European advanced "glass-in-gas" and "glass-along-gas" technologies, TGT has developed telecommunications networks in Liaoning province, Shandong province, Jiangsu province, Shenzhen city, etc. TGT is also working closely with telecommunications partners to further expand connectivity business on the mainland.

In addition, TGT has invested in, and is currently operating, seven data centres in Hong Kong and mainland China in Dongguan city, Jinan city, Dalian city, Beijing city and Harbin city in total accommodating up to 16,000 server racks. Furthermore, based on its professional and reliable telecommunications infrastructure, TGT has built a highly flexible and secure cloud platform to cater for different needs of customers. TGT is embracing opportunities created by the "big data era", "5G wireless networks" and "the Internet of Things" by proactively developing advanced fiber-optic networks and maximising usage of its data centre network and cloud platform, aiming to meet a growing market demand for telecommunications services as well as data analysis and storage.

## Towngas China Company Limited
**(Stock Code: 1083.HK)**

Towngas China, a subsidiary of the Group, recorded good growth in profit after taxation attributable to its shareholders, amounting to HK$1,365 million in 2017, an increase of approximately 40 per cent over 2016. As at the end of 2017, the Group held approximately 1,858 million shares in Towngas China, representing approximately 67.1 per cent of Towngas China's total issued shares.

Project development also progressed well during 2017 with Towngas China adding to its portfolio a city-gas project in Huji town, Zhongxiang city, Hubei province, a midstream natural gas pipeline network project in Guyang county, Baotou city, Inner Mongolia Autonomous Region and a distributed energy project in Shenyang Economic and Technological Development Zone, Shenyang city, Liaoning province.

Foshan Gas Group Co., Ltd., an associate of Towngas China, was listed on the Shenzhen Stock Exchange in November 2017. The Company is principally engaged in the piped city-gas business. Listing will help its business development in Foshan city and the surrounding areas.

Towngas China will continue to actively develop small to medium commercial and industrial gas markets on the mainland and to advocate "coal-to-gas" conversion. The Company is also planning to actively develop both household gas heating, hot water and clothes drying markets on the mainland in order to boost residential gas demand, and, in addition, distributed energy system projects to enhance the efficiency of natural gas applications thus increasing competitiveness.

## Financing Programmes

In order to tap funding in a timely and flexible manner, the Group established a medium term note programme in 2009 under HKCG (Finance) Limited, a wholly-owned subsidiary of the Group. Taking advantage of low interest rates, medium term notes totalling

HK$1,438 million, with maturity of 10 years, were issued during 2017. In line with the Group's long-term business investments, as at 31st December 2017, the amount of medium term notes issued had reached HK$13.4 billion with tenors ranging from 10 to 40 years, with an average fixed interest rate of 3.5 per cent and an average tenor of 15 years.

## Inaugural Green Bond Issuance

The Group issued its inaugural green bonds in November 2017 based on a newly established Towngas Green Bond Framework, which was prepared in accordance with the Green Bond Principles 2017 of the International Capital Market Association. The inaugural 10-year green bonds, amounting to HK$600 million and JPY2 billion, were issued efficiently under the medium term note programme of the Group and attracted keen support from green investors. Proceeds from the bonds are earmarked for investment in the Group's waste-to-energy projects, including the landfill gas utilisation project at the South East New Territories landfill in Hong Kong and other eligible green investments in mainland China which demonstrate the Group's strong dedication to sustainable development and the fight against climate change. The Group is the first energy utility in Hong Kong to issue green bonds, laying a milestone for the Group's financial and environmental strategies.

The issuance of green bonds has allowed the Group to tap into a new base of green bond investors as an additional funding source for financing environmentally green projects under the Towngas Green Bond Framework. The Group is also pleased to play a part in developing a green finance hub in Hong Kong.

## Employees and Productivity

As at the end of 2017, the number of employees engaged in the town gas business in Hong Kong was 2,022 (2016 year end: 2,019), the number of customers was 1,883,407, and each employee served the equivalent of 931 customers, an increase of 1.1 per cent over 2016. Inclusive of employees engaged in local businesses such as telecommunications, LPG vehicular refilling stations and engineering contractual works, the total number of the Group's employees engaged in businesses in Hong Kong was 2,388 as at the end of 2017 compared to 2,392 as at the end of 2016. Related manpower costs amounted to HK$1,090 million for 2017. In 2017, there was an approximately 3.6 per cent average increase in remuneration over 2016. The Group will continue to offer employees rewarding careers based on their capabilities and performance and arrange a variety of training programmes in order to constantly enhance the quality of the Group's customer services.

Exclusive of businesses in Hong Kong, the total number of the Group's employees in mainland China and other places outside Hong Kong was approximately 47,000 as at the end of 2017, a similar level to 2016.

On behalf of the Board of Directors, I would like to thank all our employees for their dedication and hard work in creating value for shareholders and customers.

## Bonus Issue of Shares

The Directors propose to make a bonus issue of one new share for every ten existing shares held by shareholders whose names are on the Register of Members of the Company as at 14th June 2018. The necessary resolution will be proposed at the forthcoming Annual General Meeting on 6th June 2018, and if passed, share certificates will be posted on 22nd June 2018.

## Final Dividend

The Directors are pleased to recommend a final dividend of HK23 cents per share payable to shareholders whose names are on the Register of Members of the Company as at 14th June 2018. Including the interim dividend of HK12 cents per share paid on 3rd October 2017, the total dividend payout for the whole year shall be HK35 cents per share.

Barring unforeseen circumstances, the forecast dividends per share for 2018 after bonus share issue shall not be less than the interim and final dividends for 2017.

## Business Outlook for 2018

The Company predicts steady growth in its number of customers in Hong Kong during 2018. Stable economic development, favourable employment conditions and thriving inbound tourism in early 2018 all helped to stimulate domestic demand and consumer spending. The Group's gas business in Hong Kong is also benefiting from the efforts of the Government of the Hong Kong Special Administrative Region to increase land and housing supply which should help maintain stable and good growth in the number of gas customers in the next few years. Additionally, town gas as an energy resource combining both environmental and economic advantages is creating a competitive edge fostering development of the Company's commercial and industrial energy markets. Following a slight rebound of international oil prices from a low level, fuel cost adjustment charges of the gas tariff have slightly increased but this is not affecting the competitiveness of town gas, relative to electricity in particular, in the energy market. However, increasing local manpower costs and operating expenses are leading to rising costs for businesses generally. The Company's increase in the standard gas tariff effective from 1st August 2017 is helping to offset some of its own rising operating costs. The Company will, however, continue to enhance operational efficiency so as to maintain stable development of its gas business in the territory.

Despite a number of uncertainties concerning the global economic outlook, recovery momentum in 2017 was steady and is continuing so far this year. High demand for commodities in international markets is helping the development of export manufacturing industries in mainland China thus leading to steady growth in industrial gas demand. These factors are beneficial to overall profit growth of the Group's city-gas businesses. Furthermore, the Chinese government's move to improve smoggy atmospheric conditions by tightening supervision and administration of related measures is in progress. On 1st January 2018, the Implementing Regulations for the Environmental Protection Tax Law became effective alongside the Environmental Protection Tax Law, aiming to further promote corporate initiatives to enhance their environmental protection levels by charging taxes in accordance with the quantity of pollutants discharged; this is helping the development of natural gas markets. The Chinese government is also increasing its efforts to reduce carbon emissions and encourage the use of clean energy, creating opportunities for natural gas to replace use of coal in industrial production, as well as in boilers, power generation, distributed energy, household heating, etc. Natural gas price adjustments in late 2015 lowered upstream gas prices, thus enhancing competitiveness. In addition, increasing upstream gas supplies, expanding and improving pipeline networks and rapid urbanisation leading to a continuous rise in demand for utility facilities and energy, are all favourable to the downstream gas market and the healthy and long-term development of the natural gas business sector in general.

In respect of emerging environmentally-friendly energy businesses, following the Chinese government's move towards greater energy diversification, environmental protection and recycling of materials, the Group is continuing to develop and apply new technologies for conserving energy and reducing pollutant emissions. There is also a growing trend for greater use of low-sulfur, high-quality oil, electricity and natural gas as fuels for vehicles and vessels to reduce atmospheric pollution. A rebound of international oil prices from their lowest point in early 2016 has created a favourable environment for profit growth of the Group's emerging environmentally-friendly energy businesses. ECO is also moving towards production of high-quality chemical products which are less sensitive to international oil prices, taking this as a guide for future business development. As ECO's in-house research and development of a number of technologies is gradually achieving results which are being put into commercial production, emerging environmentally-friendly energy businesses will ignite a new light for the Group, illuminating the way for long-term development and business growth strategy.

With the Group's solid foundation in Hong Kong and its diverse business sectors spread across extensive areas on the mainland, together with its established operational base, successful technical experience, corporate brand names and sales channels built there over 20 years alongside society's growing concern over air quality, it is anticipated that there will be ever-rising demand for clean energy. According to the Thirteenth Five-Year Plan, the share of natural gas in the country's total energy mix is set to increase from 6 per cent currently to 10 per cent by year 2020, thus creating huge market potential for clean energy. In addition, given that the number of piped-gas customers in Hong Kong and mainland China is rising, the Group foresees that this sizeable customer base will create a promising platform for its expanding new businesses.

The mainland's economic development is expected to maintain steady and favourable momentum in 2018. The Group has formulated, and is gradually implementing, plans in accordance with the country's energy and environmental policies. Overall, with society's growing aspiration for more environmental protection, demand for natural gas and environmentally-friendly and renewable energy will increase. Furthermore, the Group is actively promoting an innovative mindset and effectively putting this into practice, thus continuously injecting new impetus to foster business growth. The Group anticipates an ever broader and brighter development for its businesses in the future.

**LEE Shau Kee**
*Chairman*
Hong Kong, 20th March 2018

# Board of Directors

*FROM LEFT TO RIGHT*

FRONT ROW

David Li Kwok Po

Lee Shau Kee
*Chairman*

Poon Chung Kwong

BACK ROW

Peter Wong Wai Yee

Alfred Chan Wing Kin

Colin Lam Ko Yin

Lee Ka Kit

Leung Hay Man

Lee Ka Shing

# BIOGRAPHICAL DETAILS OF DIRECTORS

## Dr. the Hon. LEE Shau Kee

*G.B.M., D.B.A. (Hon.), D.S.Sc. (Hon.), LL.D. (Hon.),*

Chairman & Non-executive Director

Aged 89. Dr. Lee was appointed to the Board of Directors of the Company in 1978 and subsequently appointed Chairman in 1983. He has been engaged in property development in Hong Kong for more than 60 years. Dr. Lee is the Chairman and Managing Director of Henderson Land Development Company Limited ("Henderson Land Development") and an Executive Director of Henderson Investment Limited. Dr. Lee is also a Vice Chairman of Sun Hung Kai Properties Limited as well as a Non-executive Director of Hong Kong Ferry (Holdings) Company Limited and Miramar Hotel and Investment Company, Limited. All the above companies are listed public companies. Dr. Lee is also a Director of Henderson Development Limited ("Henderson Development"), Hopkins (Cayman) Limited ("Hopkins"), Rimmer (Cayman) Limited ("Rimmer"), Riddick (Cayman) Limited ("Riddick"), Timpani Investments Limited ("Timpani Investments"), Disralei Investment Limited ("Disralei Investment"), Medley Investment Limited ("Medley Investment") and Macrostar Investment Limited ("Macrostar Investment"). Henderson Land Development, Henderson Development, Hopkins, Rimmer, Riddick, Timpani Investments, Disralei Investment, Medley Investment and Macrostar Investment have discloseable interests in the Company under the provisions of the Securities and Futures Ordinance (please refer to the notes on "Substantial Shareholders and Others" on pages 69 and 70 of this Annual Report for details). Dr. Lee was awarded the Grand Bauhinia Medal by the Government of the Hong Kong Special Administrative Region in 2007. Dr. Lee is the father of Dr. Lee Ka Kit and Mr. Lee Ka Shing, Non-executive Directors of the Company.

## Mr. LEUNG Hay Man

*F.R.I.C.S., F.C.I.Arb., F.H.K.I.S.,*

Independent Non-executive Director

Aged 83. Mr. Leung was appointed to the Board of Directors of the Company in 1981. He is an Independent Non-executive Director of Henderson Land Development Company Limited ("Henderson Land Development"), Henderson Investment Limited and Hong Kong Ferry (Holdings) Company Limited, all of which are listed public companies. Henderson Land Development has discloseable interests in the Company under the provisions of the Securities and Futures Ordinance (please refer to the notes on "Substantial Shareholders and Others" on pages 69 and 70 of this Annual Report for details). Mr. Leung is a Fellow of the Royal Institute of Chartered Surveyors, Fellow of the Chartered Institute of Arbitrators and Fellow of the Hong Kong Institute of Surveyors.

## Dr. Colin LAM Ko Yin

*S.B.S., F.C.I.L.T., F.H.K.I.o.D., D.B. (Hon.),*

Non-executive Director

Aged 66. Dr. Lam was appointed to the Board of Directors of the Company in 1983. He has more than 44 years' experience in banking and property development. He is the Deputy Chairman of The University of Hong Kong Foundation for Educational Development and Research and a Director of Fudan University Education Development Foundation. Dr. Lam was awarded the Silver Bauhinia Star by the Government of the Hong Kong Special Administrative Region in 2017. He was also awarded an Honorary University Fellowship by The University of Hong Kong in 2008, and was conferred a degree of Doctor of Business (Honoris Causa) by Macquarie University in 2015. He is a Fellow of The Chartered Institute of Logistics and Transport in Hong Kong and a Fellow of The Hong Kong Institute of Directors. Dr. Lam is a Vice Chairman of Henderson Land Development Company Limited ("Henderson Land Development") and Henderson Investment Limited, the Chairman of Hong Kong Ferry (Holdings) Company Limited, and an Executive Director of Miramar Hotel and Investment Company, Limited, all of which are listed public companies. Dr. Lam is a Director of Henderson Development Limited ("Henderson Development"), Hopkins (Cayman) Limited ("Hopkins"), Rimmer (Cayman) Limited ("Rimmer"), Riddick (Cayman) Limited ("Riddick"), Disralei Investment Limited ("Disralei Investment"), Medley Investment Limited ("Medley Investment") and Macrostar Investment Limited ("Macrostar Investment"). Henderson Land Development, Henderson Development, Hopkins, Rimmer, Riddick, Disralei Investment, Medley Investment and Macrostar Investment have discloseable interests in the Company under the provisions of the Securities and Futures Ordinance (please refer to the notes on "Substantial Shareholders and Others" on pages 69 and 70 of this Annual Report for details).

### Dr. the Hon. Sir David LI Kwok Po

*GBM, GBS, OBE, JP, MA Cantab. (Economics & Law), Hon. LLD (Cantab), Hon. DSc. (Imperial), Hon. LLD (Warwick), Hon. DBA (Edinburgh Napier), Hon. D.Hum.Litt. (Trinity, USA), Hon. LLD (Hong Kong), Hon. DSocSc (Lingnan), Hon. DLitt (Macquarie), Hon. DSocSc (CUHK), FCA, FCPA, FCPA (Aust.), FCIB, FHKIB, FBCS, CITP, FCIArb, Officier de l'Ordre de la Couronne, Grand Officer of the Order of the Star of Italian Solidarity, The Order of the Rising Sun, Gold Rays with Neck Ribbon, Commandeur dans l'Ordre National de la Légion d'Honneur,*

Independent Non-executive Director

Aged 79. Sir David was appointed to the Board of Directors of the Company in 1984. Sir David is the Chairman and Chief Executive of The Bank of East Asia, Limited. He is an Independent Non-executive Director of Guangdong Investment Limited, The Hongkong and Shanghai Hotels, Limited, PCCW Limited, San Miguel Brewery Hong Kong Limited and Vitasoy International Holdings Limited. All the above companies are listed public companies. He is also a Director of Hong Kong Interbank Clearing Limited. He was previously an Independent Non-executive Director of SCMP Group Limited (now known as Great Wall Pan Asia Holdings Limited). Sir David is a Member of the Council of the Treasury Markets Association. He is Founding Chairman of The Friends of Cambridge University in Hong Kong Limited, Chairman of the Advisory Board of The Salvation Army, Hong Kong and Macau Command and Chairman of the Executive Committee of St. James' Settlement. He was a Member of the Legislative Council of Hong Kong from 1985 to 2012.

### Dr. LEE Ka Kit

*G.B.S., J.P., D.B.A. (Hon.),*

Non-executive Director

Aged 54. Dr. Lee was appointed to the Board of Directors of the Company in 1990. He was educated in the United Kingdom. He is a Vice Chairman of Henderson Land Development Company Limited ("Henderson Land Development") and Henderson Investment Limited as well as a Non-executive Director of The Bank of East Asia, Limited. All the above companies are listed public companies. He is also a Vice Chairman of Henderson Development Limited ("Henderson Development") and a Director of Hopkins (Cayman) Limited ("Hopkins"), Rimmer (Cayman) Limited ("Rimmer") and Riddick (Cayman) Limited ("Riddick"). Henderson Land Development, Henderson Development, Hopkins, Rimmer and Riddick have discloseable interests in the Company under the provisions of the Securities and Futures Ordinance (please refer to the notes on "Substantial Shareholders and Others" on pages 69 and 70 of this Annual Report for details). Dr. Lee is a Member of the Standing Committee of the 13th National Committee of the Chinese People's Political Consultative Conference and a Member as well as the Chairman of the Board of Directors of One Country Two Systems Research Institute. He was appointed as a Justice of the Peace by the Government of the Hong Kong Special Administrative Region (the "HKSAR") in 2009, and was awarded the Gold Bauhinia Star by the Government of the HKSAR in 2015. Dr. Lee was awarded an Honorary University Fellowship by The University of Hong Kong in 2009, and was also awarded an Honorary Degree of Doctor of Business Administration by Edinburgh Napier University in 2014. He is the son of Dr. Lee Shau Kee, the Chairman of the Company and the brother of Mr. Lee Ka Shing, a Non-executive Director of the Company.

## Mr. LEE Ka Shing

*J.P.,*

Non-executive Director

Aged 46. Mr. Lee was appointed to the Board of Directors of the Company in 1999. He was educated in Canada. He is a Vice Chairman of Henderson Land Development Company Limited ("Henderson Land Development"), the Chairman and Managing Director of Henderson Investment Limited and the Chairman and Chief Executive Officer of Miramar Hotel and Investment Company, Limited, all of which are listed public companies. Mr. Lee is also a Vice Chairman of Henderson Development Limited ("Henderson Development") and a Director of Hopkins (Cayman) Limited ("Hopkins"), Rimmer (Cayman) Limited ("Rimmer"), Riddick (Cayman) Limited ("Riddick"), Disralei Investment Limited ("Disralei Investment"), Medley Investment Limited ("Medley Investment"), Faxson Investment Limited ("Faxson Investment"), Chelco Investment Limited ("Chelco Investment") and Macrostar Investment Limited ("Macrostar Investment"). Henderson Land Development, Henderson Development, Hopkins, Rimmer, Riddick, Disralei Investment, Medley Investment, Faxson Investment, Chelco Investment and Macrostar Investment have discloseable interests in the Company under the provisions of the Securities and Futures Ordinance (please refer to the notes on "Substantial Shareholders and Others" on pages 69 and 70 of this Annual Report for details). Mr. Lee was appointed as a Justice of the Peace by the Government of the Hong Kong Special Administrative Region in 2017. He is a Member of The Court of The Hong Kong Polytechnic University. He is also a Committee Member of the 13th Beijing Committee of the Chinese People's Political Consultative Conference. Mr. Lee is the son of Dr. Lee Shau Kee, the Chairman of the Company and the brother of Dr. Lee Ka Kit, a Non-executive Director of the Company.

## Professor POON Chung Kwong

*G.B.S., J.P., Ph.D., D.Sc.,*

Independent Non-executive Director

Aged 78. Professor Poon was appointed to the Board of Directors of the Company in 2009. Professor Poon is currently the Chairman of Virya Foundation Limited (a registered non-profit charitable organisation). Professor Poon is an Emeritus Professor and the President Emeritus of The Hong Kong Polytechnic University. He had devoted 40 years of his life to advancing university education in Hong Kong before he retired in January 2009 from his 18-year presidency at The Hong Kong Polytechnic University. Professor Poon is a Non-executive Director of Lee & Man Paper Manufacturing Limited and an Independent Non-executive Director of Henderson Land Development Company Limited ("Henderson Land Development") and Chevalier International Holdings Limited as well as an Independent Non-executive Director of Hopewell Highway Infrastructure Limited (in which he expects to resign later). He was previously an Independent Non-executive Director of K. Wah International Holdings Limited. All the above companies are listed public companies. Henderson Land Development has discloseable interests in the Company under the provisions of the Securities and Futures Ordinance (please refer to the notes on "Substantial Shareholders and Others" on pages 69 and 70 of this Annual Report for details). Professor Poon was appointed as a Justice of the Peace in 1989 and received the OBE award in 1991, the Gold Bauhinia Star award in 2002 and also the "Leader of the Year Awards 2008 (Education)". In addition, he was appointed as a member of the Legislative Council (1985 – 1991) and a member of the National Committee of the Chinese People's Political Consultative Conference (1998 – 2013). Professor Poon obtained a Bachelor of Science (Honours) Degree from The University of Hong Kong, a Doctor of Philosophy Degree and a Higher Doctor of Science Degree from the University of London. He was a Postdoctoral Fellow at the California Institute of Technology, University of Southern California and University of Toronto. He also held the Honorary Degree of Doctor of Humanities from The Hong Kong Polytechnic University in 2009.

## Mr. Alfred CHAN Wing Kin

*B.B.S., Hon.F.E.I., Hon.F.I.I.U.S., C.Eng., F.H.K.I.E., F.I.Mech.E., F.I.G.E.M., M.Sc. (Eng), B.Sc. (Eng),*

Managing Director

Aged 67. Mr. Chan joined the Company as the General Manager – Marketing in 1992 and was appointed as the General Manager – Marketing & Customer Service in 1995. He was appointed to the Board of Directors of the Company in January 1997 and as the Managing Director in May 1997. Mr. Chan is a director of major local and overseas subsidiary companies of the Company. He is also the Chairman and President of Hong Kong & China Gas Investment Limited, an investment holding company in mainland China and chairman, vice chairman or a director of a number of the project companies in mainland China. Mr. Chan is the Chairman of Towngas China Company Limited, the Vice Chairman of Shenzhen Gas Corporation Ltd. and a Non-executive Director of the tenth session of the board of directors of Shanghai Dazhong Public Utilities (Group) Co., Ltd., all of which are listed public companies. He is an Honorary President of The Hong Kong Management Association and a Vice Chairman of China Gas Association. Mr. Chan is a Member of the Standing Committee on Judicial Salaries and Conditions of Service of the Government of the Hong Kong Special Administrative Region. Mr. Chan received the Executive Award under the DHL/SCMP Hong Kong Business Awards 2005, the Director of the Year Awards – Listed Companies (SEHK – Hang Seng Index Constituents) Executive Directors from The Hong Kong Institute of Directors in 2006, the Leadership Award in Gas Industry Award 2015 from the Institution of Gas Engineers & Managers and the Energy and Utilities Alliance of the United Kingdom, "The CEO of the Year 2017" Award from China Newsweek in 2017 and was named consecutively as one of "The 100 Best-Performing CEOs in the World" by Harvard Business Review from 2015 to 2017. He was awarded an Honorary Fellowship by The Hong Kong Institute of Education (now known as The Education University of Hong Kong) in 2016. Mr. Chan, a Chartered Engineer, is also Honorary Fellow of the Energy Institute of the United Kingdom, Fellow of The Hong Kong Institution of Engineers; Fellow of The Institution of Mechanical Engineers, Fellow of the Institution of Gas Engineers & Managers of the United Kingdom and Honorary Fellow of International Institute of Utility Specialists.

## Mr. Peter WONG Wai Yee

*C.P.A. (CANADA), C.M.A., A.C.I.S., A.C.S., F.I.G.E.M., F.H.K.I.o.D., M.B.A.,*

Executive Director and Chief Operating Officer – Utilities Business

Aged 66. Mr. Wong joined the Group in 1997, initially as its Financial Controller. Since 2002, he has been deeply involved in the development of the Group's mainland utilities business, operating from its headquarters in Shenzhen, China. Mr. Wong was appointed to the Board of Directors of the Company in February 2013. Mr. Wong is currently the Executive Director and Chief Operating Officer of the Utilities Business and also holds directorships in various subsidiaries of the Group. He is also an Executive Director and the Chief Executive Officer of Towngas China Company Limited, the Vice Chairman of Foshan Gas Group Co., Ltd. and a director of Shenzhen Gas Corporation Ltd., all of which are listed public companies. He has been appointed as a Member of the Mainland Business Advisory Committee of the Hong Kong Trade Development Council for two years from 1st April 2018. Mr. Wong was named consecutively as one of "The Best CEO of Chinese Listed Companies" by Forbes in 2012 and 2013. He is a chartered professional accountant of Canada and a chartered company secretary both in Hong Kong and the United Kingdom. Mr. Wong is a Fellow of the Institution of Gas Engineers & Managers of the United Kingdom. He completed the Advanced Management Program from Harvard Business School in the United States. Mr. Wong was formerly a director of the Certified Management Accountants Society of British Columbia, Canada and the president of its Hong Kong branch. He is a member of the Advisory Board of the Department of Accounting of Hong Kong Shue Yan University and a member of the Advisory Committee of the College of Professional and Continuing Education, The Hong Kong Polytechnic University. Mr. Wong has over 41 years of experience in corporate finance, management and international working experience.


# Executive Committee

*FROM LEFT TO RIGHT*

**Philip Siu Kam Shing**
*Chief Operating Officer – New Energy Business*

**Alfred Chan Wing Kin**
*Managing Director*

**Fan Kit Yee**
*Head of Corporate Human Resources*

**Peter Wong Lam Sang**
*Head of Commercial – Hong Kong Utilities*

**John Ho Hon Ming**
*Chief Financial Officer and Company Secretary*

**Simon Ngo Siu Hing**
*Head of Engineering – Hong Kong Utilities*

**Peter Wong Wai Yee**
*Executive Director and Chief Operating Officer – Utilities Business*

## MAINLAND UTILITY BUSINESSES

# Green

Total gas sales increased to a record-high of about 19,500 million cubic metres, an increase of 14 per cent over the previous year, while customer accounts exceeded 25 million, an increase of over 2 million.

Nearly 30,000 residential combi boilers and around 20,000 residential gas clothes dryers, a new appliance in this market, were sold during the year.


# City Gas

Good progress was made on the plant construction of our Hua Yan Water pilot project to convert food waste into gas and solid fuel. It is targeted for commissioning by the end of 2018.

The Mia Cucina kitchen cabinet brand expanded to include our Total Kitchen Solution, which offers a complete portfolio of kitchen equipment to complement the cabinets sold to property developers and individual home owners.

# MAINLAND UTILITY BUSINESSES

In the improved economic environment of 2017, we aggressively pursued opportunities to expand our city-gas and related businesses on the mainland. This has not only helped us to secure continued growth in this market but will also contribute to the Chinese government's vision of creating a greener China.


Foshan Gas Group Co., Ltd, an associate of Towngas China, was listed on the Shenzhen Stock Exchange in November 2017.

## City-gas Operations

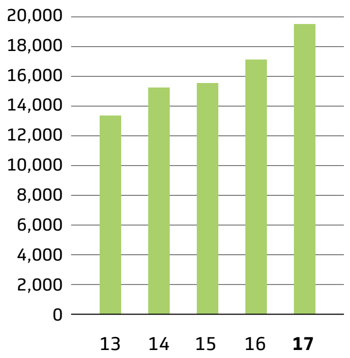
During the year, we had 131 city-gas projects in 23 provinces, autonomous regions and municipalities in mainland China. The number of customers served during this period amounted to 25.38 million, an increase of over 2 million from the previous year.

In 2017, the economy of mainland China rebounded to achieve a GDP growth rate of 6.9 per cent, which was 0.2 per cent higher than the year before and 0.4 per cent above the government's target for the year. This, together with the recovery of the renminbi and rise in commodity and oil prices, had a positive impact on our city-gas business.

The growth of our city-gas business has in large part been due to the Chinese government's policy, outlined in its Thirteenth Five-Year Plan, to reduce carbon intensity by 40 to 45 per cent from a 2005 baseline by the year 2020, with a 60 per cent ceiling by 2030. At the First Plenary Session of the Nineteenth Congress in October 2017, the government gave further support to environmental protection by pledging to accelerate the development of energy-saving, emission reduction, waste-to-energy and recycling industries, which aligns well with the Group's gas business strategy.

This is to be achieved by replacing coal with cleaner fuels such as natural gas. In recent years, the amount of natural gas consumed on the mainland has grown substantially and is projected to continue rising. In 2017, total gas consumption was 237 billion cubic metres. By 2020, it is estimated to reach 360 billion cubic metres and, by 2030, up to 480 billion cubic metres.

### China Joint Ventures Gas Sales (million m³)




The Chinese government's strong directive to switch to natural gas led to gas sales of about 19,500 million cubic metres in total volume for our city-gas projects during the year, an increase of 14 per cent over 2016.

During the year, we took the further step of exploring new gas applications by promoting distributed energy systems, which deliver higher energy efficiency and will also contribute to the country's efforts to reduce its reliance on coal-fired power. These distributed energy systems include gas-fired power generators coupled with district cooling and heating networks. Generators using gas are environmentally-friendly, lower emitting and far more efficient than coal (80 per cent vs 60 per cent thermal efficiency).

In 2017, we established Towngas Energy Investment (Shenzhen) Company for managing our distributed energy system and central heating projects. Seven direct investment projects started during the year, initially in regions of the east, north, and northeast China.

We launched strategic marketing campaigns targeted at commercial customers, particularly the restaurant industry, to encourage the switch to piped gas from bottled liquefied petroleum gas, a move that not only significantly reduces fuel costs but also enhances safety. In addition, we promoted the use of gas-powered hot water systems in the commercial market, including hotels, schools and fitness centres, across the country. During the year, we acquired 18,000 new commercial customers, accounting for 580 million cubic metres of annual gas volume.

We also see enormous potential in the residential market for cost-efficient gas furnaces and space heaters, which are common in areas of the country with cold winters. The growing popularity of gas clothes dryers, especially among China's affluent new middle class, together with the continuing trend towards urbanisation, should lead to a steady growth in average gas consumption per household.

As a company with a long history in Hong Kong, we are transferring our culture to the joint venture companies we partner with. In these collaborative partnerships, we take responsibility for managing project designs, materials and technology as well as our own consolidated purchasing system to ensure better bargaining power with suppliers in terms of cost and quality. We have been building on our experience, systems, efficiency and customer service, as well as our reputation for safety, quality, and professionalism, for the past two decades in mainland China. With the Chinese government's determination to clean its air, water and soil, we are well positioned to become a green Hong Kong-based company in Greater China in the years ahead.

## Midstream Facilities

We continued to look for opportunities in the midstream natural gas business in 2017. By investing in long-haul pipelines, natural gas imports and gas storage in strategic locations, we hope to secure sufficient supplies of natural gas for our city-gas projects, particularly during peak winter months when gas consumption is high.

In early 2018, we invested in a liquefied natural gas (LNG) receiving terminal and supporting pier project at Huanghua port, Cangzhou, Hebei province. The project will be developed in phases to construct four LNG storage tanks and an uploading pier. It is expected to become a major channel to import LNG into Hebei province after completion, thus offering a new gas source for the province.

To improve air quality, we encouraged the use of natural gas boilers for central heating.

We also made significant progress building new underground gas storage facilities at Jintan in Jiangsu province. These facilities, which were converted from salt caverns, have a total storage capacity of approximately 440 million standard cubic metres. Construction of phase one of this project was completed in January 2018, with a capacity of approximately 140 million standard cubic metres. Phase two of the construction, commencing in the first quarter of 2018, will be to develop a storage capacity of approximately 300 million standard cubic metres. Once in full operation, the project will increase the Group's gas storage capabilities and enable us to enter the gas trading business in future.

## Water Supply and Wastewater Operation

Since 2005, we have been engaged in the water supply and waste water treatment business through our subsidiary, Hong Kong & China Water Limited (Hua Yan Water). As of the end of 2017, this business had invested in or was managing six projects on the mainland, including city water supply, domestic sewage and industrial wastewater treatment projects. These included water supply joint ventures in Suzhou, Jiangsu province and Wuhu, Anhui province, as well as wholly-owned water supply projects in Zhengpugang Xin Qu, Maanshan and in Jiangbei Xin Qu, Wuhu, both in Anhui province.

Hua Yan Water also operated an integrated water supply and wastewater treatment joint venture project, along with an integrated wastewater treatment joint venture project, for an international electronics firm in Suzhou Industrial Park in Jiangsu province.

During the review period, Hua Yan Water sold 467 million tonnes of water, an increase of 3 per cent over 2016. The Company as of the year end had more than 1.2 million customers.

Taking advantage of its experience in sewage treatment, Hua Yan Water in 2016 branched out into the bio-waste treatment business with a plant that is currently under construction in Suzhou Industrial Park. This plant, which is another example of our commitment to environmental conservation, will convert food waste to make gas and organic fertiliser using Swedish technology and our own expertise in waste water treatment – the first venture of its kind for the Group. With its commissioning in the fourth quarter of 2018, the plant will be capable of handling 500 tonnes of food waste, green waste and landfill leachate a day for conversion into natural gas, oil products, solid fuel and fertilisers. After this trial project is successfully commissioned, we can extend this model into cities beyond Suzhou, since food waste has become an increasingly serious problem in the country. We are also looking into treating organic landscaping waste and expanding into incinerators and other garbage treatment facilities through Hua Yan Water.

All of these new ventures offer tremendous scope for the Group's business expansion as the Chinese government is eager to convert bio-waste into reusable fuel or materials in line with its commitment to promote green industries.

## Extended Service Businesses

For more than 25 million customers on the mainland, we provide a selection of high quality, contemporary products, ranging from home gas appliances to kitchen furnishings, as well as services such as gas-related insurance policies, convenient payment methods and customer service centres.

### *Trusted products*

We help fulfil the aspirations of China's rising middle class for a better life with safe, reliable, high quality residential gas appliances under our well-recognised Bauhinia brand. These products include gas stoves, clothes dryers, water heaters and space heating systems. In 2017, we sold 750,000 appliances, accumulating sales of more than 5 million units since the launch of the brand.

In response to the growing demand for more upmarket household products, we launched the Mia Cucina line of cabinets in 2016, as part of our Total Kitchen Solution concept first introduced in Hong Kong. These products


As a result of extensive marketing efforts, our residential gas clothes dryer has become widely accepted in the mainland market.

have been well received by property developers, who signed contracts for more than 2,000 Mia Cucina packages in 2017.

Also in 2017, we had 36 customer centres featuring cabinet displays in various cities as a test of the retail market. These centres serve as a showcase for our cabinets, so that property developers, architects and other customers can experience the concept and quality behind these products directly. Thanks to the importance we place on style, premium materials and quality control, the Mia Cucina brand has won a loyal following on the mainland.

To increase sales of residential combi boilers, we equipped them with a smart temperature control system that enables customers not only to save energy but to learn about the safety features of space heating systems via the internet.

### *Convenient services*

Our digital service arm, Towngas Lifestyle, is a one-stop e-commerce platform that provides customers with a wide selection of high quality lifestyle services and products. In addition to over 3,000 types of kitchenware and related merchandise, the platform offers pollution-free cooking ingredients from all over the world as well as seasonal healthy food and user-friendly cooking recipes. To meet the market demand for healthy food, we are also planning to launch a meal delivery service in Suzhou as a pilot programme in collaboration with reliable restaurants.

To build customer loyalty, we launched the Towngas Card as part of our exclusive Towngas Membership Scheme during the year. Our members not only can enjoy various benefits such as health services and lucky draws but also redeem points for special events and featured products. During the year, the number of members reached nearly 1 million.

We continued to offer household gas insurance protection to our residential customers in partnership with China Ping An Property & Casualty Insurance and Huatai Property Insurance. Currently, this business is available through our city-gas projects across 65 cities and has accumulated total premiums of RMB45 million. Aside from household gas insurance, we also launched a comprehensive gas insurance plan for more than 1,000 industrial and commercial customers.

### *Marketing promotions*

To promote our gas clothes dryers, we make use of online channels, including geolocation advertising on WeChat groups. Additionally, we launched a free clothes drying service at local districts in selected sales markets to change consumer habits and ultimately increase the sales of our products.

We also organise Bauhinia's National Cooking Competition for children every year, a brand-building activity based on the idea of contributing to the community. In 2017, our volunteers brought the finalists and their families to visit children in remote mountain areas and distribute care packages to their families.

## Customer Service

During the review period, we expanded our service and sales network to 255 customer centres across 84 mainland cities, all in convenient, easily-accessible locations.

In serving our more than 25 million customers each year, our employees make over 100 million contacts with them through inquiries, appliance sales and installation, maintenance and hotline calls. Our goal is to leave a positive impression in every customer encounter by providing service that is above the market norm.

Although we have made a great effort to set a high standard of service on the mainland, we believe that we can always improve. During the year, we partnered with a consultancy firm to launch a nationwide customer satisfaction survey to identify areas for improvement. The results of the survey showed that we scored 93 per cent in terms of service excellence – the highest level of customer satisfaction as compared with local water, electricity, transportation and other public utilities. The results of our mystery customer survey also improved by another 5 per cent over the previous year, confirming that we have made a steady improvement in our service standards.

During the year, we upgraded our online service platform, the Virtual Customer Centre (VCC), and included Ganghua Pay, our own transaction platform for online payments. The VCC, which is widely accessible through websites, social media and mobile apps, allows our city-gas companies to offer greater online convenience to their customers. During the year, a total of 33 city-gas projects joined the platform and launched promotion campaigns that reached 6 million users. Our VCC platform was named as China's Top 10

Towngas Lifestyle, our e-commerce platform, offers a wide range of lifestyle services and products.

We conduct continuous and systematic inspections to ensure customer safety.

Hybrid Cloud User 2017 by the Open Source Cloud Alliance for Industry.

We also improved service standards among our customer service staff through our Three Courtesies service campaign. Forty frontline staff were recognised as ambassadors for practising these Courtesies – etiquette, politeness and care – in their daily interactions with customers. To promote these concepts among all employees, we launched a series of internal activities such as workshops, stories sharing and a video contest.

After-sales service is another important aspect of our service culture that has made the Bauhinia brand so well-trusted among consumers. All Bauhinia products come with a three-year warranty and comprehensive after-sales services. To improve the service skills of our after-sales team, every year we organise a nationwide competition to motivate our staff to upgrade their skills.

## Safety

One of the main reasons we enjoy such an exemplary reputation on the mainland is our relentless focus on safety and efforts to raise safety standards in the gas industry. Taking a proactive approach to enhance safety levels, we conducted ongoing and systematic safety inspections of our mainland business locations. For example, in 2017, comprehensive safety visits were organised in northeast and north China in September and November, respectively. What's more, we conduct regular safety and risk audits every two years and the assessment list of safety practices covered more than 800 items. In 2017, we evaluated the performance of 55 joint venture companies, with satisfactory results.

Another key approach to safety is to carry out regular safety inspections (RSI). We introduced RSI in Hong Kong in the 1990s and later brought the concept to mainland China when we began operating there. It has since become a policy for all mainland city-gas companies to conduct RSIs, and every gas user is required to have an inspection every 12 to 24 months.

As we believe in constantly improving safety, we offer comprehensive training to employees across our mainland operations. We have also developed a wide range of training materials, with information on laws and regulations, occupational safety and other practical topics, and established an e-learning platform for all joint venture companies. In 2017, we conducted an online safety quiz that attracted the participation of around 16,000 employees and increased their safety knowledge.

During the year, our safety initiatives achieved significant improvements, as demonstrated by our safety figures in which, for example, the Group's number of serious gas-related incidents fell by 30 per cent.

# 2017
## Utility Businesses in Mainland China

### Towngas Piped City-Gas Projects

| | Year of Establishment | Project Investment Rmb M | Registered Capital Rmb M | Equity Share % |
|---|---|---|---|---|
| **GUANGDONG PROVINCE** | | | | |
| Panyu | 1994 | 260 | 105 | 80% |
| Zhongshan | 1995 | 240 | 96 | 70% |
| Dongyong | 1998 | 178 | 75 | 82.6% |
| Shenzhen | 2004 | – | 2,214 | 26.46% |
| Chaoan | 2007 | 185 | 99 | 90% |
| Chaozhou Raoping | 2011 | 189 | 106 | 60% |
| **CENTRAL CHINA** | | | | |
| Wuhan | 2003 | 1,000 | 420 | 49% |
| Xinmi | 2009 | 205 | 85 | 100% |
| **EASTERN CHINA** | | | | |
| Yixing | 2001 | 246 | 124 | 80% |
| Taizhou | 2002 | 200 | 83 | 65% |
| Zhangjiagang | 2003 | 200 | 100 | 50% |
| Wujiang | 2003 | 150 | 60 | 80% |
| Xuzhou | 2004 | 245 | 125 | 80% |
| Suining | 2009 | 155 | 67 | 100% |
| Fengxian | 2009 | 60 | 31 | 100% |
| Peixian | 2015 | 300 | 100 | 100% |
| Danyang | 2004 | 150 | 60 | 80% |
| Jintan | 2006 | 150 | 60 | 60% |
| Tongling | 2006 | 240 | 100 | 70% |
| Suzhou Industrial Park | 2001 | 600 | 200 | 55% |
| Changzhou | 2003 | 248 | 166 | 50% |
| Nanjing | 2003 | 1,200 | 700 | 49% |
| Fengcheng | 2007 | 206 | 88 | 55% |
| Pingxiang | 2009 | 297 | 105 | 100% |
| Jiangxi | 2009 | 52 | 26 | 56% |
| Zhangshu | 2009 | 86 | 34 | 100% |
| Yonganzhou | 2010 | 100 | 68 | 93.9% |
| Hangzhou | 2013 | 2,988 | 1,195 | 24% |
| **SHANDONG PROVINCE** | | | | |
| Jinan East | 2003 | 610 | 470 | 49% |
| **NORTHERN CHINA** | | | | |
| Jilin | 2005 | 247 | 100 | 63% |
| Beijing Economic-technological Development Area | 2005 | 111 | 44 | 49% |
| Hebei Jingxian | 2011 | 186 | 79 | 81% |
| **NORTHWESTERN CHINA** | | | | |
| Xi’an | 2006 | 1,668 | 1,000 | 49% |
| **HAINAN PROVINCE** | | | | |
| Qionghai | 2008 | 110 | 50 | 49% |

### Midstream Projects

| | Year of Establishment | Project Investment Rmb M | Registered Capital Rmb M | Equity Share % |
|---|---|---|---|---|
| Guangdong LNG | 2004 | 8,595 | 2,578 | 3% |
| Anhui NG | 2005 | – | 336 | 20.61% |
| Hebei NG | 2005 | 2,760 | 920 | 43% |
| Jilin NG | 2007 | 360 | 220 | 49% |
| Henan NG | 2012 | 125 | 60 | 49% |
| Jintan NG | 2013 | 180 | 100 | 64% |
| Huanghua Port LNG | 2017 | 90 | 90 | 20% |

## LNG Refilling Station

| | Year of Establishment | Project Investment Rmb M | Registered Capital Rmb M | Equity Share % |
|---|---|---|---|---|
| Nanjing (Marine) | 2014 | 600 | 217 | 32.95% |

## Water Projects

| | Year of Establishment | Project Investment Rmb M | Registered Capital Rmb M | Equity Share % |
|---|---|---|---|---|
| Wujiang | 2005 | 2,450 | 860 | 80% |
| Suzhou Industrial Park | 2005 | 4,705 | 1,597 | 50% |
| Wuhu | 2005 | 1,000 | 400 | 75% |
| Suzhou Industrial Park (Industrial Wastewater Treatment) | 2011 | 550 | 185 | 49% |
| Maanshan | 2013 | 607 | 213 | 100% |
| Jiangbei | 2013 | 1,049 | 374 | 100% |
| Suzhou Industrial Park (Food Waste Processing and Utilisation) | 2016 | 220 | 75 | 55% |

## Towngas China Piped City-Gas Projects

**GUANGDONG PROVINCE**
Foshan
Shaoguan
Qingyuan
Yangdong
Fengxi

**EASTERN CHINA**
Nanjing Gaochun
Dafeng
Tongshan
Hubei Zhongxiang
Maanshan
Bowang
Zhengpugang Xin Qu Modern Industrial Zone
Wuhu Fanchang
Wuhu Jiangbei
Anqing
Chizhou
Tunxi
Huangshan
Huizhou
Tongxiang
Huzhou
Yuhang
Songyang
Changjiu
Fuzhou
Jiujiang
Wuning
Xiushui
Yifeng
Changting

**SHANDONG PROVINCE**
Jimo
Laoshan
Zibo
Zibo Lubo
Longkou
Jinan West
Weifang
Weihai
Taian
Chiping
Linqu
Laiyang
Zhaoyuan
Pingyin
Feicheng
Boxing Economic Development Zone
Yangxin
Wulian

**HUNAN PROVINCE**
Miluo

**NORTHEASTERN CHINA**
Benxi
Chaoyang
Tieling
Fuxin
Shenyang Coastal Economic Zone
Yingkou
Dalian Changxingdao
Dalian Economic and Technical Development Zone
Anshan
Lvshun
Kazuo
Beipiao
Wafangdian
Xinqiu
Jianping
Changchun
Gongzhuling
Siping
Qiqihar

**HEBEI PROVINCE**
Qinhuangdao
Yanshan
Cangxian
Mengcun
Shijiazhuang
Baoding

**INNER MONGOLIA**
Baotou

**SOUTHWESTERN CHINA**
Ziyang
Weiyuan
Pengxi
Lezhi
Pingchang
Dayi
Yuechi
Cangxi
Chengdu
Zhongjiang
Jianyang
Pengshan
Mianyang
Xinjin
Xindu
Mianzhu
Jiajiang
Qijiang
Guilin
Zhongwei (Fusui)
Xingyi
Luliang

## Midstream Projects

Xuancheng NG
Taian Taigang
Inner Mongolia NG

## CNG Refilling Stations

Qiqihar (Lianfu)
Qiqihar (Xingqixiang)

## Other Projects

Zhuojia Public Engineering
Sichuan Distributed Energy Systems
Shenyang Economic and Technical Development Zone Distributed Energy System

HONG KONG
GAS BUSINESS

# Quality

Our first combined heat and power system using landfill gas in Hong Kong is now in operation at the Alice Ho Miu Ling Nethersole Hospital in Tai Po – an award-winning breakthrough in clean energy for social good.

# Living

Our Mia Cucina high-end Total Kitchen Solution is growing in popularity, with more than 5,300 units sold in 2017, a 27 per cent increase in sales from the previous year.

The Towngas Cooking Centre celebrated its 40th anniversary of delivering exceptional experiences in flame cooking.

# HONG KONG GAS BUSINESS

For more than 150 years, Towngas has brought the people of Hong Kong a safe, dependable and clean source of energy, while providing innovative products that make life more comfortable and convenient. Our insistence on quality products and service has earned us the loyalty and trust of our customers and will continue to underpin our success in the years to come.

## Residential and Commercial Activities

During the year, our customer base further increased by 23,993 accounts to reach a total of 1,883,407. Total volume of gas sales was 29,049 million MJ, an increase of 0.8 per cent compared with the previous year.

To meet increasing operation and manpower costs, we adjusted the standard gas tariff upward by HK1.1 cents per MJ which, including the standard tariff and fuel cost adjustment, amounted to an actual increase equivalent to 4.3 per cent. We also pledged to keep the basic tariff unchanged for the next two years.

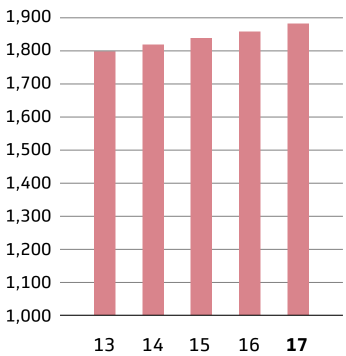
Ocean Park's new Water World project will use direct-gas fired absorption chillers to supply hot and cold water for indoor cooling and heating.

The year 2017 saw a brighter economic picture in Hong Kong, with GDP growth reaching 3.8 per cent as compared with 2.0 per cent in 2016. The booming stock and property markets as well as an increase in inbound tourist numbers helped to stimulate local spending, which benefited our commercial clients and contributed to a positive growth in our sales of 2.6 per cent during the year.

Our commercial customers continued to look to us for cost-effective, environmentally-responsible energy solutions. Hong Kong's two theme parks are currently using town gas in a wide range of applications, such as gas absorption chillers and dehumidification units, in place of their previous electricity-powered systems. In addition, we will be supplying gas to Ocean Park's new Water World and hotel for use in water heating as well as climate

### Number of Customers

Company (Thousand)




control in the park's swimming pools and water carnival features.

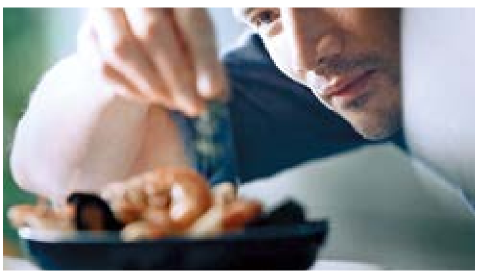
Another major customer acquired during the year was Vogue Laundry, one of the leading commercial laundry companies in Hong Kong. When this customer moved to a new plant in Yuen Long, we provided the gas for its expanded production lines to power the four 12-tonne boilers that generate the high-pressure steam used in its washing machines, dryers and pressing machines. Also in Yuen Long, we helped a well-established soy sauce factory, Koon Chun, to convert its diesel steam boilers to town gas.

Our first combined heat and power system in Hong Kong, which runs on treated landfill gas from the North East New Territories landfill site, operated smoothly during the year at the Alice Ho Miu Ling Nethersole Hospital in Tai Po. The system generates power while simultaneously making use of waste heat to maximise energy efficiency by up to 85 per cent, thus helping our client to save fuel costs and lower carbon emissions. Moreover, we commissioned the new landfill gas treatment plant at the South East New Territories (SENT) landfill site in November 2017, creating new potential for renewable energy by our business customers in the area.

The hotel and restaurant trades represent a significant share of our commercial sales. During the year, we continued to support various activities that promoted the development of the industry and cemented our relationships with these clients. In September, we sponsored an exclusive event, the Master Chefs Flame-cooking Demonstrations, during the 2017 World Master Chefs Competition for Cantonese Cuisine held in Hong Kong. This event attracted the participation of over 100 teams from 40 countries and regions.

Our residential business benefited from the thriving property market and our concerted marketing efforts during the year. In 2017, we sold a total of over 275,000 appliances.

As part of the Total Kitchen Solution we offer to customers, we launched a line of kitchen cabinets under the Mia Cucina brand in 2013. Made of Italian and other premium European materials and accessories, these cabinets are




We produced a new TV commercial highlighting the unique designs and special functions of the Mia Cucina products.


At the Towngas Cooking Centre's 40th Anniversary Celebration, Towngas was the title sponsor of the popular Ahistoric Grandpa Cooking Show.

highly competitive against comparable brands in the market and come with lifelong after-sales service, a competitive edge unique to Towngas. In 2017, we added kitchen white goods such as refrigerators and microwaves to the brand. These kitchen packages have been very well-received by both retail consumers and property developers, who ordered more than 5,300 units during the year. Today, roughly 30 per cent of new residential units in Hong Kong are installed with Mia Cucina kitchen cabinets, which are well-regarded for the quality and value they offer.

To add a new dimension in flame cooking, we collaborated with Sanrio to launch Hong Kong's first Hello Kitty kitchen appliance: the TGC X HELLO KITTY built-in hob. We also introduced a wide range of Hello Kitty-inspired kitchenware, such as a clay pot, tamagoyaki fry pan and wok, to bring consumers a complete and delightful cooking experience. The launch of this popular product range received widespread media attention, and sales results have been encouraging.

What's more, we introduced a mini stovetop oven designed especially for flame cooking. The stovetop oven combines grill-steam-bake functions in an all-in-one compact appliance that does not need extra counter space. Launched during Home Delights Expo, it won the Creativity Award 2017 of the Hong Kong Brand Corporate Association.

To provide customers with a better bathing experience in less space, we brought a new generation of small-sized temperature-modulated 11L gas water heaters to market under the SIMPA brand. We also developed our own superslim temperature-modulated gas water heater that can fit into almost any small-size flat in Hong Kong.

Since 1977, Towngas Cooking Centre has been a resource for people to learn about the advantages of flame cooking through content-rich courses taught by expert chefs. In celebration of the 40th Anniversary of the Towngas Cooking Centre, in 2017 we staged a series of promotions that included a TV programme – The Ahistoric Grandpa Cooking Show – hosted by a popular Chinese cuisine master, Lee Ka Ding. Mr Lee was also invited to run cooking classes as the grand finale of the celebration activities. In addition, we enriched the Disciples Escoffier Professional Diploma with a pastry course, which is currently being held in our new and expanded Cooking Centre.

## Customer Service

As a utility company offering services essential to daily life, we understand that meeting customer expectations is a key driver of our business. Throughout the year, we were honoured to receive nearly 6,000 written complimentary letters from customers as a testimony to our caring, high quality services and products.

## 2017 Results of Towngas Service Pledge

### reliability

Uninterrupted gas supply (over 99.99%)
**99.991%**

3 days prior notification in case of supply interruption on account of maintenance or engineering work
**100%**

Restoration of gas supply within 12 hours
**100%**

### safety

Emergency Team average arrival time (within 25 minutes)
**Average 22.57 minutes**

### appointments

Availability of maintenance and installation services within 2 working days
**Average 1.11 days**

### service quality

Efficiency*
**8.91**

Courteous and friendly attitude*
**8.87**

### speed and convenience

Customer Service Hotline (calls answered within 4 rings)
**94.98%**

Connect or disconnect gas supply within one working day
**100%**
(upon customer's request)

Deposit refunded at Customer Centres 2 hours after disconnection of gas supply
(upon customer's request)
**100%**

### handling suggestions

Reply within 3 working days
**100%**

Resolution, or a statement of when the matter will be resolved, within 2 weeks
**100%**

* The results were based on surveys conducted by an independent research company. Our target is to exceed a score of 8 out of 10.

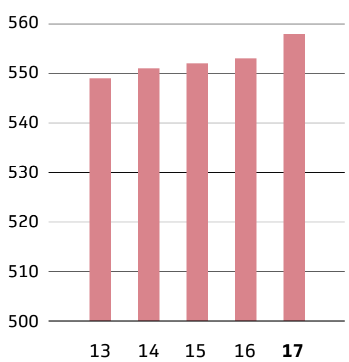
One of the hallmarks of Towngas service is the high safety level we offer. In addition to on-call maintenance services, we conduct regular safety inspections every 18 months to ensure these gas systems and appliances are safe and defect-free for our customers.

During the year, we also revamped our corporate website and online service platform to provide greater convenience as well as mobility for customers. To promote our paperless online services, we

The launch of the limited edition TGC X HELLO KITTY built-in hob brought the first-ever Hello Kitty themed kitchen appliance to Hong Kong.

The revamp of our corporate website and eService platform improved the user experience and increased eService usage.

**Number of Customers per km of Mains** Company




rewarded newly-registered eBilling customers who successfully applied to pay their gas bills via bank autopay with a one-off HK$50 gas charge rebate. We also offered monthly lucky draws for prizes of HK$1,000 in gas charge rebates under this promotion.

In recognition of our commitment to service excellence, we received the Sing Tao Service Awards – After Sales Services for the ninth consecutive year, *East Week's* Hong Kong Service Awards – Public Utilities for the seventh consecutive year, and the Hong Kong Call Centre Association's Gold Award of Mystery Caller Assessment (Phone-in) for the third year running. This year, we obtained the Hong Kong Top Service Brand Award jointly organised by The Hong Kong Brand Development Council and The Chinese Manufacturers' Association of Hong Kong, which further reinforced our reputation for service excellence.

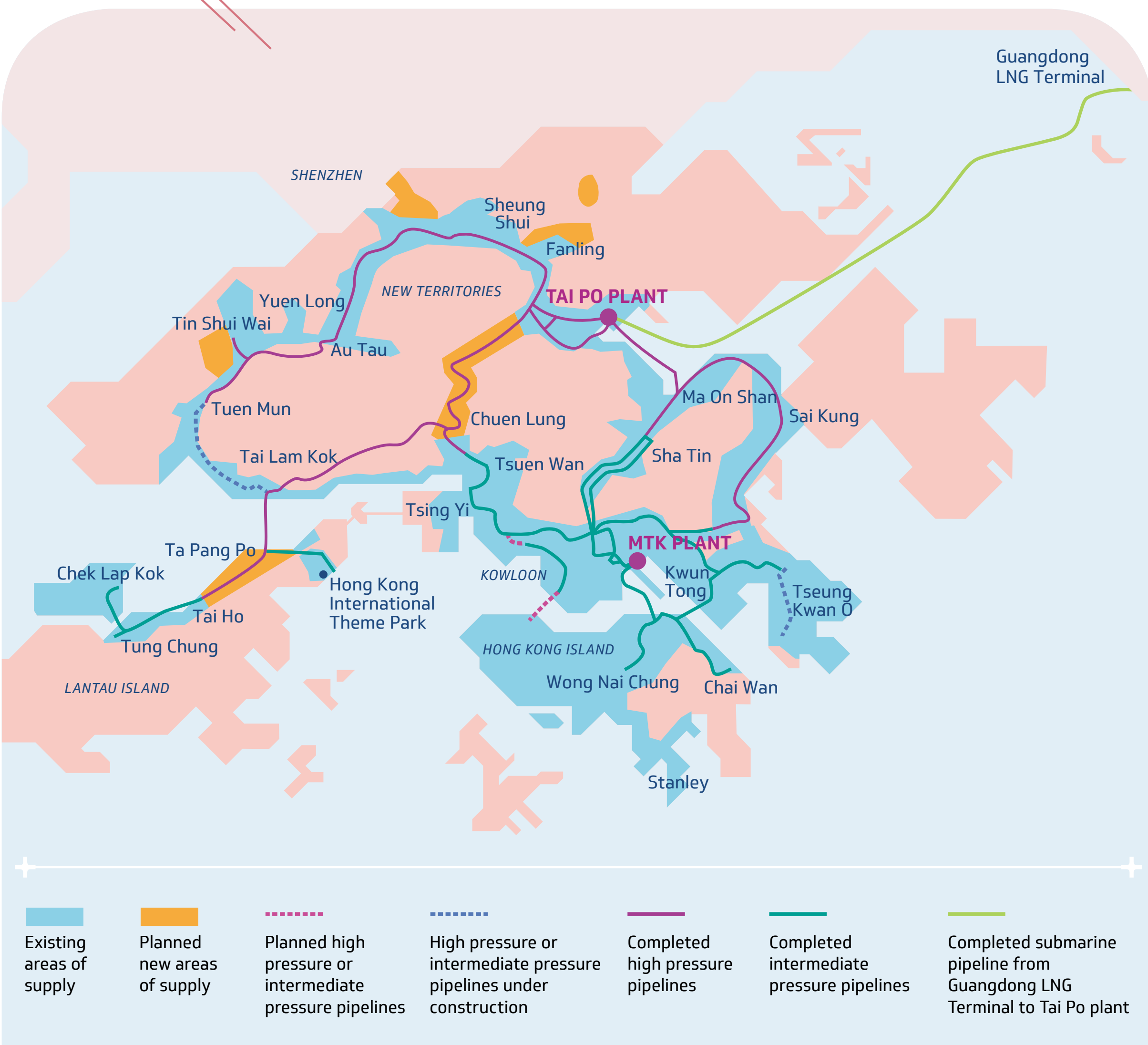
## Gas Infrastructure

We are committed to long-term investment in the extension of our pipeline network in order to keep up with infrastructure development and meet Hong Kong's energy demands. These include the more than 15 kilometres of pipeline planned for the third runway at Hong Kong International Airport, where more catering businesses are expected in the passenger terminal expansion.

Additionally, we will be significantly expanding our network coverage to reach the approximately 400,000 housing units in the New Territories that will be available for occupancy in phases throughout the next ten years. During the year under review, we continued to make progress on the network design for the residential developments in Fanling North, Kwu Tung North, Hung Shui Kiu and Tung Chung East.

To further enhance supply security, we made satisfactory progress linking up the supply network between Tuen Mun and Tsuen Wan and reinforcing the supply to major commercial and industrial customers in Tai Po and Yuen Long Industrial Estates, as well as the two theme parks in Hong Kong.

## Towngas Network in Hong Kong




In November 2017, we brought the SENT Landfill Gas Utilisation Project in Tseung Kwan O on stream. It is currently the largest landfill gas treatment facility of its kind in Asia. The landfill gas we collect will be converted into synthetic natural gas at the facility, then transported to the offtake station in Tseng Lan Shue through a 12 km pipeline and integrated into the gas supply network.

Despite the low leakage rate of our gas pipeline network, we continued to seek ways to identify very minor cases of seepage, even those undetectable by sophisticated equipment. For example, we employ highly sensitive sniffer dogs to pinpoint leaks at busy traffic locations and other challenging environments. This enables us to locate leakage points quickly and accelerate the repair process, while reducing the extent of road digging and disturbances to the public.

## NEW ENERGY AND DIVERSIFIED BUSINESSES

# Energy

ECO has five projects in the construction phase for converting low-value feedstock into clean fuel and chemical products.

ECO constructed a new plant in Zhangjiagang, Jiangsu province, for converting inedible grease feedstock into high-value bio-diesel fuel.

# Innovation

ECO is planning to launch a pilot project for converting agricultural waste into furfural and paper pulp, underlining our commitment to green technology and sustainability.

We made great progress in developing advanced carbon materials for high performance batteries and super-capacitors that will help to revolutionise the transport industry.

# NEW ENERGY AND DIVERSIFIED BUSINESSES

ECO Environmental Investments Limited (ECO) operates a wide range of environmentally-friendly energy businesses across the mainland as well as liquefied petroleum gas (LPG) refilling stations, landfill gas projects and an aviation fuel storage facility in Hong Kong. These initiatives are helping us to fulfil our vision of a greener, low-carbon future.

A pilot project plant was established by ECO in Zhangjiagang, Jiangsu province to upgrade waste grease into hydro-treated vegetable oil (HVO) for use as bio-diesel.

## New ECO Energy

ECO was established in 2000 as the Group's platform for new energy projects. Since its founding, ECO has earned a strong reputation for innovative research and the development of alternative energy, such as turning low-grade waste materials into high-value energy products.

Currently, ECO has a product portfolio encompassing clean fuels including liquefied natural gas (LNG) and methanol, with more high-value, environmentally-friendly fuel, chemical and material products soon to be added. By building a diverse energy portfolio based on low-value feedstock, ECO is helping mainland China meet its future energy requirements while simultaneously addressing environmental concerns.

In 2017, ECO delivered better performance than the previous year in an operating environment that was much more favourable for our businesses. In Hong Kong, our aviation fuel and landfill gas businesses remained steady. On the mainland, we were set to bring two new projects online. One of these is a hydro-treated vegetable oil (HVO) facility – our first plant dedicated to renewable fuel production – in Zhangjiagang, Jiangsu province. This plant commenced trial production in November 2017. The other project is an ethylene glycol facility in Ordos, Inner Mongolia Autonomous Region. Construction work of this facility was completed for the pilot production in the first quarter of 2018.

### *Research & Development*

Our goal at ECO is to create business opportunities through the technological solutions we develop, with the ultimate aim of becoming a green industry leader. Going beyond fuels such as LNG and diesel substitutes, we have begun research on green chemicals and materials that will help to redefine our business in years to come.

New energy vehicles are being championed in many countries across the world, particularly in mainland China, to combat air pollution. The success of these vehicles, however, will depend on achieving a breakthrough in battery technology. At ECO, we have developed a patented technology for transforming coal tar oil into high-performance carbon materials, such as activated carbon with high specific surface area and graphitised anode material with high specific power-storage. High-performance activated carbon is an essential material in the production of super-capacitors, while high-grade anode material will be critical for making a breakthrough in battery technology. Both types of materials are currently being tested in preparation for commercial use.

Additionally, the carbon materials can readily be adapted for producing high-strength, light-weight carbon fibre suitable for carbon fibre reinforced polymer, which has wide applications in products such as car bodies and airliner fuselages as it is more pressure-resistant and less prone to vibration.

### *Aviation Fuel*

Our aviation fuel business went into operation in 2002. ECO's aviation fuel facility supplies fuel for aircraft at Hong Kong International Airport from eight storage tanks, with a gross capacity of 264,000 cubic metres. Now a major logistics base for aviation fuel in Hong Kong, it is one of the largest airport based aviation fuel storage facilities in the world, with a 2017 turnover of about 6.55 million tonnes.

### *Vehicular Fuel and Logistics Projects*

ECO has been operating LPG refilling stations in Hong Kong since 2000. Today, we have five designated stations providing taxis and minibuses in Hong Kong with 24-hour gas refilling services. Annual gas sales amount to over 60,000 tonnes, or about 30 per cent of the transportation LPG market in Hong Kong. In 2017, revenue from this business reached over HK$350 million.

On the mainland, ECO has over 50 strategically-located natural gas refilling stations that form an extensive network in Shaanxi, Inner Mongolia, Ningxia, Shandong, Shanxi, Jiangsu, Henan, Hebei, etc. We are proactively developing the network in anticipation of the growth in gas-powered heavy truck fleets across the country.

### *Coalbed Methane and Coke Oven Gas*

As LNG is in short supply in mainland China, one of our key strategies on the mainland is to develop a reliable supply of this fuel by converting various types of feedstock, including coalbed methane (CBM) and coke oven gas, into new form of clean energy.

Our plant in Shanxi province, where there is an abundant supply of CBM, is operated in partnership with the Shanxi Jincheng Anthracite Mining Group. Using the latest cryogenic technology, we convert coalbed methane into LNG (LCBM). The plant is currently the largest CBM liquefaction plant in mainland China with an annual production capacity of 250 million cubic metres. During the year, the LCBM operation achieved a remarkable profit growth due to the much higher market price of LNG.

Construction of the ethylene glycol facility in Ordos, Inner Mongolia Autonomous Region, was completed in 2017.

At another facility for producing LNG from coke oven gas, our new plant in Xuzhou, Jiangsu province is expected to start trial production in the first half of 2018 with a designed annual production capacity of 60,000 tonnes.

### *Clean Coal Chemicals*

We operate a methanol plant in Inner Mongolia Autonomous Region that makes use of clean coal technology to generate syngas, which is then processed into methanol. At present, this plant has a production capacity of more than 1,000 tonnes of methanol a day.

In 2017, we launched another project at this methanol plant to convert 40 per cent of the coal-based syngas we produce into ethylene glycol, a high-value chemical product in great demand for the manufacture of polyester fibres and antifreeze formulations. With an annual designed capacity of 120,000 tonnes, this project is expected to start trial production in the first quarter of 2018. Once in operation, it will mark a significant step forward in our efforts to transform the coal chemical plant into a downstream value-adding facility for turning coal feedstock into environmentally-friendly chemical products.

### *Agricultural Waste*

China is one of the world's most productive agricultural countries, particularly in rice, wheat and corn. However, these crops also produce vast amounts of agricultural waste after each harvest, which until recently was mostly burned off, causing significant amounts of pollution to be emitted into the atmosphere.

At ECO, our research and development team has developed technologies to decompose agricultural and forestry waste into hemicellulose, cellulose and lignin. The hemicellulose is converted to furfural, a chemical commodity much needed in mainland China, while the cellulose can be marketed as paper pulp or further upgraded into clean fuel additives such as levulinic acid. We are planning to launch a trial project in a region abundant in straw, a common agricultural waste.

### *Waste Grease Oil*

At a pilot project plant in Zhangjiagang, Jiangsu province, we are upgrading inedible grease feedstock into HVO for use as bio-diesel fuel, which is in particularly high demand in Europe as well as other potential markets around the world. This ISCC (International Sustainability and Carbon Certification) certified plant is currently in the trial production stage. Commercial production at this plant, which has a design capacity of 120,000 tonnes of feedstock per year, is expected to begin in 2018.

## Telecommunications

Towngas Telecommunications Company Limited (TGT) is in the business of providing connectivity as well as data centre and cloud computing services to meet customer demand for colocation, server hosting and other value-added services. The Company today operates networked data centres that can accommodate up to 16,000 server racks. We also work closely with our national network partners to lay a foundation for the development of the big data industry, cloud computing and related value-added services.

In 2017, we added TGT Beijing Data Centre 1 to our operations, bringing our portfolio up to a total of seven data centres in Hong Kong and mainland China. We also formed a strategic partnership with a mainland gas company to start operating a new joint venture, Shenzhen Internet Exchange Co., Ltd., which focuses on the construction and operation of city networks.

A new product introduced in 2017, GOEZ!, provides all-in-one cloud services for SMEs and the catering industry, allowing them to enjoy convenient and reliable business support with our high speed internet.

In August 2017, TGT carried out an 1,800-metre fibre-optic network project inside our submarine gas pipeline running from Quarry Bay to Cha Kwo Ling. Using our proprietary technology, the project team installed fibre-optic cable into the submarine gas pipeline, inside a separate protective polyethylene (PE) pipe. Combined with its existing telecom infrastructure, TGT now owns two cross-harbour submarine fibre-optic paths, which form a ring fibre-optic network that provides highly reliable transmission quality for customers.

TGT received numerous international awards and recognitions during the year, including a China IDC Industry Green Data Centre Award at the 11th China IDC Industry Annual Ceremony. Additionally, TGT Dongguan Data Centre 1 received LEED Gold, ISO9001, ISO20000-1, ISO27001 and GB/T 29490-2013 certifications.

With the coming of the new era in 5G wireless networks, big data and the Internet of Things, the demand for data with low latency will continue to grow rapidly around the world. In Hong Kong and mainland China, TGT is paving the way for this new business environment by developing an advanced fibre-optic network and maximising usage of our networked data centres and cloud platform, which will enable us to capitalise on business opportunities in this market.

Our coke oven gas plant in Xuzhou, Jiangsu province will commence trial production in the first half of 2018.

## Information Technology

The information technology needs of our customers are met by S-Tech Technology Holdings Limited (S-Tech), a wholly-owned subsidiary of the Group. Its principal businesses include software development, solution implementation and systems integration to satisfy the needs of city-gas businesses for advanced and diversified customer service and piping network management.

S-Tech's Towngas Customer Information Systems are provided to 78 per cent of the Group's city-gas joint ventures on the mainland, half of which are now using the latest cloud version to reduce operational costs as well as to shorten development cycles. By the end of 2017, the systems were serving over 12 million customers. To help save management costs and improve service quality, S-Tech offers several mobility applications for meter reading, Regular Safety Inspection and maintenance services.

S-Tech has also invested in the development of a Geographic Information System and Artificial Intelligent Call Centre System, which further enhance operational safety and service efficiency. In addition, the Company has diversified into Fintech by providing a payment gateway – Ganghua Pay – for utility management, as well as customised software and cloud services for the financial sector.

In 2017, S-Tech was awarded a Grade III Certificate by the Ministry of Public Security for the Graded Protection of State Information Security of TCIS. In addition to serving the Group's system and software needs, S-Tech is also geared to provide these services in partnership with TGT to external clients.

TGT Beijing Data Centre 1 started operating in 2017.

## Civil and Building Services Engineering

U-Tech Engineering Company Limited (U-Tech), a wholly-owned subsidiary of the Group, provides consultancy and engineering contractor services in Hong Kong and Macau. It specialises in utilities installation, infrastructure construction, trenchless technologies, and civil and building services engineering for public and private projects.

For U-Tech, 2017 was another productive year. Among the year's highlights, it successfully completed several landmark projects, including the supply and installation of electrical works for the Double Cove Summit residential development at Wu Kai Sha and its first footbridge elevator installation project at Tin Shui Wai. In addition, U-Tech broadened its client base and secured several new contracts during the year. These included its first contract with the Housing Authority for detecting underground utilities over a two-year term, the first supply

Two G-Tech production facilities, in Maanshan, Anhui province and Zhongshan, Guangdong province, respectively, are currently providing high-quality PE pipes to city-gas operators.

and installation of electrical works with CITIC Limited for the residential development at Lok Wo Sha Lane, the first 3-year term contract with the Water Supplies Department for Lantau and Outlying Islands, and the installation of air-conditioning for a commercial development at Middle Road. Another contract will see the Company taking on the civil construction work for the emergency rescue site at Shek Kong for the Express Rail Link of the MTR Corporation.

In recognition of its high quality and safety standards, U-Tech received the Safety Performance Award – Construction from the Occupational Safety and Health Council for the fourth consecutive year. With the gradual expansion of its business, U-Tech is set to become a major civil utility and building service contractor in the years ahead.

## Manufacturing

Our subsidiary, M-Tech Metering Solutions Company Limited (M-Tech), develops and markets proprietary smart gas meter solutions, which are based primarily on Micro-Electro-Mechanical Systems (MEMS) technology, for greater accuracy under various temperature and pressure conditions.

In 2017, M-Tech developed and launched an advanced small-scale commercial meter with MEMS technology to provide more options for gas users. This meter incorporates a Near Field Communication (NFC) payment capability as well as smart metering functions for the compilation of tier tariffs on the mainland. It allows tariff prepayments, tier tariff settings and gas consumption records to avoid conflicts in the event of a tariff adjustment. The meter also has several gas safety functions, such as regular safety inspection alerts, excess flow cut-off and external interference alarms. Committed to customer satisfaction, M-Tech continues to develop smart meters based on our own technology for residential applications. These have proven especially popular in the European market, where customers are increasingly turning to smart meters.

G-Tech Piping System (Zhongshan) Company Limited (G-Tech) is in the business of manufacturing high-quality PE pipes, with support from a UK joint venture – GH-Fusion Corporation Limited – that specialises in PE fittings. In addition to its original extrusion plant in Zhongshan, Guangzhou province, G-Tech has built a second production site in Maanshan, Anhui province, doubling its output capacity.

Both M-Tech and G-Tech will be expanding their product range and markets, both within mainland China as well as overseas, to capture the rapidly-growing natural gas market worldwide and opportunities arising from the drive towards smart metering.

# 2017
## New Energy and Other Projects

## New Energy Projects

| | Year of Establishment | Project Investment Rmb M | Registered Capital Rmb M | Equity Share % |
|---|---|---|---|---|
| **COAL MINING** | | | | |
| Jiangxi Fengcheng | 2008 | 1,100 | 236 | 25% |
| Inner Mongolia Ordos Kejian | 2011 | 681 | 486 | 100% |
| **COAL-BASED CHEMICALS** | | | | |
| Jiangxi Fengcheng | 2009 | 1,250 | 350 | 40% |
| Inner Mongolia Ordos | 2009 | 1,620 | 1,017 | 100% |
| **CNG/LNG REFILLING STATIONS** | | | | |
| Shaanxi Xianyang | 2008 | 12 | 12 | 100% |
| Shaanxi Huitai | 2010 | 54 | 27 | 100% |
| Shaanxi Lueyang | 2014 | 21 | 13 | 100% |
| Shaanxi Fengxiang | 2014 | 30 | 15 | 100% |
| Shaanxi Shenmu | 2015 | 60 | 38 | 100% |
| Shaanxi Baoji | 2015 | 29 | 14 | 100% |
| Shaanxi Zhouzhi | 2016 | 14 | 10 | 100% |
| Shaanxi Weinan Gushi | 2016 | 21 | 14 | 100% |
| Shaanxi Weinan Tianshi | 2016 | 15 | 11 | 100% |
| Shaanxi Hancheng | 2016 | 46 | 41 | 90% |
| Shanxi Yuanping | 2008 | 40 | 20 | 42% |
| Shanxi Lingshi | 2013 | 25 | 20 | 75% |
| Shanxi Xinzhou | 2016 | 30 | 15 | 100% |
| Shandong Chiping | 2010 | 30 | 15 | 100% |
| Shandong Jining | 2010 | 11 | 8 | 100% |
| Shandong Dongping | 2010 | 43 | 26 | 91% |
| Shandong Jiaxiang | 2012 | 50 | 28 | 70% |
| Shandong Weishan | 2014 | 58 | 29 | 100% |
| Shandong Shanxian | 2014 | 28 | 14 | 100% |
| Shandong Linqing | 2014 | 22 | 13 | 100% |
| Shandong Heze | 2015 | 23 | 13 | 90% |
| Hebei Shijiazhuang | 2014 | 65 | 31 | 100% |
| Xingtai (Gangxing) | 2014 | 20 | 17 | 80% |
| Xingtai (Xinghua) | 2016 | 24 | 23 | 80% |
| Henan Xinmi | 2010 | 29 | 15 | 100% |
| Henan Anyang | 2012 | 29 | 14 | 100% |
| Henan Kaifeng | 2013 | 29 | 15 | 100% |
| Henan Linzhou | 2013 | 30 | 20 | 100% |
| Henan Nanyang | 2015 | 14 | 10 | 100% |
| Henan Luoyang Yanshi | 2016 | 15 | 10 | 100% |
| Henan Wuyang | 2017 | | 15 | 85% |
| Inner Mongolia Huhhot | 2014 | 28 | 14 | 90% |
| Inner Mongolia Wulatezhong Qi | 2015 | 11 | 8 | 100% |
| Inner Mongolia Xiwuzhumuqin Qi | 2015 | 30 | 15 | 100% |
| Inner Mongolia Chifeng | 2015 | 30 | 15 | 100% |
| Inner Mongolia Chaha'eryouyiqian Qi | 2015 | 30 | 15 | 100% |
| Inner Mongolia Xilingol | 2016 | 30 | 15 | 100% |
| Inner Mongolia Ulanqab Huade | 2016 | 29 | 14 | 100% |
| Inner Mongolia Ulanqab Chahar | 2016 | 15 | 11 | 100% |
| Inner Mongolia Bayannur Uradqian Qi | 2016 | 15 | 7 | 100% |
| Inner Mongolia Bayannur Linhe | 2016 | 14 | 10 | 90% |
| Inner Mongolia Bayannur Hanggin | 2016 | 13 | 10 | 90% |
| Ningxia Guangwuxian | 2015 | 15 | 11 | 100% |
| Ningxia Qingtongxia | 2015 | 21 | 15 | 100% |
| Ningxia Jinyintan | 2015 | 28 | 14 | 100% |
| Ningxia Zhongwei | 2016 | 18 | 12 | 100% |

| | Year of Establishment | Project Investment Rmb M | Registered Capital Rmb M | Equity Share % |
|---|---|---|---|---|
| **New Energy Projects** | | | | |
| **CNG/LNG REFILLING STATIONS** | | | | |
| Ningxia Zhongwei Haixing Development Zone | 2016 | 30 | 15 | 100% |
| Jiangxu Xuzhou | 2015 | 40 | 20 | 80% |
| Anhui Maanshan | 2006 | 15 | 11 | 30% |
| Jiangxi Pengze | 2015 | 45 | 30 | 70% |
| Guangdong Guangzhou | 2013 | 26 | 13 | 100% |
| **UPSTREAM PROJECTS** | | | | |
| Shanxi LCBM | 2006 | 600 | 200 | 70% |
| Jilin Tianyuan | 2007 | 140 | 5 | 50% |
| Xuzhou COG | 2014 | 450 | 150 | 80% |
| Heze COG | 2014 | 450 | 150 | 90% |
| **COAL LOGISTIC PROJECT** | | | | |
| Shandong Jining Jiaxianggang Logistic Port | 2011 | 540 | 180 | 88% |
| **BIOMASS** | | | | |
| Zhangjiagang | 2014 | 610 | 271 | 100% |
| Hubei Xingzhou | 2017 | 170 | 134 | 100% |
| **Oilfield Project** | | | | |
| Phetchabun Province in Thailand | 2012 | USD 181M | USD 12,000 | 100% |
| **Telecommunication Projects** | | | | |
| Shandong Jinan | 2008 | 80 | 40 | 90.1% |
| Shandong Jinan Chibo | 2009 | 504 | 168 | 81.4% |
| Shandong Laiyang | 2011 | 14 | USD 1.6M | 90% |
| Xuzhou Fengxian | 2011 | 11 | 8 | 100% |
| Xuzhou Peixian | 2012 | 13 | 9 | 100% |
| Liaoning Dalian DETA | 2010 | 14 | 10 | 49% |
| Dalian Yida | 2011 | 190 | 76 | 90% |
| Harbin | 2013 | 158 | 63 | 80% |
| Beijing Zhongjing | 2014 | 14 | 10 | 49% |
| Beijing Chibo | 2014 | 14 | 10 | 98.14% |
| Dongguan | 2013 | 240 | 80 | 60% |
| Shenzhen (Qianhai) | 2014 | 59 | 30 | 100% |
| Shenzhen (Interlink Connectivity) | 2015 | 100 | 40 | 30% |
| **Other Projects** | | | | |
| Shenyang Sanquan Construction Supervisory | 2011 | 4 | 3 | 60% |
| ECO Engineering Management (Xi'an) | 2014 | 13 | 9 | 100% |
| Suzhou Industrial Park Broad Energy Services | 2012 | 170 | 71 | 25% |
| GH Yixing Ecology | 2013 | 184 | 184 | 100% |
| Dalian (New Energy Technology) | 2015 | USD 4.75M | USD 4.75M | 55% |
| M-Tech | 2011 | 60 | 30 | 100% |
| GH-Fusion | 2001 | 87 | 43 | 50% |
| G-Tech | 2012 | 77.5 | 31 | 100% |
| Towngas Technology | 2011 | 30 | 21 | 100% |
| S-Tech (Zhuhai) | 2014 | 14 | 10 | 100% |
| ECO Engineering Management (Shenzhen) | 2014 | 30 | 15 | 100% |
| Towngas Life Style | 2015 | 7 | 5 | 100% |
| Towngas Payment Technology (Shenzhen) | 2015 | 50 | 28 | 100% |
| Hong Kong & China Gas International Energy Trading | 2016 | 125 | 50 | 100% |
| Mia Cucina Kitchen Cabinets (Shenzhen) | 2017 | 125 | 50 | 100% |
| Inner Mongolia Ordos Carbon Material | 2017 | 640 | 240 | 100% |

CORPORATE SOCIAL RESPONSIBILITY

# Caring

Our third landfill gas initiative, the South East New Territories (SENT) landfill gas treatment plant, was commissioned; it is expected to reduce annual carbon emissions by around 56,000 tonnes.

Towngas launched its first Green Bond to finance green projects, such as the SENT landfill gas project and waste conversion projects in mainland China.

# Community

We launched the Chef Anchor cooking programme, Hong Kong's first procedural learning method through cooking, to help alleviate Mild Cognitive Impairment (MCI) symptoms.

Our Gas Craft Apprentice Training Scheme, the first gas training scheme in Hong Kong, celebrated its 50th anniversary.

# CORPORATE SOCIAL RESPONSIBILITY

Our businesses touch the lives of millions of people in communities across Hong Kong and mainland China, as well as among our own staff. We acknowledge our obligations to these stakeholders with our commitment to safe, responsible and ethical behaviour at all times throughout our operations.

## Care and Conservation

Our unwavering commitment to environmental protection is reflected in the way we conduct our businesses. As an energy supplier, we strive to minimise our carbon footprints while developing clean energy for homes, businesses and vehicles, with the ultimate goal of creating a more sustainable future.

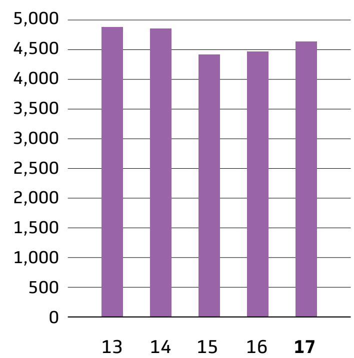
One of the highlights in our quest to become a green industry leader was the introduction of our first 10-year Green Bond in November 2017 through a HK$600 million and a JPY2 billion transaction. We are the first energy utility to issue green bonds in Hong Kong. Proceeds from the Towngas Green Bond will be used to finance waste-to-energy initiatives, such as our landfill gas project at the SENT landfill site and other eligible green investments.

In line with mainland China's Thirteenth Five-Year Plan, we have been promoting coal-to-gas conversion to reduce coal consumption. Our gas refilling stations and distributed energy projects also help meet the national goals of raising energy efficiency and reducing carbon emissions. To explore energy and resource alternatives, we have made a considerable effort in the research and development of new technology for converting waste into clean energy and useful chemical products.

In Hong Kong, we remained focused on developing renewable energy from waste. In November 2017, we made significant progress on our landfill gas initiative with the official commissioning of our

### Revenue per Employee

Company (HK$ thousand)




In the Plantation Enrichment Project, 100 employees and customers joined in to plant tree seedlings at the Tiu Yue Yung Country Trail in Clearwater Bay.


Our South East New Territories (SENT) Landfill Gas Utilisation Project was commissioned in November 2017. The finalists of our Upcycling Fashion Design Contest showcased their work at the ceremony.

third landfill gas utilisation project. Together with our landfill gas utilisation projects in Shuen Wan and the North East New Territories, the output of all three projects is expected to account for around 5 per cent of our total fuel mix. It is also projected to reduce carbon emissions by 87,600 tonnes annually, equivalent to the carbon absorption of 3.8 million planted trees per year.

The feedstock we use in Hong Kong, which includes a mix of natural gas, naphtha and landfill gas, is clean and has thus enabled us to reduce the carbon emissions per unit of town gas produced by over 20 per cent compared with 2005. In fact, in 2017 our greenhouse gas emissions were already below 1 per cent of all emissions in Hong Kong. Our plan is to further reduce our carbon footprint, with a 30 per cent target reduction in the carbon intensity of our Hong Kong gas production by the year 2020, as compared with 2005.

To improve the effectiveness of our environmental initiatives, public education is essential. In 2017, we have carried out a range of activities to share our environmental experience with stakeholders. These included promoting the concept of waste-to-energy through exhibition panels and a Virtual Reality game we designed for students, and introducing waste reduction and our utilisation of landfill gas at our renovated education centre at the SENT landfill site.

To help our customers reduce their carbon footprints, we collaborated with The Hong Kong Polytechnic University in a research project to develop practical cooking tips on reducing gas consumption and associated carbon emissions, as well as selecting healthy cooking methods and ingredients. We then promoted these tips through social media platforms and promotional leaflets, as well as a drawing competition for students.

We also continued to support the environmental efforts of green groups in the community. One of the initiatives we carried out during the year was the five-year Plantation Enrichment Project, managed by The Green Earth,


The Chef Anchor cooking programme, the first of its kind in Hong Kong, was designed to help elderly people alleviate the symptoms of MCI through a procedural learning method.

to increase biodiversity and the ecological value of country parks. To increase public awareness of nature conservation, we hosted a tree planting day for around 100 Towngas employees and customers at our planting site at Tiu Yue Yung Country Trail in Clear Water Bay.

For employees, we organise an annual carbon reduction competition in Hong Kong and mainland China. Since 2010, a total of 209 project submissions have been received in this competition, leading to a total annual reduction in carbon emissions of about 299,200 tonnes in our own operations.

In recognition of our environmental efforts, we have received the BOCHK Corporate Environmental Leadership Awards – Gold Award (Manufacturing section) for two consecutive years, as well as the Belt and Road Environmental Leadership Recognition Award 2016.

## Our Community Spirit

As a socially-responsible company, we firmly believe it is our obligation to give back to the communities in which we operate. Our Towngas Volunteer Service Team was established in 1999 to deliver a wide range of caring services. The staff members of this team have generously contributed their time and skills to help those in need. At the end of 2017, we had put in a total of 86,455 service hours on 282 community service projects in Hong Kong.

One of the major themes of our community service activities in Hong Kong is caring for the elderly. In 2017, we cooperated with Hong Kong Sheng Kung Hui Welfare Council to launch the Chef Anchor cooking programme. Designed by occupational therapists and Towngas Cooking Centre instructors, this programme offered cooking classes for elderly people suffering from MCI. Of the 90 participants in the first phase of this programme, 90 per cent showed improvements in self-confidence, cooking skills and cognitive abilities. We will further expand the programme in local communities to include more beneficiaries in future.

To enable the elderly and patients suffering from dysphagia to enjoy mooncakes with their families, we joined St. James' Settlement to create Hong Kong's first Warming Mooncake series, developed by registered dietician and chef. The mooncakes were made in a way that allows patients to overcome difficulties in swallowing solid food, while retaining its original flavour. Warming Mooncakes were delivered to those in need and also made for charity sales. All proceeds went to St. James Settlement in support of their work and public education on dysphagia.

During the year, we received the Business for Social Good Award by Our Hong Kong Foundation in recognition of our landfill gas utilisation project at Alice Ho Miu Ling Nethersole Hospital, which can create social and environmental benefits through profit-making businesses.

In mainland China, we continued to carry out a wide range of caring initiatives. These included the Gentle Breeze Movement programme for students from poverty-stricken families. In 2017, we rolled out the initiatives under the programme in Yangjiang, Guangdong province and Binzhou, Shandong province by donating teaching equipment and school supplies for more than 800 teachers and students. Since the launch of the Gentle Breeze Movement programme in 2013, we have donated RMB3.2 million to nearly 40 schools in provinces of Jiangxi, Anhui, Jiangsu, Shandong, Guizhou, Shaanxi, Liaoning, Sichuan, Guangdong and other provinces. The donations were used for refurbishing school buildings and constructing Towngas China Charity Libraries, as well as for buying uniforms, learning equipment, computers and other materials for improving the learning environment.

As an ongoing supporter of the Firefly Project run by the Shanghai Soong Ching Ling Foundation – BEA Charity Fund, we donated desks, chairs, computers and internet facilities for the 420 students of a primary school in Anqing, Anhui province.

## Human Resources

### *A Culture of Innovation and Quality*

Towngas recognises that maintaining a culture of innovation and quality is critical for helping the Group to prepare for future challenges, maintain its competitive position in the marketplace, and lay a foundation for its ongoing success. This approach has been embedded in our principle Growth = Innovation x Implementation (G=ixi), which has stimulated many creative initiatives followed by practical solutions by our staff that continue to benefit our business.

During the year, we offered Innovation Series training workshops on topics such as multi-perspective thinking and leading change. We also encouraged employees to exchange ideas through social media platforms and internal forums. Our Managing Director's Award competition was especially popular this year, attracting over 100 creative proposals.

In 2017, we celebrated the 25th anniversary of our Superior Quality Service programme. With the enthusiastic participation of employees, the programme succeeded in generating a total of 1,486 projects for streamlining workflows and improving services. This programme has become integral to our quality culture, the cornerstone of our success

Rural school children in mainland China are benefiting from the teaching equipment we donate under the Towngas Gentle Breeze Movement programme.

over the years. Following our MasterCraft Award competitions in 2016, which focused on design and installation of gas system, in 2017 we promoted craftsmanship in our kitchen solution business as we believe that quality of installation is key to the success of this product line.

### *Staff Development*

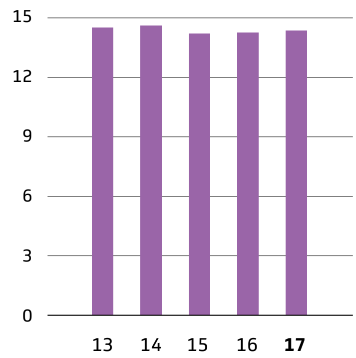
We continued to build a competent talent pool that will enable us to keep pace with the growth of our businesses. During the year, we developed a set of career development schemes for providing staff with continuous professional learning as well as opportunities for vertical promotion and horizontal job rotation. One of the new programmes launched in 2017 was the two-year Network Supervisor Trainee Programme, which provided network technicians with technical and supervisory skills training as well as mentor guidance to prepare for future promotion.

In addition, we initiated the Young Leadership Competence Accelerated programme designed to develop young talent as the future leaders of the Group. Twenty-three intakes from different businesses across geographical locations will participate in the two-year programme, which includes courses in mentorship, management training by external institutes such as Tsing Hua University, and benchmarking visits to other companies.

Through the Towngas Engineering Academy, we have built up the technical competence and professionalism of Towngas employees throughout their careers with us. Towngas is the first and, until now, only gas company in mainland China to provide gas engineers with dedicated training schemes accredited by the Hong Kong Institution of Engineers (HKIE) and the UK based Institution of Gas Engineers and Managers (IGEM).

In Hong Kong, we worked with the Vocational Training Council (VTC) to launch the Diploma of Vocational Education in Gas Services Engineering – the first diploma programme in Hong Kong directly related to the gas industry – and the first batch of students graduated in 2017. We are now planning to roll out a Professional Diploma in Gas Engineering with VTC in 2018. This programme will pave the way for our employees and related trade practitioners to become professional engineers in the gas industry.

**Town Gas Sales per Employee** Company (million MJ)




Avid young readers at a new Towngas China Charity Library, one of our caring initiatives in mainland China.

## 2017 Environmental Performance Table (Hong Kong)

**ozone layer protection**

All of our vehicle air conditioning systems now operate with refrigerant R134A

All BCF portable fire extinguishers have been replaced with dry powder extinguishers

**air quality**

Total NOx output was 4.0 kg/TJ of town gas

Total SOx output was 0.02 kg/TJ of town gas

Total $CO_2$ output was 11.6 metric tonnes/TJ of town gas

**greenhouse gas emissions**

Greenhouse gas emissions from major gas production equipment was 358,417 metric tonnes in terms of $CO_2$ equivalent

**water quality**

Total waste water output was 4.1 $m^3$/TJ of town gas

**chemical waste**

Total chemical waste output was 2.5 kg/TJ of town gas

**noise**

All installations and operations complied with the statutory requirements

No noise abatement notice has ever been received

All legal requirements relating to environmental protection were fully complied with.

Graduates of our Gas Apprentice Training Schemes are the backbone of our technical and management workforce, ensuring gas safety, efficient operations and the successful growth of the business. The year 2017 marked the 50th anniversary of the launch of the first scheme, the Gas Craft Apprentice Training Scheme. Following its success, two more training schemes, the Gas Technician Apprentice Training Scheme and Gas Network Fitter Training Scheme, were established in 1977 and 1982 respectively. Over 1,200 technical professionals have graduated from these three schemes so far.

In collaboration with the University of Technology in Sydney, Australia, we also offer a Master of Engineering Management degree, which is widely recognised in the engineering industry and the first of its kind in mainland China. Engineering staff participating in this 15-month programme, which integrates theoretical coursework and practical projects, will be able to earn a master's degree and become eligible to apply for membership in IGEM. To date, seven postgraduates have become Member Managers under this programme.

## Supporting our Staff

We recognise the importance of providing an environment for our staff that is conducive to productivity and enables them to lead fulfilling lives both at work and at home. We also regularly review and upgrade staff benefits to accommodate changes in social conditions and keep up with market trends.

As an example of how we do this, at our headquarters building in Hong Kong we provide a library, fitness facilities and a clinic where staff can enjoy free medical services and medicines for the


We launched a sign language singing competition to promote inclusion in the workplace.

treatment of illness. We also have a Mother Care Room, which was doubled in size during the year, to give breastfeeding employees a clean and quiet space to prepare and store breast milk.

During the year, Towngas was named one of the HR Asia Best Companies to Work for in Asia 2017 by *HR Asia*, an authoritative HR publication in Asia. We also won the Friendly Employment Award under the Talent-Wise Employment Charter of the Labour and Welfare Bureau, recognising our commitment to employ people with disabilities.

## Supplier Relationships

Towngas not only encourages innovation in our own work but also among our suppliers, who are invited to come forward with ideas on how to effect improvements throughout the supply chain. Issues covered can include raw materials selection, product design and packaging methods.

In 2017, we saw more suppliers in mainland China adopting the 6S methodology, a quality management approach that has helped them improve their performance by eliminating waste and optimising processes. Their feedback has been positive, and many successful cases show that the approach can lead to a safer, more efficient and effective workplace. The concept has since been expanded to include shop floor supervision among our suppliers.

Our Corporate Social Responsibility compliance audit was extended to cover the suppliers of our mainland businesses, and we are now carrying out a self-assessment survey and audits to ensure their compliance with our rules, regulations and laws.

## Occupational Health and Safety

Making sure our employees return home safely from work every day is our first priority at Towngas.

To ensure site works are carried out as safely as possible, we have developed innovative methods and tools that minimise the risk of injuries and occupational health illness to our employees and contractors. During road works, for example, we have a set of tools that include a self-assembled mechanical support arm to reduce the weight of a hydraulic breaker, an easy-to-control electronic trolley with hydraulic cylinders for lifting buckets, and a braking system to avoid tipping trolleys. We also have a pneumatic soil remover to reduce the harmful effect of repetitive actions in traditional soil removal work. The equipment is adjustable to fit the height of workers to ensure healthy posture.

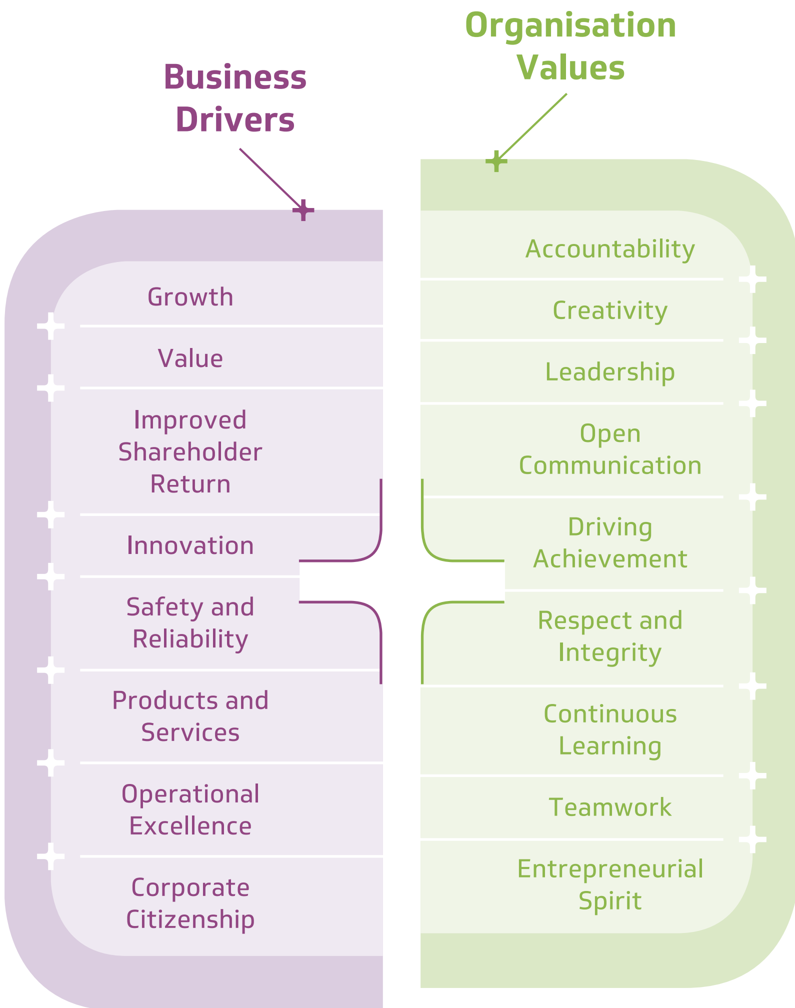
In late 2017, we organised Health, Safety and Environment (HSE) month and HSE day to promote safety among our staff and contractors. This activity featured experience sharing sessions and corporate visits as well as seminars on occupational safety and health, fire safety, security and environmental protection. We also carried out regular briefings and safety drills to prevent industrial accidents.

In recognition of our performance, we won numerous awards in Hong Kong during the year, including two Gold awards and one Silver award at the 16th Hong Kong Occupational Safety & Health Award, as well as one Excellence award at the Joyful@Healthy Workplace Best Practices Award.

## Driving Growth and Building Long-term Value

Since our business has a significant impact on communities and the environment, we believe it is essential to behave in a socially-responsible manner and to set the highest possible ethical standards for our staff, contractors and peers in the industry. This, we believe, is the foundation of our business and continuing success.

In order to fulfil our responsibilities, we are committed to living by our corporate values of quality, innovation, courtesy and environmental awareness.




In practice, this means working for the betterment of society, protecting the environment and ensuring a sustainable future for the next generation.

To achieve these aims, we introduced a new vision statement during the year: “To be Asia’s leading clean energy supplier and quality service provider, with a focus on innovation and environmental-friendliness.” The statement was widely promoted within the Group as well as in our subsidiaries and joint ventures.

We also updated our management theme, which now calls on us to examine our past successes and to recognise how we can build on them for the future. This aligns with our long-term vision and reinforces our commitment to set the standard in the public utilities industry as a caring provider of clean energy.

# RISK FACTORS

In the risks discussed below, we highlight the factors that could have an adverse material effect on the Group's revenues, cash flows, market competitiveness and operations in Hong Kong and mainland China.

For further details on how the Group manages its risks, please refer to the "Risk Management and Internal Control" section of our Corporate Governance Report on pages 80 to 82.

## Business Environment

The global economy showed a return to growth in 2017 as a result of a pick-up in manufacturing and trade, improved market confidence and a recovery in commodity prices. Global market trends were driven by a decline in some global policy uncertainties since early 2017 and expectations for a smooth and gradual transition to the monetary policy stance in the United States of America. Stock markets rose noticeably during this period, and the ongoing recovery in global trade supported growth in the business environment.

In Hong Kong, GDP growth of 3.8 per cent was recorded for the whole year. With an increase in visitor arrivals of 3.2 per cent, compared with a 4.5 per cent decline in 2016, the hotel occupancy rate rose from 87 per cent in 2016 to 89 per cent in 2017. Gas sales in the hotel and restaurant trades increased accordingly. In mainland China, the economy grew 6.9 per cent in 2017, beating the official annual expansion target of 6.5 per cent and outpacing the growth rate of 6.7 per cent in 2016. Driven by the solid economic recovery and enforcement of the government's coal-to-gas policy, natural gas consumption grew significantly in the year.

Despite the above factors, the Group faces competition from the use of electricity in the Hong Kong market; in the mainland market, it must contend with competition in the form of direct sales by upstream gas companies, as well as from suppliers of liquefied natural gas (LNG) and alternative energy sources. Other threats to our business include volatile energy prices and changes in government policy (political, legal, regulatory, environmental or competition-related) that could also affect our operations.

Our strategy for dealing with business risks continues to be critical for the sustainable growth and success of the Group. In line with this strategy, we remain prudent in our capital investments and seek ways to improve the productivity and cost effectiveness of all our operations. Credit monitoring is also reinforced to minimise the risk of a customer default.

In addition, we are constantly exploring new gas applications in both Hong Kong and mainland China, while maintaining close communication with our operational partners and governments whose support is essential for our business growth.

## Reliability of Gas Supply

We secure multiple sources of feedstock for the production of town gas in our Hong Kong operations. These include natural gas transmitted from our liquefied natural gas (LNG) receiving terminal at Shenzhen to our gas production plant at Tai Po, naphtha imported from Southeast Asia, Australia and the Middle East, and treated landfill gas obtained from our landfill project sites in Hong Kong.

A major risk of interruption to our feedstock supply for natural gas is inclement weather delaying LNG tankers. We have addressed this risk under our diversified production strategy, in which we have given our Tai Po plant the capability of switching between natural gas and naphtha for feedstock.

In mainland China, to facilitate more efficient gas inventory management and reduce supply bottlenecks during high-demand periods, LNG storage facilities are in place and we have built new underground salt caverns for gas storage in Jiangsu province, which commenced trial operations in 2017.

To ensure reliable gas transmission, we have a sophisticated Supervisory Control and Data Acquisition (SCADA) system in place to monitor and control our pressure-regulating stations and network. We also have a comprehensive staff training programme, asset management systems, and contingency plans with regular practice drills, in preparation for unforeseen events that might affect our customers and the public.

## Production and Network Safety

Preventing gas leakages or explosions in our production and storage facilities, pipelines and networks is a top priority for Towngas. Risks include the possibility of damage to critical facilities or related infrastructure from a third party, a security threat or extreme weather events such as typhoons, flooding or landslides.

These and other factors affecting the safety of our infrastructure or causing an interruption to service would have a significant legal, financial and/or reputational impact on the Group.

Towngas conducts regular reviews of all operating procedures to mitigate these risks, and implements targeted strategies for addressing them. Our Total Quality Management (TQM) system, for example, covers all critical production, storage, transmission and distribution facilities. We also manage our assets according to international standards and external certifications, and maintain insurance coverage against any property damage or financial loss.

## Information Security

Our business operations are dependent on information technology systems that are vulnerable to a critical system failure, leakage or loss of sensitive information, all of which would adversely affect the Group's business. Accordingly, we have put in place protective measures to manage data loss and monitor suspicious cyber activities. We also commission third parties to assess our security standards and identify areas for enhancement. Other security measures include contingency plans with regular drills to counter system failures as well as staff awareness programmes on cybersecurity and sensitive information handling to fully safeguard our operations against growing information security threats.

## Health and Safety

We recognise the importance of maintaining high levels of occupational health and safety in all our operations. Serious accidents or the outbreak of a communicable disease, among other risks, could cause injury, loss of life and operational disruption that would result in huge recovery costs, litigation or reputational damage.

To mitigate and contain the risks directly or indirectly under our control, we encourage staff at all levels to monitor and report any hazards or potential threats. We also have comprehensive safety guidelines and measures that ensure our safety performance conforms to the highest industry standards. Our safety management system, certified for compliance with international standards, is reviewed and updated regularly. We also emphasise the importance of maintaining a comprehensive and effective safety culture by providing staff and contractors with systematic professional, technical and safety-related training.

# FINANCIAL RESOURCES REVIEW

## Liquidity and Capital Resources

As at 31st December 2017, the Group had a net current borrowings position of HK$2,927 million (31st December 2016: net current deposits HK$5,505 million) and long-term borrowings of HK$21,162 million (31st December 2016: HK$27,296 million). The change from net current deposits as of 31st December 2016 to net current borrowings as of 31st December 2017 was due to US$995 million Guaranteed Notes maturing in August 2018. In addition, banking facilities available for use amounted to HK$13,200 million (31st December 2016: HK$11,500 million).

The operating and capital expenditures of the Group are funded by cash flow from operations, internal liquidity, banking facilities, debt and equity financing. The Group has adequate and stable sources of funds and unutilised banking facilities to meet its future capital expenditures and working capital requirements.

## Financing Structure

In May 2009, the Group established a US$1 billion Medium Term Note Programme (the "Programme") which gives the Group the flexibility to issue notes at favourable terms and timing. In May 2012, the Programme was updated with the size increased to US$2 billion. In November 2017, under the Programme, the Group issued its inaugural green bonds based on a newly established Towngas Green Bond Framework, which was prepared in accordance with the Green Bond Principles 2017 of the International Capital Market Association. The inaugural 10-year green bonds, amounting to HK$600 million and JPY2 billion, has allowed the Group to tap into a new base of green bond investors as an additional funding source for financing the Group's environmentally green projects under the Towngas Green Bond Framework. Up to 31st December 2017, the Group issued notes in the total amount of HK$13,371 million (31st December 2016: HK$11,934 million) with maturity terms of 10 years, 12 years, 15 years, 30 years and 40 years in Australian dollar, Japanese yen and Hong Kong dollar under the Programme (the "MTNs"). The carrying value of the issued MTNs as at 31st December 2017 was HK$12,748 million (31st December 2016: HK$11,196 million).

As at 31st December 2017, the outstanding principal amount of the 10-year US dollar Guaranteed Notes (the "Guaranteed Notes") issued in August 2008 at a fixed coupon rate of 6.25 per cent per annum was US$995 million (31st December 2016: US$995 million) and the carrying value was HK$7,734 million (31st December 2016: HK$7,701 million).

As at 31st December 2017, the Group's borrowings amounted to HK$36,919 million (31st December 2016: HK$33,248 million). While the Notes mentioned above together with the bank and other loans of HK$4,003 million (31st December 2016: HK$4,381 million) had fixed interest rate and were unsecured, the remaining bank and other loans were unsecured and had a floating interest rate, of which HK$6,363 million (31st December 2016: HK$6,496 million) were long-term bank loans and HK$6,071 million (31st December 2016: HK$3,474 million) had maturities within one year on revolving credit or term loan facilities. As at 31st December 2017, the maturity profile of the Group's borrowings was 43 per cent within 1 year, 11 per cent within 1 to 2 years, 21 per cent within 2 to 5 years and 25 per cent over 5 years (31st December 2016: 18 per cent within 1 year, 28 per cent within 1 to 2 years, 22 per cent within 2 to 5 years and 32 per cent over 5 years).

The US dollar Guaranteed Notes, the AUD Note and JPY Note issued are hedged to Hong Kong dollars by currency swaps. Except for some borrowings of certain subsidiaries are arranged in or hedged to their functional currency in Renminbi, the Group's borrowings are primarily denominated in Hong Kong dollars and local currency of subsidiaries in mainland China. The Group therefore has no significant exposure to foreign exchange risk.

In January 2014, the Group issued its first Perpetual Subordinated Guaranteed Capital Securities (the "Perpetual Capital Securities") amounting to US$300 million with distribution rate of 4.75 per cent per annum for the first five years and thereafter at floating distribution rate. With no fixed maturity and the distribution payment can be deferred at the discretion of the Group, the Perpetual Capital Securities are redeemable at the Group's option on or after 28th January 2019 and are accounted for as equity in the financial statements. The Perpetual Capital Securities are guaranteed by the Company. The issuance helps strengthen the Group's financial position, improve its financing maturity profile and diversify its funding sources.

The gearing ratio [net borrowing / (shareholders' funds + perpetual capital securities + net borrowing)] for the Group as at 31st December 2017 remained healthy at 28 per cent (31st December 2016: 28 per cent).

## Contingent Liabilities

As at 31st December 2017 and 31st December 2016, the Group did not provide any guarantee in respect of bank borrowing facilities made available to any associates, joint ventures or third parties.

## Currency Profile

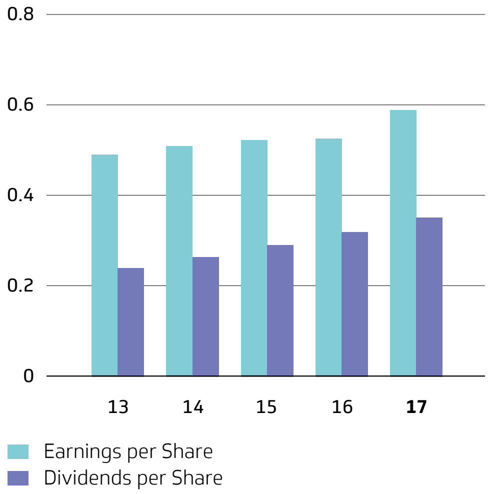
The Group's operations and activities are predominantly based in Hong Kong and mainland China. As such, its cash, cash equivalents or borrowings are mainly denominated in Hong Kong dollars, Renminbi or United States dollars, whereas borrowings for the Group's subsidiaries, associates and joint ventures in mainland China are predominantly denominated in the local currency, Renminbi, in order to provide natural hedging for the investment there.

## Group's Financial Investments in Securities

Under the guidance of the Group's Treasury Committee, financial investments have been made in equity and debt securities. As at 31st December 2017, the investments in securities amounted to HK$752 million (31st December 2016: HK$1,649 million). The performance of the Group's financial investments in securities was satisfactory.

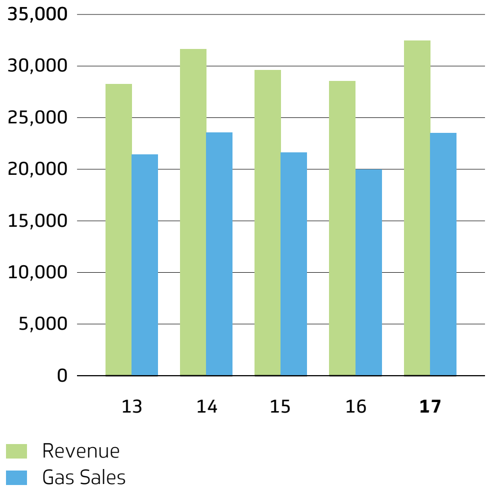
# FIVE-YEAR FINANCIAL STATISTICS

## Earnings and Dividends per Share (HK$)

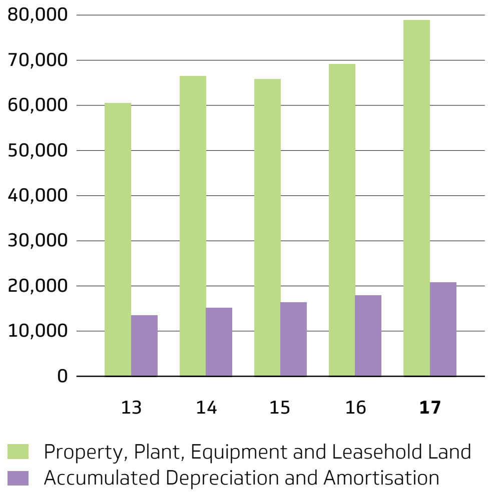



## Revenue and Gas Sales

(HK$ million)

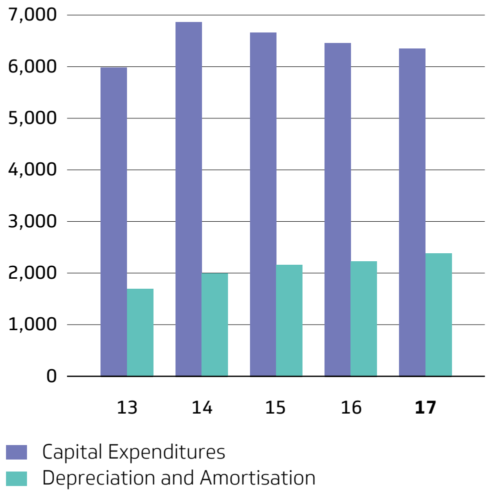



## Property, Plant, Equipment and Leasehold Land (HK$ million)



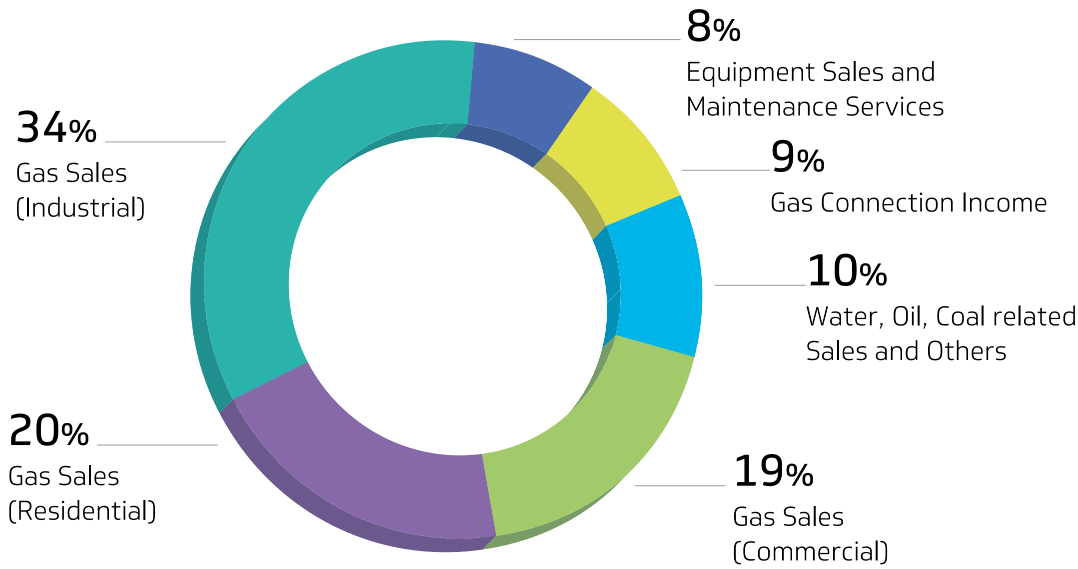

## Capital Expenditures

(HK$ million)

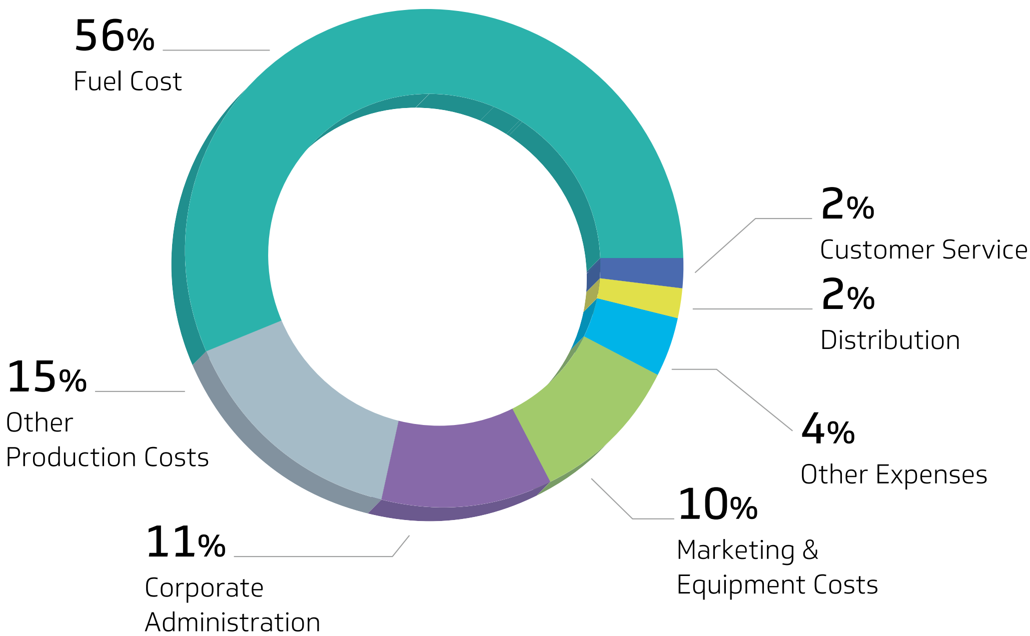


# 2017 FINANCIAL ANALYSIS

**Analysis of Revenue**




**Analysis of Expenditures**



# COMPARISON OF TEN-YEAR RESULTS

| | 2017 | 2016 | 2015 |
|---|---|---|---|
| **Highlights (Company)** | | | |
| Number of Customers as at 31st December | **1,883,407** | 1,859,414 | 1,839,261 |
| Town Gas Sales, million MJ | **29,049** | 28,814 | 28,404 |
| Installed Capacity, thousand $m^3$ per day | **12,596** | 12,596 | 12,596 |
| Maximum Daily Demand, thousand $m^3$ | **6,191** | 6,964 | 6,172 |
| **Revenue and Profit** | **HK$'M** | HK$'M | HK$'M |
| Revenue | **32,476.5** | 28,557.1 | 29,591.3 |
| Profit before Taxation | **11,096.7** | 9,845.7 | 9,906.0 |
| Taxation | **(1,749.8)** | (1,575.9) | (1,726.7) |
| Profit after Taxation | **9,346.9** | 8,269.8 | 8,179.3 |
| Holders of Perpetual Capital Securities | **(111.2)** | (110.5) | (110.5) |
| Non-controlling Interests | **(1,010.4)** | (818.6) | (766.8) |
| Profit Attributable to Shareholders | **8,225.3** | 7,340.7 | 7,302.0 |
| Dividends | **4,895.7** | 4,450.9 | 4,046.6 |
| **Assets and Liabilities** | | | |
| Property, Plant, Equipment and Leasehold Land | **58,056.7** | 51,226.2 | 49,417.5 |
| Investment Property | **764.0** | 729.0 | 713.0 |
| Intangible Assets | **5,883.6** | 5,572.4 | 5,819.5 |
| Associates | **23,393.4** | 20,485.0 | 19,591.9 |
| Joint Ventures | **10,889.2** | 9,226.5 | 9,288.2 |
| Available-for-sale Financial Assets | **4,289.9** | 4,967.1 | 4,567.0 |
| Other Non-current Assets | **3,419.3** | 3,366.3 | 2,533.3 |
| Current Assets | **24,365.8** | 21,170.9 | 23,632.9 |
| Current Liabilities | **(31,948.1)** | (19,547.5) | (23,180.6) |
| Non-current Liabilities | **(28,867.9)** | (34,297.9) | (30,269.8) |
| **Net Assets** | **70,245.9** | 62,898.0 | 62,112.9 |
| **Capital and Reserves** | | | |
| Share Capital | **5,474.7** | 5,474.7 | 5,474.7 |
| Share Premium | **–** | – | – |
| Reserves | **51,746.9** | 45,532.6 | 44,707.7 |
| Proposed Dividend | **3,217.2** | 2,924.9 | 2,659.0 |
| **Shareholders' Funds** | **60,438.8** | 53,932.2 | 52,841.4 |
| **Perpetual Capital Securities** | **2,354.1** | 2,353.8 | 2,353.8 |
| **Non-controlling Interests** | **7,453.0** | 6,612.0 | 6,917.7 |
| **Total Equity** | **70,245.9** | 62,898.0 | 62,112.9 |
| Earnings per Share, HK Dollar * | **0.59** | 0.53 | 0.52 |
| Dividends per Share, HK Dollar * | **0.35** | 0.32 | 0.29 |
| Dividend Cover | **1.68** | 1.65 | 1.80 |

* Adjusted for the bonus share issue in 2017

| 2014 | 2013 | 2012 | 2011 | 2010 | 2009 | 2008 |
|---|---|---|---|---|---|---|
| 1,819,935 | 1,798,731 | 1,776,360 | 1,750,553 | 1,724,316 | 1,698,723 | 1,672,084 |
| 28,835 | 28,556 | 28,360 | 28,147 | 27,578 | 27,274 | 27,583 |
| 12,260 | 12,260 | 12,260 | 12,260 | 12,260 | 12,260 | 12,260 |
| 6,571 | 6,283 | 6,403 | 6,742 | 6,191 | 6,621 | 7,158 |
| HK$'M | HK$'M | HK$'M | HK$'M | HK$'M | HK$'M | HK$'M |
| 31,614.7 | 28,245.9 | 24,922.5 | 22,426.8 | 19,375.4 | 12,351.8 | 12,352.2 |
| 9,874.6 | 9,410.8 | 9,885.6 | 8,068.7 | 7,086.7 | 6,159.9 | 5,189.6 |
| (1,771.4) | (1,655.2) | (1,484.6) | (1,344.0) | (1,038.8) | (750.6) | (546.3) |
| 8,103.2 | 7,755.6 | 8,401.0 | 6,724.7 | 6,047.9 | 5,409.3 | 4,643.3 |
| (102.2) | – | – | – | – | – | – |
| (891.8) | (901.8) | (688.9) | (575.1) | (463.1) | (134.2) | (92.3) |
| 7,109.2 | 6,853.8 | 7,712.1 | 6,149.6 | 5,584.8 | 5,275.1 | 4,551.0 |
| 3,679.7 | 3,345.9 | 3,041.7 | 4,147.8 | 2,513.8 | 2,285.3 | 2,333.0 |
| 51,353.6 | 47,002.3 | 41,914.1 | 33,606.3 | 27,825.8 | 24,452.6 | 15,638.0 |
| 683.0 | 646.0 | 540.0 | 518.0 | 501.0 | 501.0 | 523.0 |
| 5,858.5 | 5,253.3 | 3,845.4 | 3,434.8 | 2,575.6 | 2,461.7 | 196.4 |
| 17,572.5 | 17,015.1 | 16,307.1 | 12,706.8 | 10,802.2 | 9,304.0 | 11,327.7 |
| 9,033.8 | 8,939.0 | 9,103.6 | 8,964.7 | 7,768.8 | 7,011.2 | 6,164.0 |
| 2,599.7 | 2,937.3 | 3,078.6 | 3,110.6 | 3,441.2 | 2,996.0 | 1,105.2 |
| 2,668.3 | 2,913.5 | 2,710.6 | 2,734.5 | 2,791.9 | 722.7 | 153.8 |
| 24,641.5 | 21,688.7 | 21,437.8 | 19,955.1 | 16,957.6 | 19,622.3 | 17,708.2 |
| (20,689.6) | (19,261.8) | (17,252.9) | (13,403.4) | (16,523.4) | (10,628.8) | (5,407.7) |
| (31,497.6) | (30,762.9) | (31,334.1) | (25,353.3) | (14,932.1) | (18,635.4) | (14,989.7) |
| 62,223.7 | 56,370.5 | 50,350.2 | 46,274.1 | 41,208.6 | 37,807.3 | 32,418.9 |
| 5,474.7 | 2,389.9 | 2,172.6 | 1,975.1 | 1,795.6 | 1,632.3 | 1,666.4 |
| – | 2,861.0 | 3,078.3 | 3,275.8 | 3,455.3 | 3,618.6 | 3,618.6 |
| 44,735.7 | 42,418.0 | 37,952.1 | 33,075.4 | 30,561.3 | 27,112.3 | 24,752.6 |
| 2,417.8 | 2,198.7 | 1,998.8 | 3,199.7 | 1,651.9 | 1,501.8 | 1,533.1 |
| 52,628.2 | 49,867.6 | 45,201.8 | 41,526.0 | 37,464.1 | 33,865.0 | 31,570.7 |
| 2,353.8 | – | – | – | – | – | – |
| 7,241.7 | 6,502.9 | 5,148.4 | 4,748.1 | 3,744.5 | 3,942.3 | 848.2 |
| 62,223.7 | 56,370.5 | 50,350.2 | 46,274.1 | 41,208.6 | 37,807.3 | 32,418.9 |
| 0.51 | 0.49 | 0.55 | 0.44 | 0.40 | 0.38 | 0.32 |
| 0.26 | 0.24 | 0.22 | 0.30 | 0.18 | 0.16 | 0.16 |
| 1.93 | 2.05 | 2.54 | 1.48 | 2.22 | 2.31 | 1.95 |

# REPORT OF THE DIRECTORS

The Directors have pleasure in submitting to shareholders their Report and the audited financial statements for the year ended 31st December 2017 which are to be presented at the Annual General Meeting to be held at Meeting Room N101 (Expo Drive Entrance), Hong Kong Convention and Exhibition Centre, Wanchai, Hong Kong on Wednesday, 6th June 2018.

## Principal Activities

The principal activities of the Company and its subsidiaries (collectively, the "Group") are the production, distribution and marketing of gas, water supply and emerging environmentally-friendly energy businesses in Hong Kong and mainland China. Particulars of the principal subsidiaries of the Company are shown from pages 177 to 187 of this Annual Report. Revenue and contribution to operating profit are mainly derived from activities carried out in Hong Kong and mainland China.

## Results and Appropriations

The results of the Group for the year ended 31st December 2017 are set out in the consolidated income statement and the consolidated statement of comprehensive income on pages 91 and 92 of this Annual Report respectively.

An interim dividend of HK12 cents per share was paid to shareholders on 3rd October 2017 and the Directors recommend a final dividend of HK23 cents per share payable on 22nd June 2018 to shareholders whose names are on the register of members of the Company on 14th June 2018.

## Bonus Issue of Shares

The Directors recommend a bonus issue of shares on the basis of one bonus share for every ten existing shares held by shareholders whose names are on the register of members of the Company on 14th June 2018. The bonus issue is subject to the conditions and trading arrangements set out in the circular despatched together with this Annual Report.

## Business Review

A review of the business of the Group during the year, particulars of important events affecting the Group that have occurred since the end of the year ended 31st December 2017 (if any), an analysis of the Group's performance using financial key performance indicators and a discussion on the Group's future business development are provided from pages 4 to 65 of this Annual Report. Description of the possible risks and uncertainties that the Group may be facing are set out on page 60. The financial risk management of the Group can be found in Note 3 to the consolidated financial statements. In addition, discussions on the Group's relationships with its key stakeholders, environmental policies and performance, and compliance with relevant laws and regulations which have a significant impact on the Group can be found from pages 22 to 59 and pages 73 to 84.

## Financial Summary

A summary of the results and of the assets and liabilities of the Group for the last nine financial years is set out on pages 64 and 65 of this Annual Report.

## Distributable Reserves

The distributable reserves of the Company as at 31st December 2017 amounted to HK$14,730,000,000 (2016: HK$14,101,700,000) before the proposed final dividend for the year ended 31st December 2017.

## Shares Issued

During the year, the Company issued 1,271,604,225 bonus shares without consideration on the basis of one bonus share for every ten shares held. The reason for the issue of bonus share was to enable the shareholders to enjoy a pro-rata increase in the number of shares being held in the Company without incurring any costs.

Details of the shares issued by the Company during the year are set out in Note 35 to the consolidated financial statements.

## Debentures Issued

In November 2017, HKCG (Finance) Limited, a wholly-owned subsidiary of the Company, issued its inaugural 10-year green bonds ("Green Bonds") amounted to HK$600,000,000 at a fixed coupon rate of 2.84% per annum and JPY2,000,000,000 at a fixed coupon rate of 0.35% per annum which is hedged to Hong Kong dollars by currency swap, with an effective fixed interest rate at 2.90% per annum under the Medium Term Note Programme of the Group established since May 2009. The net proceeds of HK$734,420,000 from the Green Bonds are used to invest in the Group's waste-to-energy projects and other eligible green investments.

## Charitable Donations

During the year, the Group made charitable donations amounting to approximately HK$5,100,000 (2016: HK$7,100,000).

## Directors

The Directors of the Company during the year and up to the date of this report were:

### Non-executive Directors

Dr. the Hon. LEE Shau Kee (Chairman)
Dr. Colin LAM Ko Yin
Dr. LEE Ka Kit
Mr. LEE Ka Shing

### Independent Non-executive Directors

Mr. LEUNG Hay Man
Dr. the Hon. Sir David LI Kwok Po
Professor POON Chung Kwong

### Executive Directors

Mr. Alfred CHAN Wing Kin
Mr. Peter WONG Wai Yee

At the annual general meeting held on 7th June 2017 (the "2017 AGM"), Dr. the Hon. Sir David Li Kwok Po, Dr. Lee Ka Kit and Mr. Peter Wong Wai Yee were re-elected as Directors of the Company. Dr. the Hon. Lee Shau Kee, Mr. Leung Hay Man, Dr. Colin Lam Ko Yin, Mr. Alfred Chan Wing Kin, Mr. Lee Ka Shing and Professor Poon Chung Kwong held office throughout the year.

According to the Articles of Association of the Company (the "Articles of Association"), one-third of all the directors are subject to retirement by rotation at every annual general meeting. Pursuant to Article 97 of the Articles of Association, Dr. the Hon. Lee Shau Kee, Professor Poon Chung Kwong and Mr. Alfred Chan Wing Kin are due to retire by rotation at the forthcoming Annual General Meeting and, being eligible, offer themselves for re-appointment. Details of these directors proposed for re-election are set out in the circular sent together with this Annual Report.

A list of directors who have served on the boards of the subsidiaries of the Company during the year and up to the date of this report is available on the Company's website at www.towngas.com under the "Investor Relations" section.

## Biographical Details of Directors

The biographical details of Directors and senior management who are also executive directors are set out from pages 17 to 20 of this Annual Report.

## Disclosure of Interests

### A. Directors

As at 31st December 2017, the interests and short positions of each Director of the Company in the shares, underlying shares and debentures of the Company and its associated corporations (within the meaning of Part XV of the Securities and Futures Ordinance (the "SFO")) as recorded in the register required to be kept under section 352 of the SFO or as otherwise notified to the Company and The Stock Exchange of Hong Kong Limited (the "Exchange") pursuant to the Model Code for Securities Transactions by Directors of Listed Issuers were as follows:

#### Shares and Underlying Shares *(Long Positions)*

| | | Interest in Shares | | | | |
|---|---|---|---|---|---|---|
| Name of Company | Name of Director | Personal Interests | Corporate Interests | Other Interests | Aggregate Interests | %* |
| The Hong Kong and China Gas Company Limited | Dr. the Hon. Lee Shau Kee | | 5,808,506,384 (Note 3) | | 5,808,506,384 | 41.53 |
| | Dr. the Hon. Sir David Li Kwok Po | 39,013,314 | | | 39,013,314 | 0.28 |
| | Dr. Lee Ka Kit | | | 5,808,506,384 (Note 2) | 5,808,506,384 | 41.53 |
| | Mr. Alfred Chan Wing Kin | 266,692 (Note 5) | | | 266,692 | 0.00 |
| | Mr. Lee Ka Shing | | | 5,808,506,384 (Note 2) | 5,808,506,384 | 41.53 |
| | Professor Poon Chung Kwong | 182,220 (Note 4) | | | 182,220 | 0.00 |
| Lane Success Development Limited | Dr. the Hon. Lee Shau Kee | | 9,500 (Note 6) | | 9,500 | 95 |
| | Dr. Lee Ka Kit | | | 9,500 (Note 6) | 9,500 | 95 |
| | Mr. Lee Ka Shing | | | 9,500 (Note 6) | 9,500 | 95 |
| Yieldway International Limited | Dr. the Hon. Lee Shau Kee | | 2 (Note 7) | | 2 | 100 |
| | Dr. Lee Ka Kit | | | 2 (Note 7) | 2 | 100 |
| | Mr. Lee Ka Shing | | | 2 (Note 7) | 2 | 100 |
| Towngas China Company Limited ("Towngas China") | Dr. the Hon. Lee Shau Kee | | 1,857,788,706 (Note 8) | | 1,857,788,706 | 67.10 |
| | Dr. Lee Ka Kit | | | 1,857,788,706 (Note 8) | 1,857,788,706 | 67.10 |
| | Mr. Lee Ka Shing | | | 1,857,788,706 (Note 8) | 1,857,788,706 | 67.10 |
| | Mr. Alfred Chan Wing Kin | 3,707,776 | | | 3,707,776 | 0.13 |
| | Mr. Peter Wong Wai Yee | 3,015,000 | | | 3,015,000 | 0.11 |

* Percentage which the aggregate long position in the shares or underlying shares represents to the number of issued shares of the Company or any of its associated corporations.

## Disclosure of Interests (continued)

### A. Directors (continued)

Save as mentioned above, as at 31st December 2017, there were no other interests or short positions of the Directors of the Company in any shares, underlying shares or debentures of the Company or any of its associated corporations (within the meaning of Part XV of the SFO) recorded in the register maintained by the Company pursuant to section 352 of the SFO or as otherwise notified to the Company and the Exchange pursuant to the Model Code for Securities Transactions by Directors of Listed Issuers.

### B. Substantial Shareholders and Others *(Long Positions)*

As at 31st December 2017, the interests and short positions of every person, other than the Directors of the Company, in the shares and underlying shares of the Company as recorded in the register required to be kept under section 336 of the SFO were as follows:

| | Name of Company | No. of Shares in which Interested | %* |
|---|---|---|---|
| **Substantial Shareholders** (a person who is entitled to exercise, or control the exercise of, 10% or more of the voting power at any general meeting) | Disralei Investment Limited (Note 1) | 3,233,610,924 | 23.12 |
| | Timpani Investments Limited (Note 1) | 4,489,565,858 | 32.10 |
| | Faxson Investment Limited (Note 1) | 5,808,506,384 | 41.53 |
| | Henderson Land Development Company Limited (Note 1) | 5,808,506,384 | 41.53 |
| | Henderson Development Limited (Note 1) | 5,808,506,384 | 41.53 |
| | Hopkins (Cayman) Limited (Note 2) | 5,808,506,384 | 41.53 |
| | Riddick (Cayman) Limited (Note 2) | 5,808,506,384 | 41.53 |
| | Rimmer (Cayman) Limited (Note 2) | 5,808,506,384 | 41.53 |
| **Persons other than Substantial Shareholders** | Macrostar Investment Limited (Note 1) | 1,318,940,526 | 9.43 |
| | Chelco Investment Limited (Note 1) | 1,318,940,526 | 9.43 |
| | Medley Investment Limited (Note 1) | 1,255,954,934 | 8.98 |

* Percentage which the aggregate long position in the shares represents to the number of issued shares of the Company.

Save as mentioned above, as at 31st December 2017, the register maintained by the Company pursuant to section 336 of the SFO recorded no other interests or short positions in shares and underlying shares of the Company.

Notes:

1. These 5,808,506,384 shares were beneficially owned by Macrostar Investment Limited ("Macrostar"), Medley Investment Limited ("Medley") and Disralei Investment Limited ("Disralei"). Macrostar was a wholly-owned subsidiary of Chelco Investment Limited, which was in turn, a wholly-owned subsidiary of Faxson Investment Limited ("FIL"). Medley and Disralei were wholly-owned subsidiaries of Timpani Investments Limited, which was in turn, a wholly-owned subsidiary of FIL. FIL was a wholly-owned subsidiary of Henderson Land Development Company Limited ("HLD"). Henderson Development Limited ("HD") was entitled to exercise or control the exercise of more than one-third of the voting power at general meetings of HLD.
2. These 5,808,506,384 shares are duplicated in the interests described in Note 1. Hopkins (Cayman) Limited ("Hopkins") owned all the issued ordinary shares which carry the voting rights in the share capital of HD as trustee of a unit trust ("Unit Trust"). Rimmer (Cayman) Limited ("Rimmer") and Riddick (Cayman) Limited ("Riddick"), as trustees of the respective discretionary trusts, held units in the Unit Trust. Dr. Lee Ka Kit and Mr. Lee Ka Shing, as discretionary beneficiaries of the discretionary trusts, were taken to have duties of disclosure in relation to these shares by virtue of Part XV of the SFO.
3. These 5,808,506,384 shares are duplicated in the interests described in Notes 1 and 2. Dr. the Hon. Lee Shau Kee beneficially owned all the issued shares in Rimmer, Riddick and Hopkins and was taken to be interested in these shares by virtue of Part XV of the SFO.

## Disclosure of Interests (continued)

### B. Substantial Shareholders and Others *(Long Positions)* (continued)

Notes: (continued)

4. These 182,220 shares were jointly held by Professor Poon Chung Kwong and his spouse.
5. These 266,692 shares were jointly held by Mr. Alfred Chan Wing Kin and his spouse.
6. These 9,500 shares in Lane Success Development Limited were beneficially owned by a wholly-owned subsidiary of the Company (as to 4,500 shares) and a wholly-owned subsidiary of HLD (as to 5,000 shares). Dr. the Hon. Lee Shau Kee, Dr. Lee Ka Kit and Mr. Lee Ka Shing were taken to be interested in HLD and the Company as set out in Notes 1 to 3 by virtue of Part XV of the SFO.
7. These 2 shares in Yieldway International Limited were beneficially owned by a wholly-owned subsidiary of the Company (as to 1 share) and a wholly-owned subsidiary of HLD (as to 1 share). Dr. the Hon. Lee Shau Kee, Dr. Lee Ka Kit and Mr. Lee Ka Shing were taken to be interested in HLD and the Company as set out in Notes 1 to 3 by virtue of Part XV of the SFO.
8. These 1,857,788,706 shares in Towngas China representing approximately 67.10% of the total issued shares in Towngas China were beneficially owned by Hong Kong & China Gas (China) Limited (as to 1,697,758,166 shares), Planwise Properties Limited (as to 157,353,034 shares) and Superfun Enterprises Limited (as to 2,677,506 shares), wholly-owned subsidiaries of the Company. Dr. the Hon. Lee Shau Kee, Dr. Lee Ka Kit and Mr. Lee Ka Shing were taken to be interested in the Company as set out in Notes 1 to 3 by virtue of Part XV of the SFO.

## Equity-Linked Agreements

No equity-linked agreements were entered into by the Company during the year or subsisted at the end of the year.

## Arrangements to Purchase Shares or Debentures

At no time during the year was the Company or any of its subsidiaries a party to any arrangement to enable the Directors of the Company to acquire benefits by means of the acquisition of shares in, or debentures of, the Company or any other body corporate.

## Directors' Interests in Competing Businesses

Pursuant to Rule 8.10 of the Rules Governing the Listing of Securities on The Stock Exchange of Hong Kong Limited (the "Listing Rules"), the interests of Directors of the Company in businesses which might compete with the Group during the year ended 31st December 2017 and as at 31st December 2017 were as follows:

Mr. Alfred Chan Wing Kin and Mr. Peter Wong Wai Yee, Directors of the Company, have held directorships in companies engaged in the same businesses of production, distribution and marketing of gas in mainland China as the Group. Although some of the businesses carried out by those companies are similar to the businesses carried out by the Group, they are of different scale and/or at different locations, and the Group, has been operating independently of, and at arm's length from, the businesses of those companies. Therefore, the Board is of the view that the businesses of those companies did not compete with the businesses of the Group.

## Service Contracts

None of the Directors who are proposed for re-election at the forthcoming Annual General Meeting has a service contract with the Company which is not determinable within one year without payment of compensation, other than statutory compensation.

## Connected Transactions

During the year, the Company had the following connected transactions, each of which, as disclosed by way of announcement, was subject to the reporting and announcement requirements but exempt from independent shareholders' approval requirements under Chapter 14A of the Listing Rules since each of the applicable percentage ratios was less than 5%:

## Connected Transactions (continued)

1. As disclosed in an announcement dated 5th May 2017, U-Tech Engineering Company Limited ("U-Tech"), a wholly-owned subsidiary of the Company, had by signing and returning to Heng Lai Construction Company Limited ("Heng Lai"), a wholly-owned subsidiary of Henderson Land Development Company Limited ("HLD"), a letter of award on 5th May 2017 successfully tendered for a sub-contract for the carrying out of the supply and installation of electrical equipment and the testing and commissioning of electrical systems at the residential development situated at Fanling Golf Club, Lot 2640, DD92, Castle Peak Road, Kwu Tung, New Territories, Hong Kong at the sum of HK$74,500,000 for Heng Lai. As Heng Lai is a wholly-owned subsidiary of HLD, which in turn is a controlling shareholder of the Company, Heng Lai is a connected person of the Company under the Listing Rules and the aforesaid transaction therefore constituted a connected transaction for the Company under Chapter 14A of the Listing Rules.

2. As disclosed in an announcement dated 22nd August 2017, U-Tech had by signing and returning to Smart Bright Development Limited ("Smart Bright"), a wholly-owned subsidiary of HLD, a letter of award on 22nd August 2017 successfully tendered for a sub-contract for the carrying out of the mechanical ventilation and air-conditioning installation works at the commercial complex situated at 15 Middle Road, Tsim Sha Tsui, Kowloon, Hong Kong at the sum of HK$83,777,000 for Smart Bright. As Smart Bright is a wholly-owned subsidiary of HLD, Smart Bright is a connected person of the Company under the Listing Rules and the aforesaid transaction therefore constituted a connected transaction for the Company under Chapter 14A of the Listing Rules.

The related party transactions set out in Note 40 to the consolidated financial statements include transactions that constitute connected transactions or continuing connected transactions under the Listing Rules for which the disclosure requirements in accordance with Chapter 14A of the Listing Rules had been met.

## Directors' Material Interests in Transactions, Arrangements or Contracts

Except for the "Connected Transactions" as disclosed in this report, no other transactions, arrangements or contracts of significance in relation to the Group's business to which the Company or any of its subsidiaries was a party, and in which a Director of the Company and the Director's connected entity had a material interest, whether directly or indirectly, subsisted at the end of the year or at any time during the year.

## Management Contracts

No contracts (as defined in section 543 of the Companies Ordinance, Chapter 622 of the Laws of Hong Kong (the "Companies Ordinance")) concerning the management and administration of the whole or any substantial part of the business of the Company were entered into or existed during the year.

## Purchase, Sale or Redemption of the Company's Listed Securities

During the year, the Company bought back 1,000,000 shares on the Exchange at an aggregate consideration of HK$15,342,200 before expenses. The shares bought back were subsequently cancelled. The buy-backs were effected by the Directors for the enhancement of shareholders' value in the long term. Details of the shares bought back are as follows:

| | | Price per Share | | |
|---|---|---|---|---|
| Month of Buy-backs | Number of Shares Bought Back | Highest (HK$) | Lowest (HK$) | Aggregate Consideration Paid (HK$) |
| April 2017 | 1,000,000 | 15.44 | 15.22 | 15,342,200 |

Save as mentioned above, neither the Company nor any of its subsidiaries had purchased, sold or redeemed any of the Company's listed securities during the year.

## Permitted Indemnity

Pursuant to the Articles of Association, subject to the provisions of the Companies Ordinance, every Director or other officer of the Company shall be indemnified out of the assets of the Company against any liability incurred by him as a director or other officer of the Company in defending any proceedings (whether civil or criminal) in which judgement is given in his favour or he is acquitted or in connection with any application under the Companies Ordinance in which relief is granted to him by the court.

In addition, the indemnity agreements made by the Company, which are currently in force and were in force throughout the financial year, contained permitted indemnity provisions (as permitted under the Companies Ordinance), for the benefit of the Directors of the Company. The Company has maintained appropriate directors' and officers' liability insurance coverage for the Directors and officers of the Group.

## Major Customers and Suppliers

During the year, both the percentages of the purchases attributable to the Group's five largest suppliers combined and the percentage of the turnover attributable to the Group's five largest customers combined were less than 30 per cent of the total purchases and turnover of the Group respectively.

## Corporate Governance

The Company's corporate governance principles and practices are set out in the Corporate Governance Report from pages 73 to 84 of this Annual Report.

## Public Float

As at the date of this report, being also the latest practicable date prior to the issue of this Annual Report, the Company has maintained the prescribed public float under the Listing Rules, based on the information that is publicly available to the Company and within the knowledge of the Directors.

## Auditor

The financial statements have been audited by PricewaterhouseCoopers who will retire at the forthcoming Annual General Meeting and, being eligible, offer themselves for re-appointment at a fee to be agreed by the Board.

On behalf of the Board

**LEE Shau Kee**
*Chairman*
Hong Kong, 20th March 2018

# CORPORATE GOVERNANCE REPORT

The Board of Directors of the Company (the "Board") is committed to maintaining good corporate governance. The Board believes that good corporate governance principles and practices should emphasise accountability and an increase in transparency which will enable the Group's stakeholders, including shareholders, investors, customers, suppliers, employees and the community to have trust and faith in the Group to take care of their needs and to fulfill its social responsibility.

## Corporate Governance Practices

During the year ended 31st December 2017, the Company complied with all the code provisions as set out in the Corporate Governance Code (the "Code") contained in Appendix 14 to the Rules Governing the Listing of Securities on The Stock Exchange of Hong Kong Limited (the "Listing Rules").

The below sets out the corporate governance principles and practices adopted by the Group which indicate how the Group has applied relevant principles in the Code.

## Board of Directors

### Responsibilities of Directors

The Board is ultimately accountable for the Group's activities, strategies and financial performance, which includes formulating business development strategies, directing and supervising the Group's affairs, reviewing the financial statements and budget proposal of the Group, approving interim reports, annual reports and announcements of interim results and annual results, considering dividend policy, reviewing the effectiveness of the risk management and internal control systems and so on.

The day-to-day management, administration and operation of the Group are delegated to the management team. The Board gives clear directions to the management team as to their powers of management, and circumstances in which the management team should report back.

Newly appointed Directors will be arranged a comprehensive, formal and tailored induction which includes provision of key guidelines, documents and publications relevant to their roles, responsibilities and ongoing obligations; a briefing on the Group's structure, businesses, risk management and other governance practices and meeting with other fellow Directors so as to help the newly appointed Directors familiarise with the management, business and governance policies and practices of the Company, and ensure that they have a proper understanding of the operations and businesses of the Group.

To ensure that Directors' contribution to the Board/committees remains informed, continuous professional development are provided for Directors to develop and refresh their knowledge, skills and understanding of the business and markets in which the Group operates. Directors are also provided with monthly updates of the Group's development, and information such as performance and key operational highlights to enable the Board as a whole and each Director to discharge their duties.

All Directors have participated in appropriate continuous professional development and provided the Company with their records of training they received for the year ended 31st December 2017.

During the year ended 31st December 2017, all Directors participated in the training which included reading regulatory updates or information relevant to the Group or its business and attending or giving talks at seminars and/or conferences.

## Board of Directors (continued)

### Responsibilities of Directors (continued)

| Directors | Training |
|---|---|
| **Non-executive Directors** | |
| Dr. the Hon. LEE Shau Kee (Chairman) | ✓ |
| Dr. Colin LAM Ko Yin | ✓ |
| Dr. LEE Ka Kit | ✓ |
| Mr. LEE Ka Shing | ✓ |
| **Independent Non-executive Directors** | |
| Mr. LEUNG Hay Man | ✓ |
| Dr. the Hon. Sir David LI Kwok Po | ✓ |
| Professor POON Chung Kwong | ✓ |
| **Executive Directors** | |
| Mr. Alfred CHAN Wing Kin | ✓ |
| Mr. Peter WONG Wai Yee | ✓ |

Every Director ensures that he gives sufficient time and attention to the affairs of the Company. Each Director shall disclose to the Company at the time of his appointment the directorships held in other listed companies or nature of offices held in public organisations and other significant commitment. The Company has also requested the Directors to provide in a timely manner any change on such information. Each Director is also required to disclose to the Company their time commitment.

Appropriate insurance cover on Directors' liabilities has been in force to protect the Directors of the Group from risks arising from the businesses of the Group.

### Corporate Governance Functions

The Board has undertaken the following corporate governance functions:

- to develop and review the Company's policies and practices on corporate governance and make recommendations to the Company;
- to review and monitor the training and continuous professional development of Directors and senior management;
- to review and monitor the Company's policies and practices on compliance with legal and regulatory requirements;
- to develop, review and monitor the code of conduct and compliance manual (if any) applicable to employees and Directors; and
- to review the Company's compliance with the code provision of Appendix 14 to the Listing Rules and disclosure in the Corporate Governance Report.

During the year ended 31st December 2017, the Board reviewed the Company's policies and practices on corporate governance and the disclosure in the Corporate Governance Report.

### Board Diversity Policy

The Board adopted the Board Diversity Policy setting out the approach to achieve diversity on the Board. The Company recognises and embraces the benefits of having a diverse Board to enhance the quality of its performance. In designing the Board's composition, Board diversity has been considered from a number of aspects, including but not limited to professional experience, skills, knowledge, cultural and educational background, ethnicity, age and gender. All Board appointments will be based on meritocracy, and candidates will be considered against selection criteria, having regard for the benefits of diversity on the Board.

## Board of Directors (continued)

### Board Composition

The Board currently has two Executive Directors and seven Non-executive Directors. Three of the seven Non-executive Directors are independent to ensure that proposed strategies protect all shareholders' interests.

As at the date of publication of this Annual Report, the Directors of the Company are set out below:

**Non-executive Directors**
Dr. the Hon. LEE Shau Kee (Chairman)
Dr. Colin LAM Ko Yin
Dr. LEE Ka Kit
Mr. LEE Ka Shing

**Independent Non-executive Directors**
Mr. LEUNG Hay Man
Dr. the Hon. Sir David LI Kwok Po
Professor POON Chung Kwong

**Executive Directors**
Mr. Alfred CHAN Wing Kin
Mr. Peter WONG Wai Yee

The Company received from each of the Independent Non-executive Directors confirmation in writing of their independence pursuant to Rule 3.13 of the Listing Rules and considered them as independent.

Biographical details of the Directors and relevant relationships among them are set out from pages 17 to 20 of this Annual Report. Save as disclosed therein, there is no financial, business, family or other material/relevant relationship among the Directors. A list of the Directors and their role and function is available on both the websites of The Stock Exchange of Hong Kong Limited (the "Exchange") and the Company.

According to the Articles of Association of the Company (the "Articles of Association"), one-third of all the directors are subject to retirement by rotation at every annual general meeting. Subject to the provisions contained in the Articles of Association, the term of office of all Non-executive Directors (including Independent Non-executive Directors) shall expire on 31st December 2020.

### Chairman of the Board and Managing Director

The Chairman of the Board is Dr. the Hon. Lee Shau Kee and the Managing Director is Mr. Alfred Chan Wing Kin. The roles of the Chairman of the Board and the Managing Director are separate and are not performed by the same individual. The Chairman is responsible for providing leadership to, and overseeing, the functioning of the Board and, with the support of Executive Directors and the Company Secretary, seeking to ensure that all Directors are properly briefed on issues arising at Board meetings and that they receive, in a timely manner, adequate and reliable information. The Managing Director is responsible for managing the business of the Group and leading the management team to implement strategies and objectives adopted by the Board. Their respective responsibilities are clearly established and set out in writing.

## Board of Directors (continued)

### Board Meetings

The Board meets regularly at least four times a year at approximately quarterly intervals. The Directors can attend meetings in person or through electronic means of communication in accordance with the Articles of Association.

During the year ended 31st December 2017, the Board met four times. The attendance record of each Director at the Board meetings during the year ended 31st December 2017 is set out below:

| Directors | No. of Meetings Attended / Held |
|---|---|
| **Non-executive Directors** | |
| Dr. the Hon. LEE Shau Kee (Chairman) | 4/4 |
| Dr. Colin LAM Ko Yin | 4/4 |
| Dr. LEE Ka Kit | 4/4 |
| Mr. LEE Ka Shing | 4/4 |
| **Independent Non-executive Directors** | |
| Mr. LEUNG Hay Man | 1/4 |
| Dr. the Hon. Sir David LI Kwok Po | 4/4 |
| Professor POON Chung Kwong | 4/4 |
| **Executive Directors** | |
| Mr. Alfred CHAN Wing Kin | 4/4 |
| Mr. Peter WONG Wai Yee | 4/4 |

Regular Board meetings of the year are scheduled in advance and at least 14 days' notice is given to all Directors so as to give them an opportunity to attend. Meeting agenda and accompanying meeting papers are sent to all relevant Directors at least 3 days before the date of a Board or committee meeting to enable the Directors to make informed decisions on matters to be raised at the meetings. All Directors are given an opportunity to include matters in the agenda for Board meetings.

In addition, Directors at all times have full and timely access to all information on the Group and may seek independent professional advice at the Company's expense in carrying out their functions, after making a request to the Board.

### Directors' Securities Transactions

The Company has adopted the model code as set out in Appendix 10 to the Listing Rules as the code for dealing in securities of the Company by the Directors (the "Model Code"). Following specific enquiry by the Company, all Directors confirmed that they had fully complied with the required standard set out in the Model Code throughout the year ended 31st December 2017.

The Board has also established written guidelines for relevant employees, including certain employees of the Company, certain directors or employees of its subsidiaries who are considered to be likely to possess inside information in relation to the Company or its securities (the "Relevant Employees"), in respect of their dealings in the Company's securities.

## Board of Directors (continued)

### Directors' Responsibility for the Financial Statements

The Directors acknowledge their responsibilities for preparing the financial statements for the year ended 31st December 2017, which give a true and fair view of the state of affairs of the Company and of the Group at that date and of the Group's results and cash flows for the year then ended and are properly prepared on the going concern basis in accordance with statutory requirements and applicable accounting standards. The Directors shall ensure the publication of the Group's financial statements in a timely manner.

The statement of the Auditor of the Company about their reporting responsibilities on the financial statements of the Group is set out in the Independent Auditor's Report on pages 85 to 90 of this Annual Report.

## Board Committees

The Board has established the following Board committees to oversee particular aspects of the Company's affairs:

### Board Audit and Risk Committee

The Board Audit and Risk Committee (formerly known as Audit Committee) was formed in May 1996. The members of the Board Audit and Risk Committee are Dr. the Hon. Sir David Li Kwok Po (Chairman of the Board Audit and Risk Committee), Mr. Leung Hay Man and Professor Poon Chung Kwong. All members are Independent Non-executive Directors. The Chairman of the Board Audit and Risk Committee has the appropriate professional qualification as required by the Listing Rules.

The principal duty of the Board Audit and Risk Committee is to assist the Board in fulfilling its audit and control-related duties through the review of the Company's financial reporting, risk management and internal control systems. The review covers all material controls, including financial, operational and compliance controls. The Company has adopted written terms of reference for the Board Audit and Risk Committee that clearly define the role, authority and function of the Board Audit and Risk Committee. The terms of reference of the Board Audit and Risk Committee are available on both the websites of the Exchange and the Company.

The Board Audit and Risk Committee held two meetings during the year ended 31st December 2017 and the following sets out a summary of the work of the Board Audit and Risk Committee during such period:

- review of the financial reports for 2016 annual results and 2017 interim results;
- recommendation to the Board, for the approval by shareholders, of the re-appointment of PricewaterhouseCoopers as the external Auditor and approval of their remuneration;
- determination of the nature and scope of the audit;
- review of the financial and accounting policies and practices of the Company; and
- review of the effectiveness of the Company's financial control and risk management and internal control systems, including the review of the adequacy of resources, staff qualifications and experience, training programmes and budget of the Company's accounting and financial reporting function.

## Board Committees (continued)

### Board Audit and Risk Committee (continued)

The attendance record of each member at the Board Audit and Risk Committee meetings during the year ended 31st December 2017 is set out below:

| Board Audit and Risk Committee Members | No. of Meetings Attended / Held |
|---|---|
| Dr. the Hon. Sir David LI Kwok Po (Chairman) | 2/2 |
| Mr. LEUNG Hay Man | 1/2 |
| Professor POON Chung Kwong | 2/2 |

### Remuneration Committee

The Company established a Remuneration Committee on 7th September 2005. The Remuneration Committee is chaired by Dr. the Hon. Sir David Li Kwok Po (Independent Non-executive Director) with Dr. the Hon. Lee Shau Kee (Non-executive Director) and Professor Poon Chung Kwong (Independent Non-executive Director) as members.

The principal duties of the Remuneration Committee include, but are not limited to, making recommendations to the Board on the Company's policy and structure for all remuneration of Directors and senior management (who are also executive directors of the Company), reviewing and approving the special remuneration packages of all executive directors with reference to corporate goals and objectives resolved by the Board from time to time and determining, with delegated responsibility, the remuneration packages of individual executive directors. The Company has adopted written terms of reference for the Remuneration Committee that clearly define the role, authority and function of the Remuneration Committee. The terms of reference of the Remuneration Committee are available on both the Exchange's and the Company's websites.

The Company has not adopted any share option scheme. The emoluments of Directors are determined based on the duties and responsibilities of each Director. The Directors' fees were reviewed by the Remuneration Committee. At the Annual General Meeting held on 7th June 2017 ("2017 AGM"), the shareholders of the Company passed the resolution to approve the revised Director's fee for each Director fixed at the rate of HK$250,000 per annum; in the case of the Chairman of the Board an additional fee at the rate of HK$250,000 per annum effective from the financial year of 2017 until the Company in general meeting otherwise determines.

During the year ended 31st December 2017, every Director received a Director's fee at the rate of HK$250,000 per annum while the Chairman of the Board received an additional fee at the rate of HK$250,000 per annum and each member of the Board Audit and Risk Committee, the Remuneration Committee and the Nomination Committee received additional fees at the rate of HK$250,000, HK$100,000 and HK$100,000 per annum respectively. The Remuneration Committee considered the fees reasonable in view of the Directors' responsibilities.

During the year ended 31st December 2017, the Remuneration Committee held its meeting once to review the Directors' fees and the remuneration of the Executive Directors. The attendance record of each member at the Remuneration Committee meeting during the year ended 31st December 2017 is set out below:

| Remuneration Committee Members | No. of Meeting Attended / Held |
|---|---|
| Dr. the Hon. Sir David LI Kwok Po (Chairman) | 1/1 |
| Dr. the Hon. LEE Shau Kee | 1/1 |
| Professor POON Chung Kwong | 1/1 |

## Board Committees (continued)

### Nomination Committee

The Company established a Nomination Committee on 19th March 2012. The Nomination Committee is chaired by Dr. the Hon. Lee Shau Kee (Non-executive Director) with Dr. the Hon. Sir David Li Kwok Po and Professor Poon Chung Kwong (both are Independent Non-executive Directors) as members.

The principal duties of the Nomination Committee include, but are not limited to, reviewing the structure, size and composition (including the skills, knowledge and experience) of the Board and making recommendations on any proposed changes to the Board to complement the Group's corporate strategy. It is also responsible for making recommendations to the Board on nominations and appointment of directors as well as assessing the independence of independent non-executive directors. The Committee shall consider the candidate from a range of backgrounds on his/her merits and against objective criteria set out by the Board. The Company has adopted written terms of reference for the Nomination Committee that clearly define the role, authority and function of the Nomination Committee. The terms of reference of the Nomination Committee are available on both the Exchange's and the Company's websites.

The Nomination Committee held one meeting during the year ended 31st December 2017. During the year under review, the Nomination Committee reviewed the structure, size and composition (including the skills, knowledge and experience) of the Board and assessed the independence of all independent non-executive directors of the Company. It also recommended to the Board the extension of the terms of office of all non-executive directors (including independent non-executive directors) and for approval of the re-election of the retiring Directors at the 2017 AGM.

The attendance record of each member at the Nomination Committee meeting during the year ended 31st December 2017 is set out below:

| Nomination Committee Members | No. of Meeting Attended / Held |
|---|---|
| Dr. the Hon. LEE Shau Kee (Chairman) | 1/1 |
| Dr. the Hon. Sir David LI Kwok Po | 1/1 |
| Professor POON Chung Kwong | 1/1 |

## Auditor's Remuneration

For the year ended 31st December 2017, the total remuneration in respect of statutory audit services provided by the Company's external auditor, PricewaterhouseCoopers, amounted to approximately HK$11.4 million. During the year, payment to PricewaterhouseCoopers in respect of non-audit services, mainly including taxation services and interim results review services provided to the Group amounted to approximately HK$4.2 million.

## Risk Management and Internal Control

### Internal Control

The Board is responsible for maintaining sound and effective risk management and internal control systems for the Group in order to safeguard the Group's assets and shareholders' interests, as well as for reviewing the effectiveness of such systems.

Risk management and internal control systems are designed to manage rather than eliminate the risk of failure to achieve business objectives, and can only provide reasonable and not absolute assurance against material misstatement or loss. Policies and procedures are established to ensure that all payments and investments are properly authorised, critical assets and data are safeguarded as well as all company records are accurate and complete. In addition, the Group has a strict internal code of conduct which provides guidance on the ethical behaviour when handling issues such as bribery and corruption, conflicts of interest, insider dealing, acceptance of gift and entertainment and fair dealing. The Board adopted a Whistleblowing Policy which provides reporting channels and guidance for employees and other parties who deal with the Group (e.g. contractors and suppliers, etc.) to report possible improprieties in matters of financial reporting or other matters. The Whistleblowing Policy is available on the Company's website.

The Group's internal audit function, which is independent of the Group's management team, assesses and monitors the effectiveness of the Group's risk management and internal control systems and reports to the Board Audit and Risk Committee on a half-yearly basis. The function has unrestricted access to the company records that allows it to review all aspects of the Group's control and governance process. Yearly audit plan is prepared for review and approval by the Board Audit and Risk Committee. The scope of work includes financial and operational review, recurring and unscheduled audit, fraud investigation and compliance review. The opinion, as formulated by the function on the effectiveness of the risk management and internal control systems, together with the major findings and implementation progress of the audit recommendations, would be reported to the Board Audit and Risk Committee.

During the year ended 31st December 2017, the Board, through the Board Audit and Risk Committee, has conducted a bi-annual review of the overall effectiveness of the Group's internal control systems over financial, operational and compliance controls, risk management process, information systems security, scope and quality of the management's monitoring of risks and internal control systems, the effectiveness of financial reporting and compliance with the Listing Rules.

The Board ensured that the resources, staff qualifications and experience, training programmes and budget of the Company's accounting, internal audit and financial reporting functions were adequate. The Board concluded that in general, the Group had set up a sound control environment and installed necessary control mechanisms to monitor and correct non-compliance or material internal control defects, if any. The Board also considered that the Group's risk management and internal control systems are effective and adequate.

## Risk Management and Internal Control (continued)

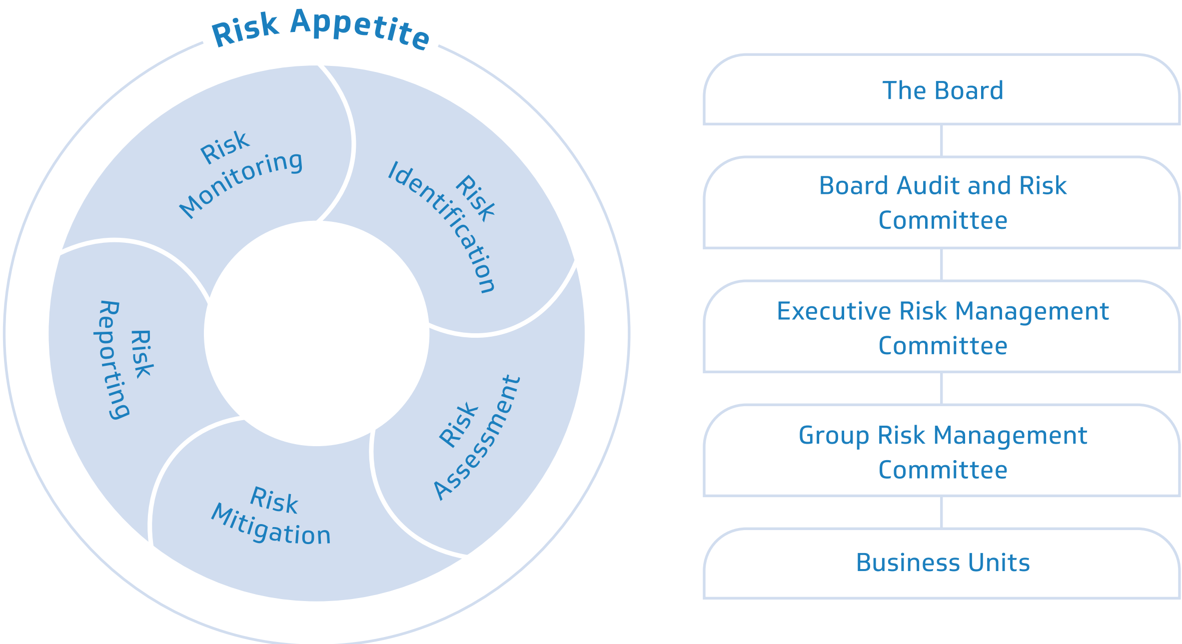
### Risk Management

#### Risk Management Framework

Rooted in corporate's vision and mission, the Group strives the best to provide its customers with a safe, reliable supply of energy as well as the caring, competent and efficient service they expect. Meanwhile, the Group is also working to pursue sustainable development and caring for the environment, people and community.

To ensure growth and long-term value for the key stakeholders, the Group considers risk governance as its top priority and is committed to establishing a robust system of risk identification and management which is central to its ongoing success.

The Group has in place an Enterprise Risk Management Framework (the "Framework") that depicts the system to effectively identify, assess, mitigate, report and monitor key business risks across all business units of the organisation. The system enables the management team to gain a clear view of the significant risks for better strategy setting and project execution which ultimately contribute to enhanced business performance.




#### Risk Appetite

To pursue the Group's mission and keep in line with the expectations of its stakeholders, the Group is willing to take reasonable and manageable risks that are consistent with its strategic business drivers and necessary to promote innovation and continued growth but would not expose the Group to the following:

1. Major incidents affecting safety and health of its staff, contractors and the general public;
2. Loss or failure of infrastructures and operations materially affecting production and supply;
3. Material financial loss impacting ability of the Group to carry out its business drivers;
4. Incidents leading to profound negative impact on corporate image or reputation;
5. Legal actions that are liable for major loss or suspension of operations; and
6. Incidents leading to severe impacts on the environment.

## Risk Management and Internal Control (continued)

### Risk Management (continued)

#### Risk Management Structure

The risk management structure sets out the mechanism by which authority is exercised, decisions are taken and organisation is effectively supervised. The Board Audit and Risk Committee supports the Board in overseeing the overall risk management system and provides assurance to the Board at least annually that the system is operating effectively. The Executive Risk Management Committee ("ERMC"), which is composed of all Executive Committee Members of the Company, is responsible for the system formulation and its effective implementation to maintain risk exposures within the risk appetite. It is assisted by the Group Risk Management Committee ("GRMC"), which comprises risk owners who are also the key business management team. GRMC reviews the major risk exposure, monitors the implementation of risk-mitigating controls and reports to ERMC regularly on the results of risk management review.

#### Risk Management Process

The risk management process is embedded into the day-to-day operation and is an ongoing process carried out by everyone in the organisation across all business units.

Each company of the Group has its own risk management process and system. Regular communication is made among companies, regional offices and headquarters of the Group on the latest risk exposures and mitigation measures to ensure risks are effectively managed and issues are timely reported. Regular independent review would be performed to ensure the risk management system is operating effectively.

The GRMC would communicate and summarise the key risks (also taking emerging risks into account) across all businesses through senior executives, who continuously monitor all material risks faced by the companies of the Group in their corresponding regions and business streams.

The summarised key risks would be reviewed continuously and reassessed within the Group by adopting the risk assessment criteria as set out in the Framework. Priorities would be given to high and medium risks on implementation of risk mitigating measures. A risk management update that highlights the summarised key risks and action plans would be submitted to and discussed by ERMC at least annually for monitoring purpose while top risks and measures would finally be selected for review by the Board Audit and Risk Committee on behalf of the Board. The Board Audit and Risk Committee, based on the review of top risks and adopted measures, ensures at least an annual review of the effectiveness of the risk management system has been conducted.

A description of the Group's risk factors is shown on page 60 of the Annual Report. The Group seeks continuous improvement to the Framework in response to the changing business environment.

## Policy and Procedures on Disclosure of Inside Information

The Board has adopted the Policy and Procedures on Disclosure of Inside Information which contains the guidelines to the officers (referring to directors, managers or Company Secretary of the Company) and all the Relevant Employees of the Company to ensure that the inside information of the Company is to be disseminated to the public in an equal and timely manner in accordance with the applicable laws and regulations. The Policy and Procedures on Disclosure of Inside Information is available on the Company's website.

## Company Secretary

The Company Secretary is responsible for assisting the Board by ensuring good information flow within the Board members as well as the Board policy and procedures being followed properly. The Company Secretary also provides professional advice to the Board on corporate governance and other matters. He is also responsible for organising general meetings of the Company and facilitating the induction and professional development of the Directors.

## Company Secretary (continued)

During the year ended 31st December 2017, the Company Secretary undertook no less than 15 hours of relevant professional training.

## Communication with Shareholders

The Board is committed to maintaining an ongoing communication with shareholders and providing timely disclosure of information concerning the Group's material developments to shareholders and investors.

The annual general meetings ("AGMs") of the Company provide a good forum for communication between the Board and shareholders. Notices of the AGMs are despatched to all shareholders at least 20 clear business days prior to such AGMs. The chairmen of all Board Committees are invited to attend the AGMs. The Chairman of the Board and the chairmen of all the Board Committees are available to answer questions at the AGMs. Auditor is also invited to attend the AGMs to answer questions about the conduct of the audit, the preparation and content of the auditor's report, the accounting policies and auditor's independence.

Pursuant to the Listing Rules, any vote of shareholders at a general meeting will be taken by poll. Detailed procedures for conducting a poll will be explained to the shareholders in the general meeting so that shareholders are familiar with such voting procedures. The poll results will be posted on the websites of the Exchange and the Company on the business day following the shareholders' meeting. Moreover, a separate resolution will be proposed by the chairman of a general meeting in respect of each substantially separate issue.

The 2017 AGM was held on 7th June 2017. The attendance record of each Director at the 2017 AGM is set out below:

| Directors | No. of Meeting Attended / Held |
|---|---|
| **Non-executive Directors** | |
| Dr. the Hon. LEE Shau Kee (Chairman) | 1/1 |
| Dr. Colin LAM Ko Yin | 1/1 |
| Dr. LEE Ka Kit | 1/1 |
| Mr. LEE Ka Shing | 1/1 |
| **Independent Non-executive Directors** | |
| Mr. LEUNG Hay Man | 0/1 |
| Dr. the Hon. Sir David LI Kwok Po | 1/1 |
| Professor POON Chung Kwong | 1/1 |
| **Executive Directors** | |
| Mr. Alfred CHAN Wing Kin | 1/1 |
| Mr. Peter WONG Wai Yee | 1/1 |

## Shareholders' Rights

Set out below is a summary of certain rights of the shareholders of the Company which are governed by the provisions of the Articles of Association and applicable laws, rules and regulations.

## Shareholders' Rights (continued)

### Convening a General Meeting

Pursuant to the Companies Ordinance (Chapter 622 of the Laws of Hong Kong) (the "Companies Ordinance"), shareholders representing at least 5% of the total voting rights of all the shareholders are entitled to send a request to the Company to convene a general meeting. Such request must state the general nature of the business to be dealt with at the meeting and may include the text of a resolution that may properly be moved and is intended to be moved at the meeting. A request may be sent to the Company in hard copy form or in electronic form and must also be authenticated by the person or persons making it.

### Putting Forward Proposals at a Shareholders' Meeting

Pursuant to the Companies Ordinance, shareholders representing at least 2.5% of the total voting rights of all the shareholders or at least 50 shareholders can request the Company in writing to circulate to the shareholders a statement of not more than 1,000 words with respect to a matter mentioned in a proposed resolution to be dealt with at that meeting or other business to be dealt with at that meeting. A request may be sent to the Company in hard copy form or in electronic form and must identify the statement to be circulated. It must be authenticated by the person or persons making it and be received by the Company at least 7 days before such meeting.

### Putting Forward Enquiries to the Board

The Company has maintained a policy on shareholders' communication to handle enquiries put to the Board. In order to enable such enquiries be properly directed, designated contacts, email addresses and enquiry lines of the Company were provided on page 188 of this Annual Report and the Company's website.

### Proposing a Person for Election as a Director

If a shareholder wishes to propose a person other than a retiring director of the Company for election as a director of the Company at a general meeting, that shareholder should deposit a written notice stating the full name of the person proposed for election as a director of the Company, together with (a) the proposed person's biographical details as required by Rule 13.51(2) of the Listing Rules, and be signed by the shareholder concerned and that proposed person indicating his/her willingness to be elected; and (b) the proposed person's written consent to the publication of his/her personal data not earlier than the day after the despatch of the notice of the meeting and not later than 7 days prior to the day appointed for the meeting. Detailed procedures can be found in the "Procedures for shareholders to propose a person for election as a director of the Company at a general meeting" which is available on the Company's website.

## Investor Relations

The Company continues to enhance communications and relationships with its investors. Designated senior management maintains regular communication and dialogue with shareholders, investors and analysts. A meeting with analysts will be held after the announcement of interim or annual results which strengthens the communication with investors. Questions from investors are dealt with in an informative and timely manner.

As a channel to further promote effective communication, the Group maintains a website at www.towngas.com where the Company's announcements and press releases, business developments and operations, financial information, corporate governance practices and other information are posted.

## Constitutional Documents

The latest version of the Articles of Association is available on both the Company's and the Exchange's websites. During the year ended 31st December 2017, there was no change in the Articles of Association.

# INDEPENDENT AUDITOR'S REPORT

羅兵咸永道

TO THE MEMBERS OF THE HONG KONG AND CHINA GAS COMPANY LIMITED
(incorporated in Hong Kong with limited liability)

## Opinion

### What we have audited

The consolidated financial statements of The Hong Kong and China Gas Company Limited (the "Company") and its subsidiaries (the "Group") set out on pages 91 to 187, which comprise:

- the consolidated income statement for the year ended 31st December 2017;
- the consolidated statement of comprehensive income for the year then ended;
- the consolidated statement of financial position as at 31st December 2017;
- the consolidated cash flow statement for the year then ended;
- the consolidated statement of changes in equity for the year then ended; and
- the notes to the consolidated financial statements, which include a summary of significant accounting policies.

### Our opinion

In our opinion, the consolidated financial statements give a true and fair view of the consolidated financial position of the Group as at 31st December 2017, and of its consolidated financial performance and its consolidated cash flows for the year then ended in accordance with Hong Kong Financial Reporting Standards ("HKFRSs") issued by the Hong Kong Institute of Certified Public Accountants ("HKICPA") and have been properly prepared in compliance with the Hong Kong Companies Ordinance.

## Basis for opinion

We conducted our audit in accordance with Hong Kong Standards on Auditing ("HKSAs") issued by the HKICPA. Our responsibilities under those standards are further described in the Auditor's responsibilities for the audit of the consolidated financial statements section of our report.

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

### Independence

We are independent of the Group in accordance with the HKICPA's Code of Ethics for Professional Accountants ("the Code"), and we have fulfilled our other ethical responsibilities in accordance with the Code.

## Key audit matters

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

## Key audit matters (Continued)

Key audit matters identified in our audit are summarised as follows:

- Valuation of investment in certain equity interests of an unlisted company
- Impairment assessment of coal mine and oil properties
- Recognition of gas connection income

| Key audit matter | How our audit addressed the key audit matter |
|---|---|
| Valuation of investment in certain equity interests of an unlisted company<br><br>Refer to notes 3, 4 and 23 to the consolidated financial statements<br><br>The investment in certain equity interests of an unlisted company (the "Investment") which owned a coking coal mine and related coke production and coke-gas conversion facility in Inner-Mongolia, was accounted for as an available-for-sale financial asset and it was subject to fair value revaluation at each reporting date. The Investment at 31st December 2017 was valued by an independent professional valuer. With reference to the valuation, management had estimated the fair value of the Investment at HK$3.0 billion at year end.<br><br>In consideration of the Investment is operating in an emerging industry and its fair value is highly dependent on its expansion plan, the valuation involved significant management judgements. Accordingly, the valuation of the Investment was considered as one of the key audit matters.<br><br>The fair value was determined based on the discounted cash flow model. The valuation involved significant judgements and estimates from management, including coking coal reserves, future business growth driven by future expansion plan, future products selling prices and production costs of the investee, discount rate, marketability discount and minority discount etc. | Our procedures in relation to management's valuation of the Investment include:<br><br>• Evaluating the independent professional valuer's competence, capabilities and objectivity;<br><br>• Assessing the valuation methodology used by the independent professional valuer to estimate the fair value of the Investment;<br><br>• Checking, on a sample basis, the accuracy and reasonableness of the input data provided by management to the independent professional valuer, to supporting evidence, such as approved budgets and considering the reasonableness of these budgets by comparing the budgets to the historical results and market data;<br><br>• Assessing the reasonableness of cash flows projection, challenging and performing audit procedures on management's assumptions such as coking coal reserves, the future business growth driven by future expansion plan, future products selling prices and production costs, discount rate by comparing the assumptions to historical results and published market and industry data and comparing the current year's results with the prior year forecast and other relevant information. Internal valuation expert has been engaged to assist the review on valuation methodology, discount rate, marketability discount and minority discount. In addition, we had met with the management of the Investment to understand the business and assessed if there was any inconsistency in the assumptions used in the cash flows projection;<br><br>• Testing the mathematical accuracy of the cash flows projection; and<br><br>• Performing sensitivity analysis in consideration of the potential impact of reasonably possible upside or downside changes in the key assumptions.<br><br>Based on the audit procedures performed, we found the assumptions made by management in relation to the valuation were supported by available evidence. |

## Key audit matters (Continued)

| Key audit matter | How our audit addressed the key audit matter |
|---|---|
| Impairment assessment of coal mine and oil properties<br><br>Refer to notes 4 and 16 to the consolidated financial statements<br><br>In relation to the new energy business segment, the Group owned oil properties in Thailand which engaged in the exploration, drilling and sale of crude oil and a coal mine in mainland China. The carrying values of the coal mine and oil properties are mainly included under "mining and oil properties" of HK$3.4 billion (after impairment as detailed below) of property, plant and equipment as at 31st December 2017. In the consideration of the prices of the primary outputs of these projects, namely coal and oil were in relatively low level and volatile in recent years, management considered there were impairment indicators and performed impairment assessments on these assets. A provision for an impairment loss of HK$313.6 million was recognised in the consolidated income statement for the year ended 31st December 2017.<br><br>Under the impairment assessments, with the assistance of independent professional valuer and consultant, management calculated the recoverable amounts using the value-in-use method. As the value-in-use calculations required the use of significant management judgements and estimates, including the coal and oil reserves, future production volume, selling prices and production costs, discount rate etc., we considered it as one of the key audit matters. | Our procedures in relation to management's impairment assessment of coal mine and oil properties include:<br><br>• Evaluating the independent professional valuer's and consultant's competence, capabilities and objectivity;<br><br>• Assessing the methodology used by management to estimate value-in-use;<br><br>• Checking, on a sample basis, the accuracy and relevance of the input data to supporting evidence, such as approved budgets and considering the reasonableness of these budgets by comparing the budgets to the historical results and the market data;<br><br>• Assessing the appropriateness of cash flows projection in calculation of the value-in-use of the coal mine and oil properties, challenging the reasonableness of management assumptions such as the future production volume, selling prices and production costs, discount rate, coal and oil reserves, etc. based on our knowledge of the business and industry by comparing the assumptions to historical results and published market and industry data and comparing the current year's actual results with the prior year forecast and other relevant information. Internal valuation expert had been engaged to assist the review on methodology of the value-in-use calculations and discount rate; and<br><br>• Performing sensitivity analysis in consideration of the potential impact of reasonably possible downside changes in the key assumptions.<br><br>Based on the audit procedures performed, we found that the assumptions made by management were supported by available evidence. |

## Key audit matters (Continued)

| Key audit matter | How our audit addressed the key audit matter |
|---|---|
| Recognition of gas connection income<br><br>Refer to notes 4 and 5 to the consolidated financial statements<br><br>The Group recognises its gas connection income with reference to the stage of completion of individual contracting work of gas connection facilities. The Group had recognised gas connection income of HK$2.9 billion for the year ended 31st December 2017.<br><br>Stage of completion is measured by reference to work performed up to the end of the reporting period. 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.<br><br>The eventual realisation of these estimates are inherently uncertain, subject to the outcome of finalisation with the sub-contractors. Any change in estimate of the total contract costs, which determined the stage of completion, would affect the gas connection income recognition.<br><br>Due to its quantitative significance to the consolidated income statement and significant judgements involved in the determination of the stage of completion, we considered recognition of gas connection income as one of the key audit matters. | Our audit procedures in relation to recognition of gas connection income include:<br><br>• Understanding, evaluating and testing the key controls operated by the Group around the estimation of the total contract costs and actual costs incurred;<br><br>• Checked, on a sample basis, to contracts, invoices, project status reports and other relevant correspondences to evaluate the reasonableness of management's assessment of budgeted total contract costs and actual costs incurred; and<br><br>• Selecting contracts, on a sample basis, to perform interview with the project managers and assessed whether or not these estimates showed any evidence of management bias.<br><br>We found the management's estimations and judgements in the recognition of gas connection income to be reasonable based on the available evidence. |

## Other information

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

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

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

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

## Responsibilities of directors and those charged with governance for the consolidated financial statements

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

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

Those charged with governance are responsible for overseeing the Group's financial reporting process.

## Auditor's responsibilities for the audit of the consolidated financial statements

Our objectives are to obtain reasonable assurance about whether the consolidated financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. We report our opinion solely to you, as a body, in accordance with Section 405 of the Hong Kong Companies Ordinance and for no other purpose. We do not assume responsibility towards or accept liability to any other person for the contents of this report. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with HKSAs will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these consolidated financial statements.

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

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

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

## Auditor's responsibilities for the audit of the consolidated financial statements (Continued)

- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by the directors.
- Conclude on the appropriateness of the directors' use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Group's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the consolidated financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the Group to cease to continue as a going concern.
- Evaluate the overall presentation, structure and content of the consolidated financial statements, including the disclosures, and whether the consolidated financial statements represent the underlying transactions and events in a manner that achieves fair presentation.
- Obtain sufficient appropriate audit evidence regarding the financial information of the entities or business activities within the Group to express an opinion on the consolidated financial statements. We are responsible for the direction, supervision and performance of the group audit. We remain solely responsible for our audit opinion.

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

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

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

The engagement partner on the audit resulting in this independent auditor's report is Chu Ho Kwan Raphael.

**PricewaterhouseCoopers**

*Certified Public Accountants*
Hong Kong, 20th March 2018

*PricewaterhouseCoopers, 22/F, Prince's Building, Central, Hong Kong*
*T: +852 2289 8888, F: +852 2810 9888, www.pwchk.com*

# CONSOLIDATED INCOME STATEMENT

*for the year ended 31st December 2017*

| | Note | 2017 HK$'M | 2016 HK$'M |
|---|---|---|---|
| Revenue | 5 | **32,476.5** | 28,557.1 |
| Total operating expenses | 6 | **(24,845.2)** | (21,387.2) |
| | | **7,631.3** | 7,169.9 |
| Other gains/(losses), net | 7 | **630.1** | (29.5) |
| Interest expense | 9 | **(1,256.9)** | (1,207.4) |
| Share of results of associates | 21 | **2,604.3** | 2,447.4 |
| Share of results of joint ventures | 22 | **1,487.9** | 1,465.3 |
| Profit before taxation | 10 | **11,096.7** | 9,845.7 |
| Taxation | 13 | **(1,749.8)** | (1,575.9) |
| Profit for the year | | **9,346.9** | 8,269.8 |
| Attributable to: | | | |
| Shareholders of the Company | | **8,225.3** | 7,340.7 |
| Holders of perpetual capital securities | | **111.2** | 110.5 |
| Non-controlling interests | | **1,010.4** | 818.6 |
| | | **9,346.9** | 8,269.8 |
| Earnings per share – basic and diluted, HK cents | 15 | **58.8** | 52.5* |

* Adjusted for the bonus share issue in 2017

The notes on pages 99 to 187 form part of these consolidated financial statements.

# CONSOLIDATED STATEMENT OF COMPREHENSIVE INCOME

*for the year ended 31st December 2017*

| | 2017 HK$'M | 2016 HK$'M |
|---|---|---|
| Profit for the year | **9,346.9** | 8,269.8 |
| Other comprehensive income: | | |
| *Item that will not be reclassified subsequently to profit or loss:* | | |
| Remeasurements of retirement benefit | **124.1** | 6.3 |
| *Items that may be reclassified subsequently to profit or loss:* | | |
| Movement in reserve of available-for-sale financial assets | **(120.5)** | 588.2 |
| Change in fair value of cash flow hedges | **(117.5)** | 86.8 |
| Share of other comprehensive (loss)/income of an associate | **(2.9)** | 7.2 |
| Exchange differences | **3,614.4** | (3,078.2) |
| Other comprehensive income/(loss) for the year, net of tax | **3,497.6** | (2,389.7) |
| Total comprehensive income for the year | **12,844.5** | 5,880.1 |
| Total comprehensive income attributable to: | | |
| Shareholders of the Company | **11,137.0** | 5,354.7 |
| Holders of perpetual capital securities | **111.2** | 110.5 |
| Non-controlling interests | **1,596.3** | 414.9 |
| | **12,844.5** | 5,880.1 |

The notes on pages 99 to 187 form part of these consolidated financial statements.

# CONSOLIDATED STATEMENT OF FINANCIAL POSITION

*as at 31st December 2017*

| | Note | 2017 HK$'M | 2016 HK$'M |
|---|---|---|---|
| **Assets** | | | |
| **Non-current assets** | | | |
| Property, plant and equipment | 16 | **55,827.4** | 49,209.6 |
| Investment property | 17 | **764.0** | 729.0 |
| Leasehold land | 18 | **2,229.3** | 2,016.6 |
| Intangible assets | 19 | **5,883.6** | 5,572.4 |
| Associates | 21 | **23,393.4** | 20,485.0 |
| Joint ventures | 22 | **10,889.2** | 9,226.5 |
| Available-for-sale financial assets | 23 | **4,289.9** | 4,967.1 |
| Derivative financial instruments | 34 | **269.9** | 505.9 |
| Retirement benefit assets | 24 | **60.4** | – |
| Other non-current assets | 25 | **3,089.0** | 2,860.4 |
| | | **106,696.1** | 95,572.5 |
| **Current assets** | | | |
| Inventories | 26 | **2,578.3** | 2,110.4 |
| Trade and other receivables | 27 | **7,512.0** | 6,329.6 |
| Loan and other receivables from associates | 21 | **241.4** | 153.4 |
| Loan and other receivables from joint ventures | 22 | **939.7** | 900.1 |
| Loan and other receivables from non-controlling shareholders | | **103.1** | 65.4 |
| Financial assets at fair value through profit or loss | 28 | **42.1** | 67.3 |
| Derivative financial instruments | 34 | **119.6** | 87.5 |
| Time deposits over three months | 29 | **2,071.0** | 3,381.1 |
| Time deposits up to three months, cash and bank balances | 29 | **10,758.6** | 8,076.1 |
| | | **24,365.8** | 21,170.9 |
| **Current liabilities** | | | |
| Trade and other payables | 30 | **(14,269.8)** | (12,134.2) |
| Loan and other payables to joint ventures | 22 | **(1,137.9)** | (718.9) |
| Loan and other payables to non-controlling shareholders | | **(175.3)** | (186.3) |
| Provision for taxation | | **(531.9)** | (556.3) |
| Borrowings | 31 | **(15,757.0)** | (5,951.8) |
| Derivative financial instruments | 34 | **(76.2)** | – |
| | | **(31,948.1)** | (19,547.5) |
| **Total assets less current liabilities** | | **99,113.8** | 97,195.9 |

The notes on pages 99 to 187 form part of these consolidated financial statements.

# CONSOLIDATED STATEMENT OF FINANCIAL POSITION (Continued)

*as at 31st December 2017*

| | Note | 2017 HK$'M | 2016 HK$'M |
|---|---|---|---|
| **Non-current liabilities** | | | |
| Customers' deposits | 32 | **(1,331.6)** | (1,302.8) |
| Deferred taxation | 33 | **(5,723.1)** | (5,067.3) |
| Borrowings | 31 | **(21,161.8)** | (27,296.1) |
| Asset retirement obligations | | **(46.9)** | (39.4) |
| Derivative financial instruments | 34 | **(604.5)** | (542.2) |
| Retirement benefit liabilities | 24 | **–** | (50.1) |
| | | **(28,867.9)** | (34,297.9) |
| **Net assets** | | **70,245.9** | 62,898.0 |
| **Capital and reserves** | | | |
| Share capital | 35 | **5,474.7** | 5,474.7 |
| Reserves | 37 | **54,964.1** | 48,457.5 |
| **Shareholders' funds** | | **60,438.8** | 53,932.2 |
| **Perpetual capital securities** | 36 | **2,354.1** | 2,353.8 |
| **Non-controlling interests** | | **7,453.0** | 6,612.0 |
| **Total equity** | | **70,245.9** | 62,898.0 |

Approved by the Board of Directors on 20th March 2018

**Lee Shau Kee**
*Director*

**David Li Kwok Po**
*Director*

The notes on pages 99 to 187 form part of these consolidated financial statements.

# CONSOLIDATED CASH FLOW STATEMENT

*for the year ended 31st December 2017*

| | Note | 2017 HK$'M | 2016 HK$'M |
|---|---|---|---|
| **Net cash from operating activities** | 41 | **8,524.4** | 8,469.2 |
| **Investing activities** | | | |
| Receipt from sale of property, plant and equipment | | **63.0** | 34.6 |
| Receipt from sale of leasehold land | | **7.7** | 62.0 |
| Purchase of property, plant and equipment | | **(6,004.5)** | (6,056.7) |
| Payment for leasehold land | | **(136.4)** | (199.9) |
| Increase in other intangible assets | | **(4.2)** | – |
| Increase in investments in associates | | **(303.1)** | (153.8) |
| Increase in loans to associates | | **(135.8)** | (156.4) |
| Repayment of loans by associates | | **7.9** | 56.2 |
| Disposal of associates | | **29.6** | – |
| Increase in investments in joint ventures | | **(71.2)** | (6.8) |
| Increase in loans to joint ventures | | **(50.0)** | (9.7) |
| Increase in loans from joint ventures | | **205.1** | 336.6 |
| Repayment of loans by joint ventures | | **53.0** | 13.1 |
| Consideration paid for acquisition of businesses in prior periods | | **(11.9)** | (37.2) |
| Acquisition of businesses | 42 (a) & (b) | **(68.1)** | (110.0) |
| Sale of financial assets at fair value through profit or loss | | **415.0** | 32.0 |
| Sale of available-for-sale financial assets | | **1,157.3** | 481.1 |
| Purchase of financial assets at fair value through profit or loss | | **(303.5)** | (118.3) |
| Purchase of available-for-sale financial assets | | **(118.9)** | (526.9) |
| Decrease/(increase) in time deposits over three months | | **1,326.3** | (2,065.6) |
| Interest received | | **256.2** | 199.1 |
| Dividends received from investments in securities | | **187.5** | 151.5 |
| Dividends received from associates | | **887.6** | 848.4 |
| Dividends received from joint ventures | | **940.8** | 758.3 |
| **Net cash used in investing activities** | | **(1,670.6)** | (6,468.4) |

The notes on pages 99 to 187 form part of these consolidated financial statements.

# CONSOLIDATED CASH FLOW STATEMENT (Continued)

*for the year ended 31st December 2017*

| | Note | 2017 HK$'M | 2016 HK$'M |
|---|---|---|---|
| **Financing activities** | | | |
| Shares bought back | | **(15.4)** | – |
| Change in loans with non-controlling shareholders | | **3.8** | 48.9 |
| Capital injection by non-controlling shareholders | | **15.1** | 12.1 |
| Further acquisition of subsidiaries | 42 (c) | **(385.4)** | (342.5) |
| Increase in borrowings | | **12,673.4** | 10,924.9 |
| Repayment of borrowings | | **(9,919.9)** | (10,192.3) |
| Interest paid to holders of perpetual capital securities | | **(110.9)** | (110.5) |
| Interest paid | | **(1,571.8)** | (1,359.5) |
| Dividends paid to shareholders of the Company | 43 (a) | **(4,603.2)** | (4,185.0) |
| Dividends paid to non-controlling shareholders | | **(425.2)** | (469.1) |
| **Net cash used in financing activities** | | **(4,339.5)** | (5,673.0) |
| **Increase/(decrease) in cash and cash equivalents** | | **2,514.3** | (3,672.2) |
| **Cash and cash equivalents at 1st January** | | **8,076.1** | 11,925.9 |
| **Effect of foreign exchange rate changes** | | **168.2** | (177.6) |
| **Cash and cash equivalents at 31st December** | | **10,758.6** | 8,076.1 |
| **Analysis of the balances of cash and cash equivalents** | | | |
| Cash and bank balances | | **4,549.9** | 4,008.6 |
| Time deposits up to three months | | **6,208.7** | 4,067.5 |
| | | **10,758.6** | 8,076.1 |

The notes on pages 99 to 187 form part of these consolidated financial statements.

# CONSOLIDATED STATEMENT OF CHANGES IN EQUITY

*for the year ended 31st December 2017*

| | Attributable to shareholders of the Company | | | | | |
|---|---|---|---|---|---|---|
| | Share capital HK$'M | Reserves HK$'M | Holders of perpetual capital securities HK$'M | Non-controlling interests HK$'M | Total HK$'M |
| Total equity as at 1st January 2017 | 5,474.7 | 48,457.5 | 2,353.8 | 6,612.0 | 62,898.0 |
| Profit for the year | – | 8,225.3 | 111.2 | 1,010.4 | 9,346.9 |
| Other comprehensive income: | | | | | |
| Remeasurements of retirement benefit | – | 124.1 | – | – | 124.1 |
| Movement in reserve of available-for-sale financial assets | – | (112.6) | – | (7.9) | (120.5) |
| Change in fair value of cash flow hedges | – | (117.5) | – | – | (117.5) |
| Share of other comprehensive loss of an associate | – | (2.9) | – | – | (2.9) |
| Exchange differences | – | 3,020.6 | – | 593.8 | 3,614.4 |
| Total comprehensive income for the year | – | 11,137.0 | 111.2 | 1,596.3 | 12,844.5 |
| Capital injection | – | – | – | 15.1 | 15.1 |
| Further acquisition of subsidiaries (Note 42 (c)) | – | (11.8) | – | (373.6) | (385.4) |
| Interest paid on perpetual capital securities | – | – | (110.9) | – | (110.9) |
| Dividends paid to shareholders of the Company | – | (4,603.2) | – | – | (4,603.2) |
| Dividends paid to non-controlling shareholders | – | – | – | (425.2) | (425.2) |
| Acquisition of businesses | – | – | – | 28.4 | 28.4 |
| Shares bought back | – | (15.4) | – | – | (15.4) |
| Total equity as at 31st December 2017 | 5,474.7 | 54,964.1 | 2,354.1 | 7,453.0 | 70,245.9 |

The notes on pages 99 to 187 form part of these consolidated financial statements.

# CONSOLIDATED STATEMENT OF CHANGES IN EQUITY (Continued)

*for the year ended 31st December 2017*

| | Attributable to shareholders of the Company | | Holders of perpetual capital securities | Non-controlling interests | Total |
|---|---|---|---|---|---|
| | Share capital HK$'M | Reserves HK$'M | HK$'M | HK$'M | HK$'M |
| Total equity as at 1st January 2016 | 5,474.7 | 47,366.7 | 2,353.8 | 6,917.7 | 62,112.9 |
| Profit for the year | – | 7,340.7 | 110.5 | 818.6 | 8,269.8 |
| Other comprehensive income: | | | | | |
| Remeasurements of retirement benefit | – | 6.3 | – | – | 6.3 |
| Movement in reserve of available-for-sale financial assets | – | 591.5 | – | (3.3) | 588.2 |
| Change in fair value of cash flow hedges | – | 85.5 | – | 1.3 | 86.8 |
| Share of other comprehensive income of an associate | – | 7.2 | – | – | 7.2 |
| Exchange differences | – | (2,676.5) | – | (401.7) | (3,078.2) |
| Total comprehensive income for the year | – | 5,354.7 | 110.5 | 414.9 | 5,880.1 |
| Capital injection | – | – | – | 12.1 | 12.1 |
| Further acquisition of subsidiaries | – | (78.9) | – | (263.6) | (342.5) |
| Interest paid on perpetual capital securities | – | – | (110.5) | – | (110.5) |
| Dividends paid to shareholders of the Company | – | (4,185.0) | – | – | (4,185.0) |
| Dividends paid to non-controlling shareholders | – | – | – | (469.1) | (469.1) |
| Total equity as at 31st December 2016 | 5,474.7 | 48,457.5 | 2,353.8 | 6,612.0 | 62,898.0 |

The notes on pages 99 to 187 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 engages 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, available-for-sale financial assets, financial assets and liabilities at fair value through profit or loss and derivative financial instruments, which are carried at fair value.

As at 31st December 2017, the Group was in a net current liability position of approximately HK$7.6 billion. This is mainly because of the maturity of the US$1 billion guaranteed notes in August 2018 which was recorded as current liabilities as at 31st December 2017. Taking into 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 revised standards, interpretations and amendments adopted in 2017*

The Group has adopted the following amendments to standards and annual improvements which are effective for the Group's financial year beginning 1st January 2017 and relevant to the Group.

| | |
|---|---|
| Amendments to HKAS 7 | Disclosure Initiative |
| Amendments to HKAS 12 | Recognition of Deferred Tax Assets for Unrealised Losses |
| Annual Improvements Project | Annual Improvements to HKFRSs 2014-2016 Cycle |

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

## 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 2017 but relevant to the Group and have not been early adopted by the Group*

| | |
|---|---|
| HKFRS 9 | Financial Instruments |
| HKFRS 15 | Revenue from Contracts with Customers |
| HKFRS 16 | Leases |
| Amendments to HKAS 28 | Investments in Associates and Joint Ventures |
| Amendments to HKFRS 2 | Classification and Measurement of Share-based Payment Transactions |
| Amendments to HKFRS 4 | Applying HKFRS 9 Financial Instruments with HKFRS 4 Insurance Contracts |
| Amendments to HKFRS 9 | Prepayment Features with Negative Compensation |
| Amendments to HKFRS 10 and HKAS 28 | Sale or Contribution of Assets between an Investor and its Associate or Joint Venture |
| Amendments to HKFRS 15 | Clarifications to HKFRS 15 |
| Amendments to HKAS 40 | Transfers of Investment Property |
| HK(IFRIC)-Interpretation 22 | Foreign Currency Transactions and Advance Consideration |
| HK(IFRIC)-Interpretation 23 | Uncertainty over Income Tax Treatments |

***HKFRS 9 "Financial Instruments" (effective from 1st January 2018)***

*Nature of change*

HKFRS 9 addresses the classification, measurement and recognition of financial assets and financial liabilities. It replaces the guidance in HKAS 39 that relates to the classification and measurement of financial instruments. HKFRS 9 retains but simplifies the mixed measurement model and establishes three primary measurement categories for financial assets: amortised cost, fair value through other comprehensive income and fair value through profit or loss. The basis of classification depends on the entity's business model and the contractual cash flow characteristics of the financial asset. Investments in equity instruments are required to be measured at fair value through profit or loss with the irrevocable option at inception to present changes in fair value in other comprehensive income not recycling. There is now a new expected credit losses model that replaces the incurred loss impairment model used in HKAS 39. For financial liabilities there were no changes to classification and measurement except for the recognition of changes in own credit risk in other comprehensive income, for liabilities designated at fair value through profit or loss. HKFRS 9 relaxes the requirements for hedge effectiveness but contemporaneous documentation is still required.

*Potential impact*

The Group's equity investments currently classified as available-for-sale financial assets will be reclassified to financial assets at fair value through profit or loss (FVTPL) or other comprehensive income (FVOCI), which is being under the process of the election. There will be no impact on the Group's accounting for financial liabilities, as the new requirements only affect the accounting for financial liabilities that are designated at fair value through profit or loss and the Group does not have any such liabilities.

## 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 2017 but relevant to the Group and have not been early adopted by the Group* (Continued)

***HKFRS 9 "Financial Instruments" (effective from 1st January 2018)*** (Continued)

In addition, the new impairment model requires the recognition of impairment provisions based on expected credit losses rather than only incurred credit losses as is the case under HKAS 39. Based on the assessments undertaken to date, the Group does not expect material change of the loss allowance for the Group's trade receivables.

The new hedge accounting rules will align the accounting for hedging instruments more closely with the Group's risk management practices. As a general rule, more hedge relationships might be eligible for hedge accounting, as the standard introduces a more principles-based approach. Based on the assessments undertaken to date, it is expected that the Group's current hedge relationships will likely be qualify as continuing hedges upon the adoption of HKFRS 9.

The new standard also introduces expanded disclosure requirements and changes in presentation. These are expected to change the nature and extent of the Group's disclosures about its financial instruments particularly in the year of the adoption of the new standard.

***HKFRS 15 "Revenue from Contracts with Customers" (effective from 1st January 2018)***

*Nature of change*

HKFRS 15 replaces HKAS 18 "Revenue" and HKAS 11 "Construction Contracts" and the related interpretations. HKFRS 15 establishes a comprehensive framework for determining when to recognise revenue and how much revenue to recognise through a 5-step approach: (i) identify the contract(s) with a customer; (ii) identify separate performance obligations in the contract; (iii) determine the transaction price; (iv) allocate the transaction price to the performance obligations; and (v) recognise revenue when a performance obligation is satisfied. The core principle is that a company should recognise revenue when control of a good or service transfers to a customer. Under HKFRS 15, an entity normally recognises revenue when a performance obligation is satisfied. Impact on the revenue recognition may arise when multiple performance obligations are identified.

*Potential impact*

Based on the assessment undertaken to date, the Group does not expect the adoption of HKFRS 15 would have a material impact over gas sales (the major revenue of the Group). The Group is continuing the assessment in relation to other revenue streams in particular the impact on gas connection income.

The Group intends to adopt the standard using the modified retrospective approach which means that the cumulative impact of the adoption will be recognised in retained earnings as of 1st January 2018 and that comparatives will not be restated.

# 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 2017 but relevant to the Group and have not been early adopted by the Group* (Continued)

***HKFRS 16 "Leases" (effective from 1st January 2019)***

*Nature of change*

HKFRS 16 will result in almost all leases being recognised on the statement of financial position, as the distinction between operating and finance leases is removed. Under the new standard, an asset (the right to use the leased item) and a financial liability to pay rentals are recognised. The only exceptions are short-term and low-value leases. The accounting for lessors will not significantly change.

*Potential impact*

The standard will affect primarily the accounting for the Group's operating leases. As at the reporting date, the Group has non-cancellable operating lease commitments of HK$621.3 million as disclosed in Note 39(d). Based on the preliminary assessment undertaken to date, it is estimated that the adoption of HKFRS 16 would result in recognition of right-of-use assets and financial liabilities in the consolidated statement of financial position primarily arising from leases of land and buildings. The interest expenses on the lease liabilities and the depreciation expenses on the right-of-use assets under HKFRS 16 will replace the rental charge under HKAS 17 in the consolidated income statement.

The new standard is mandatory for financial years commencing on or after 1st January 2019. At this stage, the Group does not intend to adopt the standard before its effective date.

Except those mentioned above, the Group anticipates that the application of the other amendments and improvements to standards that have been issued but are not yet effective may have no material impact on the results of operations and financial position.

### *(iii) Hong Kong Companies Ordinance (Cap. 622)*

These consolidated financial statements comply with the applicable requirements of Hong Kong Companies Ordinance (Cap. 622), with the exception of Section 381 which requires a company to include all its subsidiary undertakings (within the meaning of Schedule 1 to Cap. 622) in the company's annual consolidated financial statements. Section 381 is inconsistent with the requirements of HKFRS 10 Consolidated Financial Statements so far as Section 381 applies to subsidiary undertakings which are not controlled by the Group in accordance with HKFRS 10. For this reason, under the provisions of Section 380(6), the Company has departed from Section 381 and has not treated such companies as subsidiaries but they are accounted for in accordance with the accounting policies in Notes 2(b)(iv & v). Those excluded subsidiary undertakings of the Group are disclosed in Notes 21 and 22.

## 2 Summary of significant accounting policies (Continued)

### (b) 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 acquisition date. Subsequent changes to the fair value of the contingent consideration that is deemed to be an asset or liability is recognised in accordance with HKAS 39 in the income statement. 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 income statement.

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.

## 2 Summary of significant accounting policies (Continued)

### (b) Consolidation (Continued)

#### *(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 income statement. The fair value is the initial carrying amount for the purposes of subsequently accounting for the retained interest as an associate, joint venture or financial asset. In addition, any amounts previously recognised in 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 income statement.

#### *(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 income statement where appropriate.

The Group's share of its associates' post-acquisition profits or losses is recognised in the income statement, 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 adjacent to "share of results of associates" in the income statement.

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 income statement.

## 2 Summary of significant accounting policies (Continued)

### (b) Consolidation (Continued)

#### *(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 income statement where appropriate.

The Group's share of its joint ventures' post-acquisition profits or losses is recognised in the income statement, 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 adjacent to "share of results of joint ventures" in the income statement.

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 income statement.

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.

### (c) 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.

## 2 Summary of significant accounting policies (Continued)

### (d) 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 prevailing at the dates of the transactions or valuation where items are remeasured. Foreign exchange gains and losses resulting from the settlement of such transactions and from the translation at year-end exchange rates of monetary assets and liabilities denominated in foreign currencies are recognised in the income statement except when deferred in equity as qualifying cash flow hedges and qualifying net investment hedges.

Changes in the fair value of monetary securities denominated in foreign currency classified as available-for-sale financial assets are analysed between translation differences resulting from changes in the amortised cost of the securities, and other changes in the carrying amount of the securities. Translation differences resulting from changes in the amortised cost of the securities are recognised in the income statement, and other changes in carrying amount are recognised in the other comprehensive income.

Translation differences on non-monetary financial assets and liabilities are reported as part of the fair value gain or loss. Translation differences on non-monetary financial assets and liabilities such as equities held at fair value through profit or loss are recognised in the income statement as part of the fair value gain or loss. Translation differences on non-monetary financial assets such as equities classified as available-for-sale are included in the 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 the other comprehensive income.

On consolidation, exchange differences arising from the translation of the net investment in foreign operations, are taken to the other comprehensive income. When a foreign operation is sold, exchange differences that were recorded in equity are recognised in the income statement 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)

### (e) 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 income statement.

### (f) 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 income statement.

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 statement of financial position date.

Gains or losses 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 income statement.

## 2 Summary of significant accounting policies (Continued)

### (g) 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.

### (h) 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 income statement during the financial period in which they are incurred.

Changes in fair values are recognised in the income statement.

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 income statement.

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 income statement.

## 2 Summary of significant accounting policies (Continued)

### (i) Leases

#### (i) *Operating leases*

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

#### (ii) *Finance leases*

Leases of assets where the Group has substantially all the risks and rewards of ownership are classified as finance leases. Finance leases are 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 is 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, are included in current and non-current borrowings. The interest element of the finance cost is recognised in the income statement 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 are carried at cost less accumulated depreciation and impairment. They are depreciated over the shorter of the useful life of the assets and the lease term.

### (j) 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 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 asset is 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.

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

Goodwill that have an indefinite useful life are not subject to amortisation, which 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)

### (l) Financial assets

The Group classifies its financial assets in the following categories: financial assets at fair value through profit or loss, loans and receivables and available-for-sale financial assets. The classification depends on the purpose for which the financial assets were acquired. Management determines the classification of its financial assets at initial recognition.

#### *(i) Financial assets at fair value through profit or loss*

Financial assets at fair value through profit or loss are financial assets held for trading and those designated at fair value through profit or loss at inception. A financial asset is classified in this category if acquired principally for the purpose of selling in the short term or if so designated by management. Assets in this category are classified as current assets.

#### *(ii) Loans and receivables*

Loans and receivables are non-derivative financial assets with fixed or determinable payments that are not quoted in an active market, and with no intention of trading the receivables. They are included in the current assets, except for maturities greater than 12 months after the statement of financial position date which are classified as non-current assets.

#### *(iii) Available-for-sale financial assets*

Available-for-sale financial assets are non-derivatives that are either designated in this category or not classified in any of the other categories. They are included in non-current assets unless management intends to dispose of the investments within 12 months of the statement of financial position date.

The unlisted equity securities are carried at cost less impairment when these investments do not have a quoted market price and range of reasonable fair value estimate is so significant that the directors of the Company are of the opinion that their fair value cannot be measured reliably.

Regular purchases and sales of financial assets are recognised on trade-date – the date on which the Group commits to purchase or sell the asset. Investments are initially recognised at fair value plus transaction costs for all financial assets not carried at fair value through profit or loss. Financial assets carried at fair value through profit or loss are initially recognised at fair value and transaction costs are expensed in the income statement. Financial assets are derecognised when the rights to receive cash flows from the investments have expired or have been transferred and the Group has transferred substantially all risks and rewards of ownership. Available-for-sale financial assets and financial assets at fair value through profit or loss are subsequently carried at fair value.

Gains and losses arising from changes in the fair value of the "financial assets at fair value through profit or loss" category are presented in the income statement within "other gains/(losses), net", in the period in which they arise. Dividend income from financial assets at fair value through profit or loss is recognised in the income statement as part of "other gains/(losses), net" when the Group's right to receive payment is established.

Changes in the fair value of monetary securities denominated in a foreign currency and classified as available-for-sale are analysed between translation differences resulting from changes in amortised cost of the securities and other changes in the carrying amount of the securities. Translation differences resulting from changes in the amortised cost of the securities are recognised in the income statement, and other changes in the carrying amount are recognised in the other comprehensive income.

## 2 Summary of significant accounting policies (Continued)

### (l) Financial assets (Continued)

When available-for-sale financial assets are sold or impaired, the accumulated fair value adjustments recognised in equity are included in the income statement as gains and losses on disposal of available-for-sale financial assets under "other gains/(losses), net".

Interest on available-for-sale financial assets calculated using the effective interest method is recognised in the income statement as part of "other gains/(losses), net". Dividends on available-for-sale equity instruments are recognised in the income statement as part of "other gains/(losses), net" when the Group's right to receive payments is established.

The fair values of quoted investments are based on current bid prices. If the market for a financial asset is not active (and for unlisted securities), the Group establishes fair value by using valuation techniques including the use of recent arm's length transactions, reference to other instruments that are substantially the same, discounted cash flow analysis, and option pricing models, making maximum use of market inputs and relying as little as possible on entity-specific inputs.

The Group may choose to reclassify a non-derivative trading financial asset out of the financial assets at fair value through profit or loss category if the financial asset is no longer held for the purpose of selling it in the near term. Financial assets other than loans and receivables are permitted to be reclassified out of the financial assets at fair value through profit or loss category only in rare circumstances arising from a single event that is unusual and highly unlikely to recur in the near term.

Reclassifications are made at fair value as of the reclassification date. Fair value becomes the new cost, and no reversals of fair value gains or losses recorded before reclassification date are subsequently made.

### (m) 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).

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

The fair values of the derivative instruments used for hedging purposes are disclosed in Note 34. Movements on the hedging reserve in shareholders' equity are shown in Note 37. 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, and as a current asset or liability when the remaining maturity of the hedged item is less than 12 months.

***Cash flow hedge***

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

### (m) Derivative financial instruments and hedging activities (Continued)

Amounts accumulated in equity are recycled in the income statement in the periods when the hedged item affects profit or loss (for example, when the forecast sale that is hedged takes place). The gain or loss relating to the effective portion of changes in the fair value of derivatives is recognised in the income statement within “interest expense”. The gain or loss relating to the ineffective portion is recognised in the income statement within “other gains/(losses), net”. However, when the forecast transaction that is hedged results in the recognition of a non-financial asset (for example, inventory or property, plant and equipment), the gains and losses previously deferred in equity are transferred from equity and included in the initial measurement of the cost of the asset. The deferred amounts are ultimately recognised in cost of goods sold in case of inventory or in depreciation in the case of property, plant and equipment.

When a hedging instrument expires or is sold, or when a hedge no longer meets the criteria for hedge accounting, any cumulative gain or loss existing in equity at that time remains in equity and is recognised when the forecast transaction is ultimately recognised in the income statement. When a forecast transaction is no longer expected to occur, the cumulative gain or loss that was reported in equity is immediately transferred to the income statement within “other gains/(losses), net”.

### (n) 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.

### (o) 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 estimated reliably, contract revenue is recognised only to the extent of contract costs incurred that are likely to be recoverable.

When the outcome of a construction contract can be estimated reliably and it is probable that the contract will be profitable, contract revenue is recognised over the period of the contract. 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.

The Group uses the “stage of completion method” to determine the appropriate amount to recognise in a given period. The stage of completion is measured by reference to the contract costs incurred up to the statement of financial position date as a percentage of total estimated costs for each contract. Costs incurred in the year in connection with future activity on a contract are excluded from contract costs in determining the stage of completion.

### (p) Trade and other receivables

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

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

## 2 Summary of significant accounting policies (Continued)

### (q) Impairment of financial assets

#### *(i) Assets carried at amortised cost*

The Group assesses at the end of each reporting period whether there is objective evidence that a financial asset or group of financial assets is impaired. A financial asset or a group of financial assets is impaired and impairment losses are incurred only if there is objective evidence of impairment as a result of one or more events that occurred after the initial recognition of the asset (a "loss event") and that loss event (or events) has an impact on the estimated future cash flows of the financial asset or group of financial assets that can be reliably estimated.

The criteria that the Group uses to determine that there is objective evidence of an impairment loss include:

- Significant financial difficulty of the issuer or obligor;
- A breach of contract, such as a default or delinquency in interest or principal payments;
- The Group, for economic or legal reasons relating to the borrower's financial difficulty, granting to the borrower a concession that the lender would not otherwise consider;
- It becomes probable that the borrower will enter bankruptcy or other financial reorganisation;
- The disappearance of an active market for that financial asset because of financial difficulties; or
- Observable data indicating that there is a measurable decrease in the estimated future cash flows from a portfolio of financial assets since the initial recognition of those assets, although the decrease cannot yet be identified with the individual financial assets in the portfolio, including:

  (i) adverse changes in the payment status of borrowers in the portfolio;

  (ii) national or local economic conditions that correlate with defaults on the assets in the portfolio.

The Group first assesses whether objective evidence of impairment exists.

For loans and receivables category, the amount of the loss is measured as the difference between the asset's carrying amount and the present value of estimated future cash flows (excluding future credit losses that have not been incurred) discounted at the financial asset's original effective interest rate. The carrying amount of the asset is reduced and the amount of the loss is recognised in the income statement. If a loan has a variable interest rate, the discount rate for measuring any impairment loss is the current effective interest rate determined under the contract. As a practical expedient, the Group may measure impairment on the basis of an instrument's fair value using an observable market price.

If, in a subsequent period, the amount of the impairment loss decreases and the decrease can be related objectively to an event occurring after the impairment was recognised (such as an improvement in the debtor's credit rating), the reversal of the previously recognised impairment loss is recognised in the income statement.

#### *(ii) Assets classified as available-for-sale*

The Group assesses at the end of each reporting period whether there is objective evidence that a financial asset or a group of financial assets is impaired. For debt securities, the Group uses the criteria refer to (i) above. In the case of equity investments classified as available-for-sale, a significant or prolonged decline in the fair value of the security below its cost is also evidence that the assets are impaired. If any such evidence exists for available-for-sale financial assets, the cumulative loss – measured as the difference between the acquisition cost and the current fair value, less any impairment loss on that financial asset previously recognised in the income statement – is removed from equity and recognised in the income statement. Impairment losses recognised in the income statement on equity instruments are not reversed through the income statement. If, in a subsequent period, the fair value of a debt instrument classified as available for sale increases and the increase can be objectively related to an event occurring after the impairment loss was recognised in the income statement, the impairment loss is reversed through the income statement.

## 2 Summary of significant accounting policies (Continued)

### (r) 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.

### (s) Trade payables and customers' deposits

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

### (t) 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 income statement over the period of the borrowings using the effective interest method.

Fees paid on the establishment of loan facilities are recognised as transaction costs of the loan to the extent that it is probable that some or all of the facility will be drawn down. In this case, the fee is deferred until the draw-down occurs. To the extent there is no evidence that it is probable that some or all of the facility will be drawn down, the fee is capitalised as a 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 income statement in the year in which they are incurred.

### (u) Current and deferred taxation

The tax expense for the year comprises current and deferred tax. Tax is recognised in the income statement, 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 statement of financial position date 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.

## 2 Summary of significant accounting policies (Continued)

### (v) Revenue and income recognition

(i) Gas sales – based on gas consumption derived from meter readings.

(ii) Water sales – based on water consumption derived from meter readings.

(iii) Liquefied petroleum gas sales – upon completion of the gas filling transaction.

(iv) Equipment sales – 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 – upon completion of delivery and title has passed.

(vi) Maintenance and service charges – 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 in accordance with Note 2(o).

### (w) 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 government 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.

# 2 Summary of significant accounting policies (Continued)

## (w) Employee benefits (Continued)

### *(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 income statement 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 income statement.

## (x) 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 income statement 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. 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 2017, if the RMB had weakened/strengthened by 2 per cent (2016: 2 per cent) against HKD with all other variables held constant, pre-tax profit for the year would have been HK$93.8 million (2016: HK$79.7 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 available-for-sale financial assets and financial assets at fair value through profit or loss of HK$273.4 million (2016: HK$1,175.1 million) and HK$42.1 million (2016: HK$20.5 million) respectively.

The Group also held unlisted equity investments which are classified as available-for-sale financial assets of HK$39.6 million (2016: HK$39.1 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 Straits Times 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 equity. 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 equity | |
|---|---|---|---|---|
| | **2017 HK$'M** | 2016 HK$'M | **2017 HK$'M** | 2016 HK$'M |
| Hang Seng Index | **2.5** | 2.0 | **10.7** | 94.3 |
| S&P 500 Index | **1.2** | 0.3 | **–** | 4.9 |
| Euro Stoxx 50 Price Index | **–** | – | **2.9** | 2.9 |
| Straits Times Index | **–** | – | **–** | 3.0 |

Pre-tax profit for the year would increase/decrease as a result of gains/losses on equity securities classified as at fair value through profit or loss. Equity would increase/decrease as a result of gains/losses on equity securities classified as available-for-sale 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$12,829.6 million (2016: HK$11,457.2 million). The Group's interest bearing liabilities mainly comprises floating rate borrowings of HK$12,433.9 million (2016: HK$9,970.5 million), fixed rate borrowings of HK$24,484.9 million (2016: HK$23,277.4 million) and floating rate deposits received from customers of HK$1,331.6 million (2016: HK$1,302.8 million).

At 31st December 2017, if market interest rates on bank deposits had been 100 basis points (2016: 100 basis points) higher/lower with all other variables held constant, pre-tax profit for the year would have been HK$131.1 million (2016: HK$129.6 million) higher/lower, mainly as a result of higher/lower interest income on floating rate bank deposits.

At 31st December 2017, if market interest rates on borrowings and customers' deposits had been 100 basis points (2016: 100 basis points) higher/lower with all other variables held constant, pre-tax profit for the year would have been HK$143.6 million (2016: HK$134.3 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:

| | **2017 HK$'M** | 2016 HK$'M |
|---|---|---|
| Cash and bank deposits | **12,829.6** | 11,457.2 |
| Debt securities and derivative financial instruments | **851.3** | 1,093.2 |
| Trade receivables | **3,734.5** | 3,497.5 |
| Other receivables | **2,118.5** | 1,572.7 |
| Loan and other receivables from joint ventures | **963.7** | 900.1 |
| Loan and other receivables from associates | **999.3** | 871.7 |
| Loan and other receivables from non-controlling interests | **103.1** | 65.4 |
| Other non-current assets | **2,603.8** | 2,486.5 |

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 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 counter party default risk is low and there is no history of default in repayment. Debt securities, derivative financial instruments 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 subsidiaries, joint ventures and associates through exercising 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 that are neither past due nor impaired can be assessed by reference to external credit ratings (if available) or to historical information about counterparty default rates is as follows:

| | **2017 %** | 2016 % |
|---|---|---|
| Cash and bank deposits | | |
| AA | **0.6** | 0.7 |
| A | **74.1** | 86.5 |
| BBB | **20.2** | 8.8 |
| BB | **1.5** | 0.1 |
| Unrated | **3.6** | 3.9 |
| | **100.0** | 100.0 |
| Debt securities and derivative financial instruments | | |
| AA | **5.7** | 4.7 |
| A | **68.7** | 57.4 |
| BBB | **–** | 14.1 |
| Unrated | **25.6** | 23.8 |
| | **100.0** | 100.0 |

## 3 Financial risk management (Continued)

### *Financial risk factors* (Continued)

**(b) Credit risk** (Continued)

Credit ratings are quoted from Bloomberg.

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, 25 and 27 respectively to the consolidated financial statements. None of the financial assets that are fully performing has been renegotiated during the year.

**(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 our 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 statement of financial position date to the contractual maturity date. The amounts disclosed in the table are the contractual undiscounted cash flows. 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 2017** | | | | |
| Trade and other payables | **11,781.3** | **–** | **–** | **–** |
| Loan and other payables to joint ventures | **1,137.9** | **–** | **–** | **–** |
| Loan and other payables to non-controlling shareholders | **175.3** | **–** | **–** | **–** |
| Borrowings | **17,040.9** | **4,537.9** | **9,803.8** | **12,163.2** |
| Derivative financial instruments | **76.2** | **–** | **604.5** | **–** |
| At 31st December 2016 | | | | |
| Trade and other payables | 10,020.4 | – | – | – |
| Loan and other payables to joint ventures | 718.9 | – | – | – |
| Loan and other payables to non-controlling shareholders | 186.3 | – | – | – |
| Borrowings | 7,134.3 | 10,326.3 | 8,946.8 | 14,097.2 |
| Derivative financial instruments | – | – | 82.7 | 459.5 |

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 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.

The gearing ratios at 31st December 2017 and 2016 are as follows:

| | **2017 HK$'M** | 2016 HK$'M |
|---|---|---|
| Total borrowings | **(36,918.8)** | (33,247.9) |
| Less: Time deposits, cash and bank deposits | **12,829.6** | 11,457.2 |
| Net borrowing | **(24,089.2)** | (21,790.7) |
| Shareholders' funds | **(60,438.8)** | (53,932.2) |
| Perpetual capital securities | **(2,354.1)** | (2,353.8) |
| | **(86,882.1)** | (78,076.7) |
| Gearing ratio | **28%** | 28% |

## 3 Financial risk management (Continued)

### *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).

The following table presents the Group's assets and liabilities that are measured at fair value at 31st December 2017 and 2016. See Note 17 for disclosures of the investment properties that are measured at fair value.

| | Level 1 | | Level 2 | | Level 3 | | Total | |
|---|---|---|---|---|---|---|---|---|
| **At 31st December HK$'M** | **2017** | 2016 | **2017** | 2016 | **2017** | 2016 | **2017** | 2016 |
| **Assets** | | | | | | | | |
| Financial assets at fair value through profit or loss | | | | | | | | |
| – Debt securities | **–** | – | **–** | 46.8 | **–** | – | **–** | 46.8 |
| – Equity securities | **42.1** | 20.5 | **–** | – | **–** | – | **42.1** | 20.5 |
| Derivative financial instruments | **–** | – | **157.6** | 344.6 | **231.9** | 248.8 | **389.5** | 593.4 |
| Available-for-sale financial assets | | | | | | | | |
| – Debt securities | **461.8** | 453.0 | **–** | – | **–** | – | **461.8** | 453.0 |
| – Equity investment | **273.4** | 1,175.1 | **39.6** | 39.1 | **2,976.1** | 2,808.6 | **3,289.1** | 4,022.8 |
| Total assets | **777.3** | 1,648.6 | **197.2** | 430.5 | **3,208.0** | 3,057.4 | **4,182.5** | 5,136.5 |
| **Liabilities** | | | | | | | | |
| Other payables | **–** | – | **–** | – | **154.0** | 154.0 | **154.0** | 154.0 |
| Derivative financial instruments | **–** | – | **680.7** | 542.2 | **–** | – | **680.7** | 542.2 |
| Total liabilities | **–** | – | **680.7** | 542.2 | **154.0** | 154.0 | **834.7** | 696.2 |

There are no other 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.

## 3 Financial risk management (Continued)

### *Fair value estimation* (Continued)

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 forward 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 determined using forward exchange rates at the end of the reporting year, with the resulting value discounted back to present value.

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

- Financial assets composed of available-for-sale financial assets and derivative financial instruments in level 3, which represented an unlisted equity investment and its related derivative respectively. In respect of the unlisted equity investment, the fair value is determined based on the discounted cash flow model. The significant unobservable inputs include discount rate of 12.5 per cent, products selling price, sales volume and expected free cash flows of the investee. The higher the discount rate, the lower the fair value. The higher the products selling price, sales volume or expected free cash flows of the investee, the higher the fair value.
- 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 underlying unlisted equity investment, mainly include expected volatility of the fair value of the unlisted equity investment. The higher the volatility, the higher the fair 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 4.0 per cent and the rate of probability on the outflow of resources will be required to settle the obligation. The higher the discount rate, the lower the fair value. The higher the rate of probability, the higher the fair value.

The following table presents the changes in level 3 instruments for the year ended 31st December 2017 and 2016.

| | Financial assets | | Financial liability | |
|---|---|---|---|---|
| | **2017 HK$'M** | 2016 HK$'M | **2017 HK$'M** | 2016 HK$'M |
| At 1st January | **3,057.4** | 2,416.2 | **154.0** | 176.7 |
| Acquisition | **–** | 739.0 | **–** | – |
| Change in fair value | **(77.8)** | 108.0 | **(11.3)** | (18.7) |
| Exchange difference | **228.4** | (205.8) | **11.3** | (4.0) |
| At 31st December | **3,208.0** | 3,057.4 | **154.0** | 154.0 |

The carrying amounts of financial assets and financial liabilities recorded at amortised cost in the 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:

***Discount rate***

Discounts rates reflect the current market assessments of the time value of money and are based on the estimated cost of capital. The discount rates are calculated based on the discount rate applicable to each cash generating unit adjusted for the relevant impact and timing of tax cash flows. The discount rates used ranged from 8.5 per cent to 10.6 per cent.

***Selling price and production volume***

The Group's management determines the budgeted selling price based on his expectation on the future trend of the prices of the products. The production volume was based on the production capacity and/or the management's expectation on market demand.

In respect to the Group's mining and oil properties in mainland China and Thailand respectively, the Group tested them for impairment by estimating the value-in-use of these projects as at 31st December 2017. The key assumptions adopted in the test were selling price, production volume and discount rate of 10 percent. Based on the result of the tests, an impairment loss of HK$313.6 million was recognised in the consolidated income statement for the year ended 31st December 2017. 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.

### (b) Useful lives of 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.

## 4 Critical accounting estimates and judgements (Continued)

### (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 Hong Kong Institute of Surveyors 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 statement of financial position date.

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.

### (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 individual 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) Estimate of gas connection income

The Group recognises its gas connection income in accordance with Note 2(o). Stage of completion is measured by reference to work performed up to the end of the reporting period. 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. The eventual realisation of these estimates is inherently uncertain, subject to the outcome of finalisation with the sub-contractors.

## 4 Critical accounting estimates and judgements (Continued)

### (f) Reserve 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 income statement 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 impairment assessment of equity investments classified as available-for-sale

The fair value of available-for-sale 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 statement of financial position date. The key assumptions adopted on projected cash flows are based on management's best estimates.

A significant or prolonged decline in the fair value of the equity investments classified as available-for-sale below its cost is also objective evidence of impairment. In assessing whether it is significant, the decline in fair value is evaluated against the original cost of the asset at initial recognition. In assessing whether it is prolonged, the decline is evaluated against the continuous period in which the fair value of the asset has been below its original cost at initial recognition.

## 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:

| | **2017 HK$'M** | 2016 HK$'M |
|---|---|---|
| Gas sales before fuel cost adjustment | **22,865.8** | 19,553.5 |
| Fuel cost adjustment | **649.4** | 438.8 |
| Gas sales after fuel cost adjustment | **23,515.2** | 19,992.3 |
| Gas connection income | **2,922.2** | 2,831.1 |
| Equipment sales and maintenance services | **2,634.6** | 2,514.4 |
| Water and related sales | **1,249.7** | 1,233.3 |
| Oil and coal related sales | **989.0** | 834.2 |
| Other sales | **1,165.8** | 1,151.8 |
| | **32,476.5** | 28,557.1 |

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 profit before interest, tax, depreciation and amortisation (the "adjusted EBITDA"). Other information provided, except as noted below, to the ECM is measured in a manner consistent with that in the financial statements.

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

| **2017 HK$'M** | **Gas, water and related businesses** | | **New Energy** | **Property** | **Other segments** | **Total** |
|---|---|---|---|---|---|---|
| | **Hong Kong** | **Mainland China** | | | | |
| Revenue | **9,386.1** | **19,680.2** | **2,658.5** | **66.3** | **685.4** | **32,476.5** |
| Adjusted EBITDA | **4,648.9** | **4,916.1** | **843.7** | **42.1** | **181.1** | **10,631.9** |
| Depreciation and amortisation | **(734.3)** | **(1,126.6)** | **(407.5)** | **–** | **(86.3)** | **(2,354.7)** |
| Unallocated expenses | | | | | | **(645.9)** |
| | | | | | | **7,631.3** |
| Other gains, net | | | | | | **630.1** |
| Interest expense | | | | | | **(1,256.9)** |
| Share of results of associates | **–** | **831.7** | **(0.9)** | **1,768.0** | **5.5** | **2,604.3** |
| Share of results of joint ventures | **–** | **1,479.6** | **1.0** | **9.0** | **(1.7)** | **1,487.9** |
| Profit before taxation | | | | | | **11,096.7** |
| Taxation | | | | | | **(1,749.8)** |
| Profit for the year | | | | | | **9,346.9** |

## 5 Segment information (Continued)

Share of results of associates includes HK$1,217.0 million (2016: HK$1,188.0 million) being the Group's share of change in valuation of investment properties at the International Finance Centre (the "IFC") complex for the year.

| 2016<br>HK$'M | Gas, water and related businesses<br>Hong Kong | Gas, water and related businesses<br>Mainland China | New Energy | Property | Other segments | Total |
|---|---|---|---|---|---|---|
| Revenue | 9,042.6 | 16,683.7 | 2,072.8 | 63.8 | 694.2 | 28,557.1 |
| Adjusted EBITDA | 4,512.8 | 4,618.0 | 636.8 | 40.3 | 176.2 | 9,984.1 |
| Depreciation and amortisation | (710.8) | (1,055.3) | (370.7) | – | (68.0) | (2,204.8) |
| Unallocated expenses | | | | | | (609.4) |
| | | | | | | 7,169.9 |
| Other losses, net | | | | | | (29.5) |
| Interest expense | | | | | | (1,207.4) |
| Share of results of associates | – | 735.3 | (0.8) | 1,710.3 | 2.6 | 2,447.4 |
| Share of results of joint ventures | – | 1,455.5 | 1.1 | 9.2 | (0.5) | 1,465.3 |
| Profit before taxation | | | | | | 9,845.7 |
| Taxation | | | | | | (1,575.9) |
| Profit for the year | | | | | | 8,269.8 |

The segment assets at 31st December 2017 and 2016 are as follows:

| **2017<br>HK$'M** | **Gas, water and related businesses<br>Hong Kong** | **Gas, water and related businesses<br>Mainland China** | **New Energy** | **Property** | **Other segments** | **Total** |
|---|---|---|---|---|---|---|
| Segment assets | **17,335.7** | **65,453.5** | **17,898.4** | **13,924.8** | **3,897.5** | **118,509.9** |
| Unallocated assets: | | | | | | |
| Available-for-sale financial assets | | | | | | **4,289.9** |
| Financial assets at fair value through profit or loss | | | | | | **42.1** |
| Time deposits, cash and bank balances excluded from segment assets | | | | | | **7,031.1** |
| Others (Note) | | | | | | **1,188.9** |
| Total assets | | | | | | **131,061.9** |

Note

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

## 5 Segment information (Continued)

| 2016 HK$'M | Gas, water and related businesses: Hong Kong | Gas, water and related businesses: Mainland China | New Energy | Property | Other segments | Total |
|---|---|---|---|---|---|---|
| Segment assets | 16,259.1 | 56,276.4 | 16,093.0 | 12,706.2 | 3,254.2 | 104,588.9 |
| Unallocated assets: | | | | | | |
| Available-for-sale financial assets | | | | | | 4,967.1 |
| Financial assets at fair value through profit or loss | | | | | | 67.3 |
| Time deposits, cash and bank balances excluded from segment assets | | | | | | 5,884.6 |
| Others | | | | | | 1,235.5 |
| Total assets | | | | | | 116,743.4 |

The Company is domiciled in Hong Kong. The Group's revenue from external customers in Hong Kong for the year ended 31st December 2017 is HK$10,721.3 million (2016: HK$10,328.9 million), and the revenue from external customers in other geographical locations is HK$21,755.2 million (2016: HK$18,228.2 million).

At 31st December 2017, the total of non-current assets other than financial instruments located in Hong Kong and other geographical locations are HK$27,772.0 million and HK$71,760.5 million (2016: HK$25,755.0 million and HK$61,484.1 million) respectively.

For the years ended 31st December 2017 and 2016, the percentage of revenues attributable to the Group's five largest customers is less than 30 per cent.

## 6 Total operating expenses

| | **2017 HK$'M** | 2016 HK$'M |
|---|---|---|
| Stores and materials used | **15,691.9** | 12,709.6 |
| Manpower costs (Note 11) | **3,034.9** | 2,955.2 |
| Depreciation and amortisation | **2,374.8** | 2,223.1 |
| Other operating items | **3,743.6** | 3,499.3 |
| | **24,845.2** | 21,387.2 |

## 7 Other gains/(losses), net

| | 2017 HK$'M | 2016 HK$'M |
|---|---|---|
| Net investment gains (Note 8) | **729.7** | 208.5 |
| Fair value gain on investment property (Note 17) | **33.6** | 14.1 |
| Gain on deemed disposal of partial interest in associates | **253.4** | – |
| Gain on disposal of associates | **23.8** | – |
| Fair value gain on derivative | **–** | 248.8 |
| Project research and development costs | **(46.9)** | (49.3) |
| Provision for assets | **(365.1)** | (206.6) |
| Provision for an investment in an associate | **–** | (250.0) |
| Ineffective portion on cash flow hedges | **2.0** | 5.0 |
| Others | **(0.4)** | – |
| | **630.1** | (29.5) |

## 8 Net investment gains

| | 2017 HK$'M | 2016 HK$'M |
|---|---|---|
| **(a) Interest income** | | |
| Bank deposits | **188.6** | 137.0 |
| Listed available-for-sale financial assets | **8.4** | 8.5 |
| Loans to associates and joint ventures | **41.8** | 49.1 |
| Others | **17.3** | 15.3 |
| | **256.1** | 209.9 |
| **(b) Net realised and unrealised (losses)/gains and interest income on financial assets at fair value through profit or loss and derivative financial instruments** | | |
| Listed securities | **10.3** | 1.8 |
| Unlisted securities | **(387.8)** | 170.1 |
| Exchange differences | **65.2** | (1.3) |
| | **(312.3)** | 170.6 |
| **(c) Net realised gains on available-for-sale financial assets** | | |
| Listed securities | **276.6** | (40.0) |
| Unlisted securities | **(35.1)** | 51.2 |
| Exchange differences | **2.2** | 2.1 |
| | **243.7** | 13.3 |
| **(d) Dividend income** | | |
| Listed available-for-sale financial assets | **58.0** | 46.1 |
| Unlisted available-for-sale financial assets | **128.9** | 105.0 |
| Listed financial assets at fair value through profit or loss | **0.6** | 0.4 |
| | **187.5** | 151.5 |
| **(e) Other investment and exchange gains/(losses)** | **354.7** | (336.8) |
| | **729.7** | 208.5 |

## 9 Interest expense

| | 2017 HK$'M | 2016 HK$'M |
|---|---|---|
| Interest on bank loans and overdrafts wholly repayable within five years | **624.3** | 558.0 |
| Interest on guaranteed notes wholly repayable within five years | **565.9** | 435.7 |
| Interest on guaranteed notes not wholly repayable within five years | **304.3** | 413.5 |
| | **1,494.5** | 1,407.2 |
| Less: amount capitalised | **(237.6)** | (199.8) |
| | **1,256.9** | 1,207.4 |

The interest expense is capitalised at average rates from 2.98 per cent to 6.42 per cent (2016: 3.70 per cent to 6.37 per cent) per annum.

## 10 Profit before taxation

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

| | 2017 HK$'M | 2016 HK$'M |
|---|---|---|
| Cost of inventories sold | **17,956.6** | 14,857.3 |
| Depreciation and amortisation | **2,374.8** | 2,223.1 |
| Loss on disposal/write off of property, plant and equipment | **4.2** | 30.9 |
| Loss/(gain) on disposal of leasehold land | **0.3** | (45.2) |
| Impairment loss of trade receivables | **50.9** | 13.7 |
| Impairment loss of available-for-sale financial assets | **135.8** | 534.3 |
| Operating lease rentals | | |
| – land and buildings | **126.3** | 113.9 |
| – plant and equipment | **12.3** | 12.0 |
| Rental income from investment property | | |
| – gross rental income | **(66.3)** | (63.7) |
| – outgoing expenses | **23.9** | 23.1 |
| Auditors' remuneration | **26.7** | 25.7 |
| Net loss on residential maintenance (Note) | **57.7** | 54.9 |

Note

| | | |
|---|---|---|
| Analysis of net loss on residential maintenance: | | |
| Residential maintenance revenue | **(206.6)** | (204.1) |
| Less expenses: | | |
| Manpower costs | **147.3** | 146.7 |
| Other operating and administrative expenses | **117.0** | 112.3 |
| Net loss | **57.7** | 54.9 |

## 11 Manpower costs

### (a) Staff costs

| | 2017 HK$'M | 2016 HK$'M |
|---|---|---|
| Salaries and wages | **2,619.5** | 2,559.3 |
| Pension costs – defined contribution retirement schemes | **397.1** | 377.1 |
| Pension costs – defined benefit retirement scheme (Note 24) | **18.3** | 18.8 |
| | **3,034.9** | 2,955.2 |

### (b) Five highest paid individuals

The five individuals whose emoluments were the highest in the Group for the year include two (2016: two) directors whose emoluments are reflected in the analysis shown in Note 12. Details of the emoluments payable to the remaining three (2016: three) individuals during the year are as follows:

| | 2017 HK$'M | 2016 HK$'M |
|---|---|---|
| Fee, salaries, allowances and benefits in kind | **8.8** | 8.7 |
| Performance bonus | **13.3** | 12.2 |
| Contributions to retirement scheme | **3.3** | 3.0 |
| | **25.4** | 23.9 |

Number of individuals whose emoluments fell within:

| Emoluments band (HK$'M) | 2017 | 2016 |
|---|---|---|
| 10.0 – 11.0 | **1** | – |
| 9.0 – 10.0 | **–** | 1 |
| 8.0 – 9.0 | **1** | – |
| 7.0 – 8.0 | **–** | 1 |
| 6.0 – 7.0 | **1** | 1 |

### (c) Emoluments of senior management

Senior management for the years ended 31st December 2017 and 2016 were all executive directors of the Company whose emoluments have been shown in Note 12.

## 12 Benefits and interests of directors

### (a) Directors' emoluments

| | Emoluments paid or receivable in respect of a person's services as a director, whether of the Company or its subsidiary undertaking | | | | | |
|---|---|---|---|---|---|---|
| **Name of director** | **Fees HK$'M** | **Salary, allowances and benefits in kind HK$'M** | **Performance bonus HK$'M** | **Contributions to retirement scheme HK$'M** | **Others HK$'M** | **Total HK$'M** |
| **2017** | | | | | | |
| Alfred Chan Wing Kin (Managing Director) (Note (i)) | **0.4** | **6.0** | **25.7** | **5.7** | **–** | **37.8** |
| Peter Wong Wai Yee (Note (i)) | **0.4** | **4.4** | **8.4** | **2.4** | **–** | **15.6** |
| Lee Shau Kee | **0.7** | **0.3** | **–** | **–** | **–** | **1.0** |
| Leung Hay Man | **0.5** | **–** | **–** | **–** | **–** | **0.5** |
| 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** |
| | **4.3** | **10.8** | **34.1** | **8.1** | **–** | **57.3** |

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$6.0 million (2016: HK$0.2 million and HK$5.4 million) respectively, and no share-based payments were received during the year and 2016.

## 12 Benefits and interests of directors (Continued)

### (a) Directors' emoluments (Continued)

| Name of director | Fees HK$'M | Salary, allowances and benefits in kind HK$'M | Performance bonus HK$'M | Contributions to retirement scheme HK$'M | Others HK$'M | Total HK$'M |
|---|---|---|---|---|---|---|
| | Emoluments paid or receivable in respect of a person's services as a director, whether of the Company or its subsidiary undertaking | | | | | |
| 2016 | | | | | | |
| Alfred Chan Wing Kin (Managing Director) (Note (i)) | 0.4 | 6.0 | 26.0 | 5.4 | – | 37.8 |
| Peter Wong Wai Yee (Note (i)) | 0.4 | 4.4 | 7.9 | 2.3 | – | 15.0 |
| Lee Shau Kee | 0.6 | 0.2 | – | – | – | 0.8 |
| Leung Hay Man | 0.5 | – | – | – | – | 0.5 |
| Colin Lam Ko Yin | 0.2 | 0.1 | – | – | – | 0.3 |
| Lee Ka Kit | 0.2 | – | – | – | – | 0.2 |
| Lee Ka Shing | 0.2 | – | – | – | – | 0.2 |
| David Li Kwok Po | 0.6 | 0.1 | – | – | – | 0.7 |
| Poon Chung Kwong | 0.6 | – | – | – | – | 0.6 |
| | 3.7 | 10.8 | 33.9 | 7.7 | – | 56.1 |

The above remuneration paid to directors of the Company also represents the amount of short-term employee benefits of HK$49.2 million (2016: HK$48.4 million) and post-employment benefits of HK$8.1 million (2016: HK$7.7 million) paid to the Group's senior management during the year ended 31st December 2017. There were no other long-term benefits, termination benefits and share-based payment paid to the Group's senior management during the year (2016: 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 income statement represents:

| | **2017 HK$'M** | 2016 HK$'M |
|---|---|---|
| Current taxation – provision for Hong Kong Profits Tax at the rate of 16.5% (2016: 16.5%) on the estimated assessable profits for the year | **727.5** | 647.5 |
| Current taxation – provision for other countries income tax at the prevailing rates on the estimated assessable profits for the year (Note (a)) | **707.1** | 695.9 |
| Current taxation – over provision in prior years | **(94.4)** | (101.6) |
| Deferred taxation – origination and reversal of temporary differences | **290.5** | 255.2 |
| Withholding tax | **119.1** | 78.9 |
| | **1,749.8** | 1,575.9 |

Note

(a) The prevailing tax rates of the mainland China and Thailand range from 15 per cent to 25 per cent (2016: 15 per cent to 25 per cent) and 50 per cent (2016: 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:

| | **2017 HK$'M** | 2016 HK$'M |
|---|---|---|
| Profit before taxation | **11,096.7** | 9,845.7 |
| Less: Share of results of associates | **(2,604.3)** | (2,447.4) |
| Share of results of joint ventures | **(1,487.9)** | (1,465.3) |
| | **7,004.5** | 5,933.0 |
| Calculated at a tax rate of 16.5% (2016: 16.5%) | **1,155.7** | 978.9 |
| Effect of different tax rates in other countries | **319.5** | 275.9 |
| Income not subject to taxation | **(206.5)** | (121.1) |
| Expenses not deductible for taxation purposes | **378.7** | 340.1 |
| Utilisation of previously unrecognised tax losses | **(31.9)** | (6.3) |
| Over provision in prior years | **(94.4)** | (101.6) |
| Withholding tax | **119.1** | 78.9 |
| Others | **109.6** | 131.1 |
| | **1,749.8** | 1,575.9 |

Share of associates' taxation for the year ended 31st December 2017 of HK$399.3 million (2016: HK$351.3 million) is included in the income statement as share of results of associates.

Share of joint ventures' taxation for the year ended 31st December 2017 of HK$577.2 million (2016: HK$543.3 million) is included in the income statement as share of results of joint ventures.

## 14 Dividends

| | 2017 HK$'M | 2016 HK$'M |
|---|---|---|
| Interim, paid of HK12 cents per ordinary share (2016: HK12 cents per ordinary share) | **1,678.5** | 1,526.0 |
| Final, proposed of HK23 cents per ordinary share (2016: HK23 cents per ordinary share) | **3,217.2** | 2,924.9 |
| | **4,895.7** | 4,450.9 |

At a meeting held on 20th March 2018, the directors of the Company declared a final dividend of HK23 cents per ordinary share for the year ended 31st December 2017. 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 2017.

## 15 Earnings per share

The calculation of basic earnings per share is based on the profit attributable to shareholders of HK$8,225.3 million (2016: HK$7,340.7 million) and the weighted average of 13,987,896,483 shares (2016: 13,988,646,483 shares[1] ) in issue after adjusting for the shares bought back during the year.

As there were no diluted potential ordinary shares outstanding during the year (2016: nil), the diluted earnings per share for the year ended 31st December 2017 is the same as the basic earnings per share.

[1] Adjusted for the bonus share issue in 2017

## 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 2017 | **18,307.2** | **31,848.8** | **3,485.4** | **3,986.9** | **837.2** | **8,288.3** | **66,753.8** |
| Additions | **730.4** | **441.7** | **368.2** | **66.4** | **27.5** | **4,579.3** | **6,213.5** |
| Acquisition of businesses (Note 42 (a) & (b)) | **39.6** | **10.3** | **–** | **–** | **–** | **22.0** | **71.9** |
| Transfers from capital work in progress | **464.6** | **2,081.9** | **0.4** | **–** | **3.9** | **(2,550.8)** | **–** |
| Disposals/write off | **(143.8)** | **(14.2)** | **(83.7)** | **(0.8)** | **–** | **–** | **(242.5)** |
| Impairment | **–** | **–** | **–** | **(313.6)** | **–** | **–** | **(313.6)** |
| Exchange differences | **944.7** | **1,657.1** | **7.6** | **476.6** | **63.3** | **506.3** | **3,655.6** |
| At 31st December 2017 | **20,342.7** | **36,025.6** | **3,777.9** | **4,215.5** | **931.9** | **10,845.1** | **76,138.7** |
| **Accumulated depreciation** | | | | | | | |
| At 1st January 2017 | **7,201.8** | **7,305.9** | **2,283.6** | **636.5** | **116.4** | **–** | **17,544.2** |
| Charge for the year | **964.7** | **890.2** | **270.6** | **149.9** | **30.8** | **–** | **2,306.2** |
| Disposals/write off | **(109.4)** | **(3.5)** | **(62.3)** | **(0.1)** | **–** | **–** | **(175.3)** |
| Exchange differences | **266.7** | **282.7** | **4.9** | **70.1** | **11.8** | **–** | **636.2** |
| At 31st December 2017 | **8,323.8** | **8,475.3** | **2,496.8** | **856.4** | **159.0** | **–** | **20,311.3** |
| **Net book value** | | | | | | | |
| At 31st December 2017 | **12,018.9** | **27,550.3** | **1,281.1** | **3,359.1** | **772.9** | **10,845.1** | **55,827.4** |
| At 31st December 2016 | 11,105.4 | 24,542.9 | 1,201.8 | 3,350.4 | 720.8 | 8,288.3 | 49,209.6 |

## 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 2016 | 17,428.8 | 30,196.2 | 3,210.3 | 3,977.7 | 845.7 | 7,824.0 | 63,482.7 |
| Additions | 576.4 | 456.4 | 366.3 | 41.9 | 34.3 | 4,786.7 | 6,262.0 |
| Acquisition of businesses | 41.2 | – | – | – | – | 3.6 | 44.8 |
| Transfers from capital work in progress | 1,178.4 | 2,612.7 | 0.7 | – | 17.1 | (3,808.9) | – |
| Disposals/write off | (113.7) | (39.9) | (84.9) | (1.7) | – | (124.3) | (364.5) |
| Exchange differences | (803.9) | (1,376.6) | (7.0) | (31.0) | (59.9) | (392.8) | (2,671.2) |
| At 31st December 2016 | 18,307.2 | 31,848.8 | 3,485.4 | 3,986.9 | 837.2 | 8,288.3 | 66,753.8 |
| Accumulated depreciation | | | | | | | |
| At 1st January 2016 | 6,571.4 | 6,731.2 | 2,103.0 | 505.9 | 115.6 | – | 16,027.1 |
| Charge for the year | 930.0 | 824.2 | 249.2 | 136.6 | 13.4 | – | 2,153.4 |
| Disposals/write off | (84.5) | (25.7) | (64.3) | (0.2) | – | – | (174.7) |
| Exchange differences | (215.1) | (223.8) | (4.3) | (5.8) | (12.6) | – | (461.6) |
| At 31st December 2016 | 7,201.8 | 7,305.9 | 2,283.6 | 636.5 | 116.4 | – | 17,544.2 |
| Net book value | | | | | | | |
| At 31st December 2016 | 11,105.4 | 24,542.9 | 1,201.8 | 3,350.4 | 720.8 | 8,288.3 | 49,209.6 |
| At 31st December 2015 | 10,857.4 | 23,465.0 | 1,107.3 | 3,471.8 | 730.1 | 7,824.0 | 47,455.6 |

## 17 Investment property

| | **2017 HK$'M** | 2016 HK$'M |
|---|---|---|
| At 1st January | **729.0** | 713.0 |
| Fair value gain (Note 7) | **33.6** | 14.1 |
| Others | **1.4** | 1.9 |
| At 31st December | **764.0** | 729.0 |

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 2017 by an independent professionally qualified valuer, Knight Frank Petty Limited which conform to the The HKIS Valuation Standards (2017 Edition) shown in Note 2(h).

## 17 Investment property (Continued)

### *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%** | **8.5%** | **The higher the capitalisation rate, the lower the fair value** |
| Monthly rent | **HK$17.4 /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 Leasehold land

The Group's interests in leasehold land and land use rights movements during the year are analysed as follows:

| | **2017 HK$'M** | 2016 HK$'M |
|---|---|---|
| At 1st January | **2,016.6** | 1,961.9 |
| Additions | **136.4** | 199.9 |
| Acquisition of businesses (Note 42 (a) & (b)) | **12.1** | 44.2 |
| Disposals | **(8.0)** | (16.9) |
| Amortisation | **(59.6)** | (56.2) |
| Exchange differences | **131.8** | (116.3) |
| At 31st December | **2,229.3** | 2,016.6 |

## 19 Intangible assets

| | 2017<br>HK$'M | 2016<br>HK$'M |
|---|---|---|
| **(a) Goodwill** | | |
| At 1st January | **5,146.1** | 5,349.0 |
| Acquisition of businesses (Note 42 (a) & (b)) | **74.0** | 47.4 |
| Exchange differences | **223.2** | (250.3) |
| At 31st December | **5,443.3** | 5,146.1 |
| **(b) Other intangible asset** | | |
| Cost | | |
| At 1st January | **492.5** | 520.9 |
| Addition | **4.2** | - |
| Exchange differences | **31.0** | (28.4) |
| At 31st December | **527.7** | 492.5 |
| Accumulated amortisation | | |
| At 1st January | **(66.2)** | (50.4) |
| Amortisation | **(17.5)** | (18.1) |
| Exchange differences | **(3.7)** | 2.3 |
| At 31st December | **(87.4)** | (66.2) |
| Net book value | | |
| At 31st December | **440.3** | 426.3 |
| **Total intangible assets** | **5,883.6** | 5,572.4 |

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 (2016: HK$2,242.0 million) related to the Group's investments in Towngas China. 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 value-in-use calculations are derived from cash flow projections based on the most recent financial budget for the next five years approved by management. Cash flows beyond five year period have been extrapolated using growth rates from 0.0 per cent to 10.0 per cent (2016: 0.0 per cent to 10.0 per cent) per annum which are determined by considering both internal and external factors relating to the cash-generating units. Discount rate used of 8.5 per cent or 10.6 per cent (2016: 8.5 per cent or 10.0 per cent) is adopted to reflect specific risks relating to the relevant cash-generating units. Based on impairment tests prepared, there is no impairment for intangible assets as at 31st December 2017 and 2016.

Assuming growth rate decreased by 25 basis points or discount rate increased by 25 basis points, there is still adequate headroom and no impairment charge is required.

## 20 Subsidiaries

### Material non-controlling interests

The total non-controlling interest as at 31st December 2017 is HK$7,453.0 million (2016: HK$6,612.0 million) of which HK$5,336.0 million (2016: HK$4,751.4 million) is attributable to Towngas China and for 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 | |
|---|---|---|
| **Summarised statement of financial position** | **2017 HK$'M** | 2016 HK$'M |
| **Assets** | | |
| Non-current assets | **24,918.8** | 21,008.4 |
| Current assets | **4,182.1** | 3,545.6 |
| | **29,100.9** | 24,554.0 |
| **Liabilities** | | |
| Non-current liabilities | **(6,332.7)** | (6,130.5) |
| Current liabilities | **(9,308.5)** | (7,262.7) |
| | **(15,641.2)** | (13,393.2) |
| **Net assets** | **13,459.7** | 11,160.8 |

| | Towngas China | |
|---|---|---|
| **Summarised income statement and comprehensive income statement** | **2017 HK$'M** | 2016 HK$'M |
| Revenue | **8,759.8** | 7,181.1 |
| Profit before taxation | **1,917.7** | 1,455.4 |
| Taxation | **(405.4)** | (362.1) |
| Profit for the year | **1,512.3** | 1,093.3 |
| Other comprehensive income/(loss) | **1,087.0** | (977.2) |
| Total comprehensive income | **2,599.3** | 116.1 |
| Total comprehensive income attributable to non-controlling interests | **204.3** | 32.0 |
| Dividend paid to non-controlling shareholders | **99.4** | 92.3 |

## 20 Subsidiaries (Continued)

| Summarised cash flows statement | Towngas China 2017 HK$'M | 2016 HK$'M |
|---|---|---|
| Net cash generated from operating activities | **1,514.8** | 1,666.7 |
| Net cash used in investing activities | **(1,880.0)** | (1,595.9) |
| Net cash inflow/(outflow) from financing activities | **519.8** | (759.3) |
| Net increase/(decrease) in cash and cash equivalents | **154.6** | (688.5) |
| Cash and cash equivalents at beginning of year | **1,351.1** | 2,138.4 |
| Effect of foreign exchange rate changes | **99.6** | (98.8) |
| Cash and cash equivalents at end of year | **1,605.3** | 1,351.1 |

## 21 Associates

| | 2017 HK$'M | 2016 HK$'M |
|---|---|---|
| Investments in associates, including goodwill | **22,635.5** | 19,766.7 |
| Loans to associates – non-current | **757.9** | 718.3 |
| | **23,393.4** | 20,485.0 |
| Loan and other receivables from associates – current | **241.4** | 153.4 |
| Fair value of listed investments | **14,055.4** | 7,119.4 |

Loan and other receivables from associates are analysed below:

(i) Loans to associates in mainland China of HK$983.9 million (2016: HK$855.0 million) with effective interest rates ranging from 4.35 per cent to 7.20 per cent per annum (2016: 4.35 per cent to 7.20 per cent per annum) are unsecured and fully repayable in 2018 to 2019 (2016: 2017 to 2018).

(ii) The remaining balances are unsecured, interest free and have no fixed terms of repayment.

(iii) Loan and other receivables from associates are neither past due nor impaired and there is no history of default.

(iv) Loan and other receivables are denominated in the following currencies:

| | 2017 HK$'M | 2016 HK$'M |
|---|---|---|
| USD | **501.2** | 479.4 |
| RMB | **495.2** | 388.6 |
| HKD | **2.9** | 3.7 |
| | **999.3** | 871.7 |

## 21 Associates (Continued)

Particulars of the principal associates as at 31st December 2017 are listed below:

| Name | Note | Issued share capital/ registered capital | Percentage of the Group's equity interest | Place of incorporation/ operation | Principal activity |
|---|---|---|---|---|---|
| Fengcheng Xingao Coking Co., Ltd. | | RMB350.0 million | 40 | PRC | Chemical business |
| 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 | | RMB2,214.1 million | 26.5 | PRC | Gas sales and related businesses |
| 港華儲氣有限公司 | (ii) | RMB100 million | 64 | PRC | Gas storage project |
| Central Waterfront Property Investment Holdings Limited | (i) | US$100 | 15.8 | British Virgin Islands/ Hong Kong | 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 | 33 | 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 | | RMB920.0 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 |
| 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 |
| 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 |

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 2017 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** | | | | |
| Changchun Gas Co., Ltd. | RMB609.0 million | 28 | 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 |
| Foshan Gas Group Co., Ltd. | RMB556.0 million | 39 | PRC | Gas sales and related businesses |
| Fuzhou Fubei Natural Gas Co., Ltd. | RMB16.0 million | 40 | PRC | Gas sales and related businesses |
| Linqu Hong Kong & China Gas Company Limited | US$5.7 million | 42 | PRC | Gas sales and related businesses |
| Shandong Jihua Gas Co., Ltd. | RMB400.0 million | 49 | PRC | Gas sales and related businesses |
| Shijiazhuang Huabo Gas Co., Ltd. | 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 |
| SCEI Distributed Energy Systems Co., Ltd. | RMB500.0 million | 25 | PRC | Distributed energy systems businesses |

## 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 comprehensive income statement:

| | 2017 HK$'M | 2016 HK$'M |
|---|---|---|
| Income | **13,166.4** | 10,892.6 |
| Expenses, including taxation | **(10,562.1)** | (8,445.2) |
| Profit after taxation | **2,604.3** | 2,447.4 |
| Other comprehensive (loss)/income | **(2.9)** | 7.2 |
| Total comprehensive income | **2,601.4** | 2,454.6 |

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** | **2017 HK$'M** | 2016 HK$'M |
| **Assets** | | |
| Non-current assets | **102,367.8** | 94,666.8 |
| Current assets | **770.6** | 803.3 |
| | **103,138.4** | 95,470.1 |
| **Liabilities** | | |
| Non-current liabilities | **(18,345.7)** | (18,276.2) |
| Current liabilities | **(2,140.8)** | (2,020.3) |
| | **(20,486.5)** | (20,296.5) |
| **Net assets** | **82,651.9** | 75,173.6 |

## 21 Associates (Continued)

| Summarised income statement and comprehensive income statement | CWPI 2017 HK$'M | CWPI 2016 HK$'M |
|---|---|---|
| Income | **13,902.0** | 13,475.1 |
| Expenses, including taxation | **(2,705.1)** | (2,643.6) |
| Profit after taxation | **11,196.9** | 10,831.5 |
| Other comprehensive (loss)/income | **(18.6)** | 45.8 |
| Total comprehensive income | **11,178.3** | 10,877.3 |
| Share of total comprehensive income (15.79%) | **1,765.1** | 1,717.5 |
| Dividend received from the associate | **584.2** | 544.8 |

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 2017 HK$'M | CWPI 2016 HK$'M |
|---|---|---|
| **Net assets** | | |
| At 1st January | **75,173.6** | 67,746.3 |
| Profit for the year | **11,196.9** | 10,831.5 |
| Other comprehensive (loss)/income | **(18.6)** | 45.8 |
| Dividend paid | **(3,700.0)** | (3,450.0) |
| At 31st December | **82,651.9** | 75,173.6 |

| | 2017 HK$'M | 2016 HK$'M |
|---|---|---|
| **Carrying value** | | |
| Interest in associate (15.79%) | **13,050.7** | 11,869.9 |

## 22 Joint ventures

| | 2017 HK$'M | 2016 HK$'M |
|---|---|---|
| Investments in joint ventures, including goodwill | **10,865.2** | 9,226.5 |
| Loans to joint ventures – non-current | **24.0** | – |
| | **10,889.2** | 9,226.5 |
| Loan and other receivables from joint ventures – current | **939.7** | 900.1 |
| Loan and other payable to joint ventures – current | **(1,137.9)** | (718.9) |

Loan and other receivables from joint ventures are analysed below:

(i) Loans to joint ventures in mainland China of HK$444.7 million (2016: HK$140.7 million) with effective interest rates ranging from 4.35 per cent to 4.75 per cent per annum (2016: 4.35 per cent to 6.12 per cent per annum) are unsecured and fully repayable in 2018 to 2019 (2016: 2017).

(ii) Loan to a joint venture in Hong Kong of HK$79.0 million (2016: HK$52.9 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 neither past due nor impaired and there is no history of default.

(v) Loans and other receivables are denominated in the following currencies:

| | 2017 HK$'M | 2016 HK$'M |
|---|---|---|
| RMB | **877.8** | 844.9 |
| HKD | **85.9** | 55.2 |
| | **963.7** | 900.1 |

Loan and other payables to joint ventures are analysed below:

(i) Loan from a joint venture of HK$487.4 million (2016: HK$453.1 million) with effective interest rate of 4.44 per cent per annum (2016: 4.44 per cent per annum) is unsecured and repayable in 2018.

(ii) Loans from joint ventures of HK$648.1 million (2016: HK$261.8 million) with effective interest rate of 2.57 per cent per annum (2016: 2.35 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 (2016: denominated in RMB).

## 22 Joint ventures (Continued)

Particulars of the principal joint ventures as at 31st December 2017 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 Qinhua 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 |
| 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 | | RMB1,597.0 million | 50 | PRC | Water supply and sewage treatment |

# Direct joint ventures of the Company

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 2017 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** | | | | |
| Anqing Hong Kong and China Gas Company Limited | RMB73.0 million | 50 | PRC | Gas sales and related businesses |
| Chongqing Hong Kong and China Gas Company Limited | 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 | RMB80.0 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 |
| Taian City Taigang Gas Company Limited | 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 comprehensive income statement:

| | **2017 HK$'M** | 2016 HK$'M |
|---|---|---|
| Income | **12,365.4** | 11,750.8 |
| Expenses, including taxation | **(10,877.5)** | (10,285.5) |
| Profit after taxation and total comprehensive income | **1,487.9** | 1,465.3 |

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

## 23 Available-for-sale financial assets

| | 2017 HK$'M | 2016 HK$'M |
|---|---|---|
| Debt securities (Note (a)) | **461.8** | 453.0 |
| Equity securities (Note (b)) | **3,828.1** | 4,514.1 |
| | **4,289.9** | 4,967.1 |

Notes

| | | 2017 HK$'M | 2016 HK$'M |
|---|---|---|---|
| (a) | Debt securities | | |
| | Listed – Hong Kong | **165.6** | 126.9 |
| | Listed – overseas | **296.2** | 326.1 |
| | | **461.8** | 453.0 |

| | | 2017 HK$'M | 2016 HK$'M |
|---|---|---|---|
| (b) | Equity securities | | |
| | Listed – Hong Kong | **208.4** | 969.0 |
| | Listed – overseas | **65.0** | 206.1 |
| | Unlisted (Note (c)) | **3,554.7** | 3,339.0 |
| | | **3,828.1** | 4,514.1 |

(c) Included in the unlisted equity securities of HK$539.0 million (2016: HK$491.3 million) are carried at cost less impairment as these investments do not have a quoted market price and range of reasonable fair value estimate is so significant that the directors of the company are of the opinion that their fair value cannot be measured reliably.

(d) Available-for-sale financial assets are denominated in the following currencies:

| | 2017 HK$'M | 2016 HK$'M |
|---|---|---|
| RMB | **3,580.1** | 3,385.4 |
| HKD | **208.4** | 969.0 |
| USD | **501.4** | 612.7 |
| | **4,289.9** | 4,967.1 |

## 24 Retirement benefit assets/(liabilities)

| | 2017 HK$'M | 2016 HK$'M |
|---|---|---|
| At 31st December | **60.4** | (50.1) |

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:

| | 2017 HK$'M | 2016 HK$'M |
|---|---|---|
| Fair value of plan assets | **624.9** | 524.2 |
| Present value of funded obligations | **(564.5)** | (574.3) |
| Net assets/(liabilities) in the consolidated statement of financial position | **60.4** | (50.1) |

The plan assets did not include any shares of the Company as at 31st December 2017 (2016: nil).

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

| | 2017 HK$'M | 2016 HK$'M |
|---|---|---|
| Current service cost | **17.3** | 18.0 |
| Net interest cost | **0.9** | 0.7 |
| Administrative expenses | **0.1** | 0.1 |
| Total (Note 11) | **18.3** | 18.8 |

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

| | 2017 HK$'M | 2016 HK$'M |
|---|---|---|
| Actuarial gain due to liability experience | **(2.9)** | – |
| Actuarial gain due to financial assumption changes | **–** | (6.8) |
| Actuarial (gain)/loss due to demographic assumption changes | **(0.1)** | 0.3 |
| Actuarial gains | **(3.0)** | (6.5) |
| Return on plan assets, excluding amounts included in interest income | **(121.1)** | 0.2 |
| Total | **(124.1)** | (6.3) |

## 24 Retirement benefit assets/(liabilities) (Continued)

The movements in the defined benefit obligations are as follows:

| | 2017 HK$'M | 2016 HK$'M |
|---|---|---|
| At 1st January | **574.3** | 576.4 |
| Current service cost | **17.3** | 18.0 |
| Interest cost | **11.1** | 10.6 |
| Benefits paid | **(35.2)** | (24.2) |
| Actuarial gains | **(3.0)** | (6.5) |
| At 31st December | **564.5** | 574.3 |

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

| | 2017 HK$'M | 2016 HK$'M |
|---|---|---|
| At 1st January | **524.2** | 534.1 |
| Return on plan assets, excluding amounts included in interest income | **121.1** | (0.2) |
| Interest income recognised in consolidated income statement | **10.2** | 9.9 |
| Contribution paid by employer | **4.7** | 4.7 |
| Benefits paid | **(35.2)** | (24.2) |
| Administrative expenses | **(0.1)** | (0.1) |
| At 31st December | **624.9** | 524.2 |

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

| | 2017 HK$'M | 2016 HK$'M |
|---|---|---|
| At 1st January | **(50.1)** | (42.3) |
| Remeasurement effects recognised in other comprehensive income | **124.1** | 6.3 |
| Total cost of defined benefit retirement scheme (Note 11) | **(18.3)** | (18.8) |
| Contribution paid by employer | **4.7** | 4.7 |
| At 31st December | **60.4** | (50.1) |

## 24 Retirement benefit assets/(liabilities) (Continued)

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

| | **2017 %** | 2016 % |
|---|---|---|
| Equity securities | **76.0** | 75.0 |
| Debt securities | **20.0** | 22.0 |
| Cash | **4.0** | 3.0 |

The principal actuarial assumptions used are as follows:

| | **2017 %** | 2016 % |
|---|---|---|
| Discount rate | **2.0** | 2.0 |
| Expected rate of future salary increases | **4.5** | 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 2.9%** | **Increase by 3.0%** |
| Maximum salary scale increase rate | **0.25%** | **Increase by 1.8%** | **Decrease by 2.2%** |

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 2018 are HK$4.4 million.

## 24 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 12.0 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 |
|---|---|---|---|
| As 31st December 2017 | | | |
| Expected benefit payments | **101.5** | **169.2** | **717.6** |

## 25 Other non-current assets

| | **2017 HK$'M** | 2016 HK$'M |
|---|---|---|
| Aviation fuel facility construction receivable (Note (a)) | **2,581.6** | 2,464.0 |
| Other receivables (Note (b)) | **507.4** | 396.4 |
| | **3,089.0** | 2,860.4 |

Notes

(a) Aviation fuel facility construction receivable is denominated in HKD, unsecured and will be recovered by monthly instalments up to 2047.

(b) Balance mainly represents a prepayment for inventory to a supplier which is denominated in RMB.

## 26 Inventories

| | 2017 HK$'M | 2016 HK$'M |
|---|---|---|
| Stores and materials | **1,753.6** | 1,403.3 |
| Work in progress | **824.7** | 707.1 |
| | **2,578.3** | 2,110.4 |

The Group wrote down the carrying value of inventories by HK$2.1 million (2016: The Group wrote down the carrying value of inventories by HK$2.5 million) to its net realisable value during the year.

## 27 Trade and other receivables

| | 2017 HK$'M | 2016 HK$'M |
|---|---|---|
| Trade receivables (Note (a)) | **3,734.5** | 3,497.5 |
| Payments in advance (Note (b)) | **1,659.0** | 1,259.4 |
| Other receivables | **2,118.5** | 1,572.7 |
| | **7,512.0** | 6,329.6 |

Trade and other receivables are denominated in the following currencies:

| | 2017 HK$'M | 2016 HK$'M |
|---|---|---|
| RMB | **2,957.9** | 3,705.3 |
| HKD | **4,521.3** | 2,534.3 |
| USD | **31.5** | 88.7 |
| Others | **1.3** | 1.3 |
| | **7,512.0** | 6,329.6 |

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. As at 31st December 2017, the aging analysis of the trade receivables, net of impairment provision, is as follows:

| | 2017 HK$'M | 2016 HK$'M |
|---|---|---|
| 0 – 30 days | **3,293.5** | 2,874.8 |
| 31 – 60 days | **119.0** | 199.0 |
| 61 – 90 days | **41.5** | 135.9 |
| Over 90 days | **280.5** | 287.8 |
| | **3,734.5** | 3,497.5 |

## 27 Trade and other receivables (Continued)

Notes (Continued)

(a) (Continued)

(i) At 31st December 2017, trade receivables of the Group that were neither past due nor impaired amounted to HK$3,053.5 million (2016: HK$2,641.2 million). These balances mainly relate to individuals or companies that have been the Group's customers for more than 6 months and with no history of default in the past.

(ii) Receivables that were past due but not impaired relate to a wide range of customers and management believes that no impairment provision is necessary as there has not been a significant change in credit quality and the balances are still considered fully recoverable. The aging analysis of trade receivables that were past due but not impaired is as follows:

| | 2017 HK$'M | 2016 HK$'M |
|---|---|---|
| 1 – 30 days | **240.0** | 233.6 |
| 31 – 60 days | **119.0** | 199.0 |
| 61 – 90 days | **41.5** | 135.9 |
| Over 90 days | **280.5** | 287.8 |
| | **681.0** | 856.3 |

(iii) As at 31st December 2017, trade receivables of the Group amounting to HK$187.8 million (2016: HK$134.4 million) were impaired, all of which are aged over 90 days. The individually impaired receivables mainly relate to customers that have either been placed under liquidation or in severe financial difficulties.

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

| | 2017 HK$'M | 2016 HK$'M |
|---|---|---|
| At 1st January | **134.4** | 129.3 |
| Impairment loss recognised | **50.9** | 13.7 |
| Uncollectible amounts written off | **(2.0)** | (7.4) |
| Exchange differences | **4.5** | (1.2) |
| At 31st December | **187.8** | 134.4 |

(b) Balance mainly represents prepayment for purchase of materials and services in relation to the Group's gas and New Energy businesses in Hong Kong and mainland China. As at 31st December 2017, the directors of the Company reviewed the composition of the balance and considered the amount is recoverable.

## 28 Financial assets at fair value through profit or loss

| | 2017 HK$'M | 2016 HK$'M |
|---|---|---|
| Debt securities (Note (a)) | – | 46.8 |
| Equity securities (Note (b)) | 42.1 | 20.5 |
| | 42.1 | 67.3 |

Notes

| | | 2017 HK$'M | 2016 HK$'M |
|---|---|---|---|
| (a) | Debt securities | | |
| | Unlisted – overseas | – | 46.8 |
| | | – | 46.8 |

| | | 2017 HK$'M | 2016 HK$'M |
|---|---|---|---|
| (b) | Equity securities | | |
| | Listed – Hong Kong | 30.0 | 18.5 |
| | Listed – overseas | 12.1 | 2.0 |
| | | 42.1 | 20.5 |

Financial assets at fair value through profit or loss are denominated in the following currencies:

| | 2017 HK$'M | 2016 HK$'M |
|---|---|---|
| HKD | 30.0 | 65.3 |
| USD | 12.1 | 2.0 |
| | 42.1 | 67.3 |

## 29 Time deposits, cash and bank balances

| | 2017 HK$'M | 2016 HK$'M |
|---|---|---|
| Time deposits over three months | 2,071.0 | 3,381.1 |
| Time deposits up to three months | 6,208.7 | 4,067.5 |
| Cash and bank balances | 4,549.9 | 4,008.6 |
| | 10,758.6 | 8,076.1 |

## 29 Time deposits, cash and bank balances (Continued)

The effective interest rates on time deposits in Hong Kong and mainland China are 1.96 per cent and 1.73 per cent per annum respectively (2016: 1.45 per cent and 1.83 per cent per annum). These deposits have average maturity dates within 163 days (2016: 269 days).

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

| | **2017 HK$'M** | 2016 HK$'M |
|---|---|---|
| USD | **4,685.6** | 5,734.4 |
| RMB | **4,732.1** | 4,120.1 |
| HKD | **3,365.8** | 1,537.4 |
| THB | **41.2** | 61.2 |
| Others | **4.9** | 4.1 |
| | **12,829.6** | 11,457.2 |

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.

## 30 Trade and other payables

| | **2017 HK$'M** | 2016 HK$'M |
|---|---|---|
| Trade payables (Note (a)) | **2,977.2** | 2,647.0 |
| Other payables and accruals (Note (b)) | **11,292.6** | 9,487.2 |
| | **14,269.8** | 12,134.2 |

Notes

(a) At 31st December 2017, the aging analysis of the trade payables is as follows:

| | **2017 HK$'M** | 2016 HK$'M |
|---|---|---|
| 0 – 30 days | **1,340.0** | 1,379.3 |
| 31 – 60 days | **488.0** | 249.5 |
| 61 – 90 days | **298.0** | 264.0 |
| Over 90 days | **851.2** | 754.2 |
| | **2,977.2** | 2,647.0 |

(b) The balances mainly represent advance received from customers for construction works and accrual for services or goods received from suppliers.

## 30 Trade and other payables (Continued)

Notes (Continued)

(c) Trade and other payables are denominated in the following currencies:

| | **2017 HK$'M** | 2016 HK$'M |
|---|---|---|
| RMB | **11,916.5** | 10,227.7 |
| HKD | **2,208.8** | 1,732.7 |
| USD | **127.0** | 149.3 |
| Others | **17.5** | 24.5 |
| | **14,269.8** | 12,134.2 |

## 31 Borrowings

| | **2017 HK$'M** | 2016 HK$'M |
|---|---|---|
| **Non-current** | | |
| Bank and other loans | **8,413.7** | 8,399.2 |
| Guaranteed notes (Note (a)(i)(ii)) | **12,748.1** | 18,896.9 |
| | **21,161.8** | 27,296.1 |
| **Current** | | |
| Bank and other loans | **8,023.3** | 5,951.8 |
| Guaranteed notes (Note (a)(ii)) | **7,733.7** | – |
| | **15,757.0** | 5,951.8 |
| **Total borrowings** | **36,918.8** | 33,247.9 |

Notes

(a) Guaranteed notes comprise:

(i) The HK$11,038.0 million, AUD161.0 million and JPY12,000.0 million (2016: HK$9,738.0 million, AUD161.0 million and JPY10,000.0 million) (which in aggregate is equivalent to HK$12,852.2 million (2016: HK$11,301.3 million)) guaranteed notes were issued by HKCG (Finance) Limited, a wholly-owned subsidiary of the Company, between 2nd June 2009 and 24th November 2017. 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 10 to 40 years.

## 31 Borrowings (Continued)

Notes (Continued)

(a) Guaranteed notes comprise: (Continued)

(ii) The US$1 billion guaranteed notes were issued by HKCG (Finance) Limited, a wholly-owned subsidiary of the Company, on 7th August 2008. The notes are unsecured and guaranteed by the Company as to repayment, carry a fixed coupon rate of 6.25 per cent per annum payable semi-annually in arrear and have a maturity term of 10 years. The notes are listed on The Stock Exchange of Hong Kong Limited. At 31st December 2017, notes with a principal amount of US$995.0 million (2016: US$995.0 million), which is equivalent to HK$7,774.9 million (2016: HK$7,717.2 million), are outstanding in the market and the market value of the notes was HK$7,947.9 million (2016: HK$8,211.5 million). The notes would be matured in August 2018.

(b) The maturity of borrowings is as follows:

| | Bank and other loans | | Guarantee notes | |
|---|---|---|---|---|
| | **2017 HK$'M** | 2016 HK$'M | **2017 HK$'M** | 2016 HK$'M |
| Within 1 year | **8,023.3** | 5,951.8 | **7,733.7** | – |
| Between 1 and 2 years | **3,501.1** | 1,683.2 | **495.2** | 7,700.8 |
| Between 2 and 5 years | **4,891.7** | 6,635.1 | **2,977.4** | 774.0 |
| Wholly repayable within 5 years | **16,416.1** | 14,270.1 | **11,206.3** | 8,474.8 |
| Wholly repayable over 5 years | **20.9** | 80.9 | **9,275.5** | 10,422.1 |

(c) The exposure of the Group's borrowings to interest rate changes and the contractual repricing dates are all within 6 months from the statement of financial position date, 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 statement of financial position date are as follows:

| | **2017** | | | | | 2016 | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | **HKD** | **USD** | **RMB** | **AUD** | **JPY** | HKD | USD | RMB | AUD | JPY |
| Bank and other loans | **2.0%** | **2.3%** | **4.4%** | **N/A** | **1.2%** | 1.6% | 1.4% | 4.2% | N/A | 0.8% |
| Guaranteed notes | **3.5%** | **5.4%** | **N/A** | **3.1%** | **3.3%** | 3.6% | 5.4% | N/A | 3.1% | 3.4% |

(d) 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.

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

| | **2017 HK$'M** | 2016 HK$'M |
|---|---|---|
| HKD | **15,704.7** | 13,906.2 |
| RMB | **11,127.0** | 9,541.0 |
| USD | **8,256.1** | 8,219.8 |
| AUD | **982.0** | 899.7 |
| JPY | **849.0** | 681.2 |
| | **36,918.8** | 33,247.9 |

## 32 Customers' deposits

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.

The balances are denominated in HKD and bear interest at bank savings rate.

## 33 Deferred taxation

The movements in the deferred taxation are as follows:

| | **2017 HK$'M** | 2016 HK$'M |
|---|---|---|
| At 1st January | **5,067.3** | 4,874.7 |
| Charged to income statement | **409.6** | 334.1 |
| Acquisition of businesses | **–** | 0.9 |
| Withholding tax | **(53.4)** | (63.0) |
| Exchange differences | **299.6** | (79.4) |
| At 31st December | **5,723.1** | 5,067.3 |

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

| | Accelerated tax depreciation | | Mining and oil properties | | Others | | Total | |
|---|---|---|---|---|---|---|---|---|
| **Deferred tax liabilities** | **2017 HK$'M** | 2016 HK$'M | **2017 HK$'M** | 2016 HK$'M | **2017 HK$'M** | 2016 HK$'M | **2017 HK$'M** | 2016 HK$'M |
| At 1st January | **2,852.7** | 2,577.5 | **1,536.9** | 1,578.4 | **696.8** | 737.9 | **5,086.4** | 4,893.8 |
| Charged/(credited) to income statement | **314.4** | 324.6 | **(20.8)** | (44.7) | **116.0** | 54.2 | **409.6** | 334.1 |
| Acquisition of businesses | **–** | – | **–** | – | **–** | 0.9 | **–** | 0.9 |
| Withholding tax | **–** | – | **–** | – | **(53.4)** | (63.0) | **(53.4)** | (63.0) |
| Exchange differences | **90.2** | (49.4) | **162.9** | 3.2 | **46.5** | (33.2) | **299.6** | (79.4) |
| At 31st December | **3,257.3** | 2,852.7 | **1,679.0** | 1,536.9 | **805.9** | 696.8 | **5,742.2** | 5,086.4 |

| | Provisions | | Tax losses | | Total | |
|---|---|---|---|---|---|---|
| **Deferred tax assets** | **2017 HK$'M** | 2016 HK$'M | **2017 HK$'M** | 2016 HK$'M | **2017 HK$'M** | 2016 HK$'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** | | | | | **5,723.1** | 5,067.3 |

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$600.6 million (2016: HK$543.4 million) in respect of losses amounting to HK$2,561.5 million (2016: HK$2,412.8 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$2,094.1 million (2016: HK$1,709.4 million) which will expire at various dates up to and including 2022 (2016: 2021).

## 34 Derivative financial instruments

| | 2017 | | 2016 | |
|---|---|---|---|---|
| | **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 | **19.2** | **(475.7)** | 176.1 | (540.9) |
| Foreign currency forward contracts – held-for-trading | **1.5** | **(90.1)** | 81.0 | (1.3) |
| Cross currency swap contracts – held-for-trading | **17.3** | **(38.7)** | – | – |
| Related derivative of available-for-sale financial asset | **231.9** | **–** | 248.8 | – |
| | **269.9** | **(604.5)** | 505.9 | (542.2) |
| **Current** | | | | |
| Cross currency swap and interest rate swap contracts – cash flow hedges | **114.5** | **–** | – | – |
| Foreign currency forward contracts – held-for-trading | **5.1** | **(76.2)** | – | – |
| Cross currency swap contracts – held-for-trading | **–** | **–** | 87.5 | – |
| | **119.6** | **(76.2)** | 87.5 | – |

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.

The ineffective portion recognised in the income statement that arises from cash flow hedges amounts to a gain of HK$2.0 million (2016: a gain of HK$5.0 million).

## 34 Derivative financial instruments (Continued)

The major terms of the outstanding derivative contracts 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** | | | | | | |
| USD1 billion | 2018 | USD1 to HKD7.8 | 6.25% | 5.2% – 5.66% | Semi-annually | Quarterly or semi-annually |
| 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 |
| JPY2 billion | 2027 | JPY100 to HKD6.877 | 0.35% | 2.9% | Annually | Quarterly |
| **Foreign currency forward contracts – held-for-trading** | | | | | | |
| RMB448 .8 million | 2018 | HKD1 to RMB0.90 | Nil | Nil | Nil | Nil |
| RMB456.1 million | 2018 | USD1 to RMB7.02 | Nil | Nil | Nil | Nil |
| RMB366.9 million | 2019 | HKD1 to RMB0.92 | Nil | Nil | Nil | Nil |
| RMB90.7 million | 2018 | HKD1 to RMB0.91 | Nil | Nil | Nil | Nil |
| RMB664.8 million | 2019 | HKD1 to RMB0.93 – RMB0.94 | Nil | Nil | Nil | Nil |
| **Cross currency swap contracts – held-for-trading** | | | | | | |
| #HKD1.6 billion | 2017 | HKD1 to RMB0.83 – RMB0.86 | Nil | 1.94% – 2.39% | Not applicable | Quarterly or Annually |
| USD250 million | 2019 | USD1 to HKD7.785 | 4.75% | 4.18% – 4.23% | Semi-annually | Quarterly or semi-annually |
| RMB355.1 million | 2019 | HKD1 to RMB0.88 (Initial exchange) HKD1 to RMB0.94 (Final exchange) | Not applicable | Not applicable | On maturity | On maturity |

# Fully settled in 2017

Gains and losses recognised in the hedging reserve in equity (Note 37) on the swaps as of 31st December 2017 will be continuously released to the income statement until the repayment of relevant borrowings.

## 35 Share capital

| | Number of shares | | Share capital | |
|---|---|---|---|---|
| | **2017** | 2016 | **2017 HK$'M** | 2016 HK$'M |
| Issued and fully paid: | | | | |
| At beginning of year | **12,717,042,258** | 11,560,947,508 | **5,474.7** | 5,474.7 |
| Bonus shares | **1,271,604,225** | 1,156,094,750 | **–** | – |
| Shares bought back (Note) | **(1,000,000)** | – | **–** | – |
| At end of year | **13,987,646,483** | 12,717,042,258 | **5,474.7** | 5,474.7 |

Note

During the year, 1,000,000 shares (2016: nil) of the Company were bought back at a total consideration of HK$15.4 million (2016: nil), including transaction cost of HK$0.1 million (2016: nil), at the price per share between HK$15.22 and HK$15.44 (2016: nil). All of the shares bought back have been cancelled.

## 36 Perpetual capital securities

In January 2014, the Group issued its first perpetual subordinated guaranteed capital securities (the "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 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.

## 37 Reserves

| | Investment revaluation reserve HK$'M | Hedging reserve HK$'M | Exchange reserve HK$'M | Retained profits HK$'M | Total HK$'M |
|---|---|---|---|---|---|
| At 1st January 2017 | 119.6 | 259.2 | (1,369.2) | 49,447.9 | 48,457.5 |
| Profit attributable to shareholders | – | – | – | 8,225.3 | 8,225.3 |
| Other comprehensive income: | | | | | |
| Remeasurements of retirement benefit | – | – | – | 124.1 | 124.1 |
| Change in value of available-for-sale financial assets | 165.0 | – | – | – | 165.0 |
| Release of reserve of available-for-sale financial assets upon disposal | (413.4) | – | – | – | (413.4) |
| Impairment loss on available-for-sale financial assets transferred to income statement | 135.8 | – | – | – | 135.8 |
| Change in fair value of cash flow hedges | – | (117.5) | – | – | (117.5) |
| Share of other comprehensive loss of an associate | – | (2.9) | – | – | (2.9) |
| Exchange differences | – | – | 3,020.6 | – | 3,020.6 |
| Total comprehensive income for the year | (112.6) | (120.4) | 3,020.6 | 8,349.4 | 11,137.0 |
| Shares bought back | – | – | – | (15.4) | (15.4) |
| Further acquisition of subsidiaries | – | – | – | (11.8) | (11.8) |
| 2016 final dividend paid | – | – | – | (2,924.7) | (2,924.7) |
| 2017 interim dividend paid | – | – | – | (1,678.5) | (1,678.5) |
| At 31st December 2017 | 7.0 | 138.8 | 1,651.4 | 53,166.9 | 54,964.1 |
| Balance after 2017 final dividend proposed | 7.0 | 138.8 | 1,651.4 | 49,949.7 | 51,746.9 |
| 2017 final dividend proposed | – | – | – | 3,217.2 | 3,217.2 |
| | 7.0 | 138.8 | 1,651.4 | 53,166.9 | 54,964.1 |

## 37 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 2016 | (471.9) | 166.5 | 1,307.3 | 46,364.8 | 47,366.7 |
| Profit attributable to shareholders | – | – | – | 7,340.7 | 7,340.7 |
| Other comprehensive income: | | | | | |
| Remeasurements of retirement benefit | – | – | – | 6.3 | 6.3 |
| Change in value of available-for-sale financial assets | 57.2 | – | – | – | 57.2 |
| Impairment loss on available-for-sale financial assets transferred to income statement | 534.3 | – | – | – | 534.3 |
| Change in fair value of cash flow hedges | – | 85.5 | – | – | 85.5 |
| Share of other comprehensive income of an associate | – | 7.2 | – | – | 7.2 |
| Exchange differences | – | – | (2,676.5) | – | (2,676.5) |
| Total comprehensive income for the year | 591.5 | 92.7 | (2,676.5) | 7,347.0 | 5,354.7 |
| Further acquisition of subsidiaries | – | – | – | (78.9) | (78.9) |
| 2015 final dividend paid | – | – | – | (2,659.0) | (2,659.0) |
| 2016 interim dividend paid | – | – | – | (1,526.0) | (1,526.0) |
| At 31st December 2016 | 119.6 | 259.2 | (1,369.2) | 49,447.9 | 48,457.5 |
| Balance after 2016 final dividend proposed | 119.6 | 259.2 | (1,369.2) | 46,523.0 | 45,532.6 |
| 2016 final dividend proposed | – | – | – | 2,924.9 | 2,924.9 |
| | 119.6 | 259.2 | (1,369.2) | 49,447.9 | 48,457.5 |

## 38 Contingent liabilities

The Company and the Group did not have any material contingent liabilities as at 31st December 2017 and 2016.

## 39 Commitments

(a) Capital expenditures for property, plant and equipment

| | 2017 HK$'M | 2016 HK$'M |
|---|---|---|
| Contracts had been entered into but not brought into the consolidated financial statements at 31st December | **4,164.1** | 3,455.4 |

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

| | 2017 HK$'M | 2016 HK$'M |
|---|---|---|
| Contracts had been entered into but not brought into the consolidated financial statements at 31st December | **2,809.0** | 2,127.9 |

(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 2017, the Group's commitments to these projects were approximately HK$2,571.5 million (2016: HK$2,071.4 million).

(d) Lease commitments

*Lessee*

At 31st December 2017, future aggregate minimum lease payments of land, buildings, plant and equipment under non-cancellable operating leases are as follows:

| | 2017 HK$'M | 2016 HK$'M |
|---|---|---|
| Not later than 1 year | **133.7** | 122.8 |
| Later than 1 year and not later than 5 years | **265.9** | 179.3 |
| Later than 5 years | **221.7** | 213.5 |
| | **621.3** | 515.6 |

## 39 Commitments (Continued)

(d) Lease commitments (Continued)

*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) and rental of data centre facilities under operating leases. Except for certain car parks rented out on an hourly or a monthly basis, these leases typically run for a period of 2 to 10 years. At 31st December 2017, future aggregate minimum lease payments receivable under non-cancellable operating leases are as follows:

| | **2017** **HK$'M** | 2016 HK$'M |
|---|---|---|
| Not later than 1 year | **126.5** | 86.0 |
| Later than 1 year and not later than 5 years | **256.8** | 235.0 |
| Later than 5 years | **95.9** | 145.6 |
| | **479.2** | 466.6 |

## 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

| | **2017** **HK$'M** | 2016 HK$'M |
|---|---|---|
| Associates | | |
| Sale of goods and services (Note (i)) | **30.4** | 21.0 |
| Loan interest income (Note (ii)) | **36.7** | 41.0 |
| Joint ventures | | |
| Sale of goods and services (Note (i)) | **64.0** | 68.2 |
| Loan interest income (Note (ii)) | **7.3** | 10.6 |
| Other related parties | | |
| Sale of goods and services (Note (i)) | **46.0** | 35.0 |
| Interest income from bank deposits (Note (i)) | **1.3** | 1.7 |

## 40 Related party transactions (Continued)

(b) Interest expense and purchase of goods and services

| | 2017 HK$'M | 2016 HK$'M |
|---|---|---|
| Associates | | |
| Purchase of goods and services (Note (i)) | **320.2** | 104.9 |
| Joint ventures | | |
| Purchase of goods and services (Note (i)) | **42.8** | **28.4** |
| Loan interest expenses (Note (ii)) | **26.9** | 24.9 |
| Other related parties | | |
| Purchase of goods and services (Note (i)) | **22.2** | 16.6 |
| Interest expense on bank loans (Note (i)) | **26.6** | 27.8 |

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

| | 2017 HK$'M | 2016 HK$'M |
|---|---|---|
| Time deposits and interest receivables | **420.4** | 30.0 |
| Bank loans and interest payables | **805.0** | 560.2 |
| Trade receivables | **4.7** | 3.3 |
| Trade payables | **0.6** | 0.1 |

(d) Other related party transactions are also disclosed in Notes 12, 21, 22, 27 and 30.

## 41 Notes to consolidated cash flow statement

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

| | 2017 HK$'M | 2016 HK$'M |
|---|---|---|
| Profit before taxation | **11,096.7** | 9,845.7 |
| Share of results of associates | **(2,604.3)** | (2,447.4) |
| Share of results of joint ventures | **(1,487.9)** | (1,465.3) |
| Gain on disposal of associates | **(23.8)** | – |
| Provision for investment in an associate | **–** | 250.0 |
| Fair value gain on investment property | **(33.6)** | (14.1) |
| Gain on deemed disposal of partial interest in associates | **(253.4)** | – |
| Impairment of trade receivables | **30.9** | 13.7 |
| Provision for assets | **365.1** | 206.6 |
| Ineffective portion on cash flow hedges | **(2.0)** | (5.0) |
| Unhedged portion on cash flow hedges | **0.4** | – |
| Interest income | **(256.1)** | (209.9) |
| Interest expense | **1,256.9** | 1,207.4 |
| Dividend income from investments in securities | **(187.5)** | (151.5) |
| Depreciation and amortisation | **2,374.8** | 2,223.1 |
| Loss on disposal/write off of property, plant and equipment | **4.2** | 30.9 |
| Loss/(gain) on disposal of leasehold land | **0.3** | (45.2) |
| Fair value gain on derivative | **–** | (248.8) |
| Net realised gain on available-for-sale financial assets | **(243.7)** | (13.3) |
| Net realised and unrealised loss/(gain) on investments in financial assets at fair value through profit or loss and derivative financial instruments | **312.3** | (170.6) |
| Tax paid | **(1,473.8)** | (1,438.8) |
| Exchange differences | **(354.7)** | 336.8 |
| Changes in working capital | | |
| Increase in customers' deposits | **28.8** | 19.9 |
| (Increase)/decrease in inventories | **(422.9)** | 148.1 |
| (Increase)/decrease in trade and other receivables | **(1,297.1)** | 2.0 |
| Increase in trade and other payables | **1,673.7** | 371.6 |
| Increase in asset retirement obligations | **7.5** | 9.2 |
| Changes in retirement benefit assets | **13.6** | 14.1 |
| Net cash from operating activities | **8,524.4** | 8,469.2 |

## 41 Notes to consolidated cash flow statement (Continued)

(b) Reconciliation of liabilities arising from financing activities

| | Borrowings HK$'M |
|---|---|
| At 1st January 2017 | 33,247.9 |
| Cash flows | 2,753.5 |
| Exchange differences | 893.2 |
| Others | 24.2 |
| At 31st December 2017 | 36,918.8 |

## 42 Business combinations

(a) Business combination under the Group's new energy business

For the year ended 31st December 2017, the following businesses are acquired:

| | Percentage of registered capital acquired | Purchase consideration HK$'M |
|---|---|---|
| 韓城市易高美源清潔能源有限公司 | 90 | 5.3 |
| 巴彥淖爾市耀進燃氣有限公司 | 90 | 0.6 |
| 杭錦後旗耀進燃氣有限公司 | 90 | 0.1 |
| 漯河易高清潔能源有限公司 | 85 | 14.3 |

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

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

| | Acquirees' fair value at acquisition date HK$'M |
|---|---|
| Property, plant and equipment (Note 16) | 43.6 |
| Leasehold land (Note 18) | 5.9 |
| Trade and other receivables | 12.7 |
| Cash and bank balances | 0.1 |
| Trade and other payables | (45.1) |
| Net assets | 17.2 |
| Non-controlling interests | (2.5) |
| Net identifiable assets acquired | 14.7 |
| Goodwill (Note 19 (a)) | 5.6 |
| Purchase consideration | 20.3 |

## 42 Business combinations (Continued)

(a) Business combination under the Group's new energy business (Continued)

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

**Net cash flow arising on acquisition:**

| | HK$'M |
|---|---|
| Purchase consideration for acquisition of businesses, settled in cash | **14.0** |
| Cash and cash equivalents in business acquired | **(0.1)** |
| Cash outflow on acquisition of businesses | **13.9** |

As at 31st December 2017, purchase consideration of HK$6.3 million remained unpaid and included in trade and other payables.

(b) Business combination under Towngas China

For the year ended 31st December 2017, Towngas China acquired the following businesses:

| | Percentage of registered capital acquired | Purchase consideration HK$'M |
|---|---|---|
| 鍾祥港華燃氣有限公司 | **100** | **34.4** |
| 瀋陽智慧能源系統科技有限公司 | **55** | **68.0** |

The inclusion of the acquired businesses does not have a significant impact of the Group's turnover and profit for the year. The details of fair value of net identifiable assets acquired and goodwill are as follows:

| | Acquirees' fair value at acquisition date HK$'M |
|---|---|
| Property, plant and equipment (Note 16) | **28.3** |
| Leasehold land (Note 18) | **6.2** |
| Trade and other receivables | **1.3** |
| Inventories | **0.3** |
| Cash and bank balances | **5.1** |
| Trade and other payables | **(39.7)** |
| Amount due from non-controlling shareholders | **58.4** |
| Net assets | **59.9** |
| Non-controlling interests | **(25.9)** |
| Net identifiable assets acquired | **34.0** |
| Goodwill (Note 19 (a)) | **68.4** |
| Purchase consideration | **102.4** |

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

## 42 Business combinations (Continued)

(b) Business combination under Towngas China (Continued)

**Net cash flow arising on acquisition:**

| | HK$'M |
|---|---|
| Purchase consideration for acquisition of business, settle in cash | **59.3** |
| Cash and cash equivalents in business acquired | **(5.1)** |
| Cash outflow on acquisition of business | **54.2** |

As at 31st December 2017, purchase consideration of HK$43.1 million remained unpaid and included in trade and other payables.

(c) 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$385.4 million. The difference between the share of net assets value acquired and total consideration of HK$11.8 million was recognised directly in equity for these transactions with non-controlling interests.

(d) Apart from the above, there were no other material acquisitions during the year ended 31st December 2017.

## 43 Statement of financial position of the Company

| | 2017 HK$'M | 2016 HK$'M |
|---|---|---|
| **Assets** | | |
| **Non-current assets** | | |
| Property, plant and equipment | **11,613.3** | 11,107.8 |
| Leasehold land | **218.0** | 225.0 |
| Subsidiaries | **18,148.3** | 17,228.9 |
| Joint ventures | **831.7** | 831.7 |
| Available-for-sale financial assets | **–** | 30.0 |
| Retirement benefit assets | **60.4** | – |
| | **30,871.7** | 29,423.4 |
| **Current assets** | | |
| Inventories | **1,198.4** | 1,124.8 |
| Trade and other receivables | **2,091.5** | 1,859.7 |
| Loan and other receivables from associates | **21.5** | 28.6 |
| Other receivables from joint ventures | **16.9** | 11.7 |
| Derivative financial instruments | **0.4** | – |
| Time deposits over three months | **980.1** | 1,042.5 |
| Time deposits up to three months, cash and bank balances | **1,487.5** | 723.2 |
| | **5,796.3** | 4,790.5 |
| **Current liabilities** | | |
| Trade and other payables | **(1,606.3)** | (1,348.9) |
| Provision for taxation | **(169.5)** | (160.6) |
| | **(1,775.8)** | (1,509.5) |
| **Total assets less current liabilities** | **34,892.2** | 32,704.4 |
| **Non-current liabilities** | | |
| Loan and other payables to subsidiaries | **(11,790.0)** | (10,248.1) |
| Customers' deposits | **(1,316.5)** | (1,289.0) |
| Deferred taxation | **(1,333.2)** | (1,286.2) |
| Retirement benefit liabilities | **–** | (50.1) |
| Borrowings | **(247.8)** | (246.8) |
| | **(14,687.5)** | (13,120.2) |
| **Net assets** | **20,204.7** | 19,584.2 |

## 43 Statement of financial position of the Company (Continued)

| | 2017 HK$'M | 2016 HK$'M |
|---|---|---|
| **Capital and reserves** | | |
| Share capital | **5,474.7** | 5,474.7 |
| Reserves (Note (a)) | **14,730.0** | 14,109.5 |
| | **20,204.7** | 19,584.2 |

Approved by the Board of Directors on 20th March 2018

**Lee Shau Kee**
*Director*

**David Li Kwok Po**
*Director*

## 43 Statement of financial position of the Company (Continued)

Note

(a) Reserves of the Company

| | Investment revaluation reserve HK$'M | Retained profits HK$'M | Total HK$'M |
|---|---|---|---|
| **At 1st January 2017** | **7.8** | **14,101.7** | **14,109.5** |
| Profit attributable to shareholders | **–** | **5,122.8** | **5,122.8** |
| Other comprehensive income: | | | |
| Remeasurements of retirement benefit | **–** | **124.1** | **124.1** |
| Change in value of available-for-sale financial assets | **(7.8)** | **–** | **(7.8)** |
| Total comprehensive income for the year | **(7.8)** | **5,246.9** | **5,239.1** |
| Shares bought back | **–** | **(15.4)** | **(15.4)** |
| 2016 final dividend paid | **–** | **(2,924.7)** | **(2,924.7)** |
| 2017 interim dividend paid | **–** | **(1,678.5)** | **(1,678.5)** |
| At 31st December 2017 | **–** | **14,730.0** | **14,730.0** |
| Balance after 2017 final dividend proposed | **–** | **11,512.8** | **11,512.8** |
| 2017 final dividend proposed | **–** | **3,217.2** | **3,217.2** |
| | **–** | **14,730.0** | **14,730.0** |
| At 1st January 2016 | 8.3 | 12,830.5 | 12,838.8 |
| Profit attributable to shareholders | – | 5,449.9 | 5,449.9 |
| Other comprehensive income: | | | |
| Remeasurements of retirement benefit | – | 6.3 | 6.3 |
| Change in value of available-for-sale financial assets | (0.5) | – | (0.5) |
| Total comprehensive income for the year | (0.5) | 5,456.2 | 5,455.7 |
| 2015 final dividend paid | – | (2,659.0) | (2,659.0) |
| 2016 interim dividend paid | – | (1,526.0) | (1,526.0) |
| At 31st December 2016 | 7.8 | 14,101.7 | 14,109.5 |
| Balance after 2016 final dividend proposed | 7.8 | 11,176.8 | 11,184.6 |
| 2016 final dividend proposed | – | 2,924.9 | 2,924.9 |
| | 7.8 | 14,101.7 | 14,109.5 |

## Subsidiaries

The following is a list of the principal subsidiaries as at 31st December 2017:

| 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 | 90 | 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 |
| 常州金壇港華燃氣有限公司 | RMB60.0 million | 60 | 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 |
| 景縣港華燃氣有限公司 | RMB79.0 million | 81 | 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 |

# Direct subsidiaries of the Company
† Wholly foreign-owned enterprises

## Subsidiaries (Continued)

The following is a list of the principal subsidiaries as at 31st December 2017: (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) | | | | |
| † | 新密港華燃氣有限公司 | US$12.5 million | 100 | PRC | Gas sales and related businesses |
| † | 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 | 2,768,689,545 shares of HK$0.1 each | 67.1 | Cayman Islands/ Hong Kong | Investment holding |
| | The following subsidiaries engaged in gas businesses are held by Towngas China Company Limited (TCCL) and the respective equity interest held by TCCL 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* |
| | *Chaozhou Fengxi Hong Kong and China Gas Co., Ltd* | *RMB60.0 million* | *60* | *PRC* | *Gas sales and related businesses* |
| | *Chi Ping Hong Kong and China Gas Company Limited* | *RMB40.0 million* | *85* | *PRC* | *Gas sales and related businesses* |
| † | *Chizhou Hong Kong and China Gas Company Ltd* | *RMB20.0 million* | *100* | *PRC* | *Gas sales and related businesses* |

\# Direct subsidiaries of the Company
† Wholly foreign-owned enterprises
* A listed company in The Stock Exchange of Hong Kong Limited

## Subsidiaries (Continued)

The following is a list of the principal subsidiaries as at 31st December 2017: (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) | | | | |
| *Dafeng Hong Kong and China Gas Company Limited* | *RMB80.0 million* | *51* | *PRC* | *Gas sales and related businesses* |
| † *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* |
| † *Fuxin Dali Gas Company Limited* | *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* |
| † *Fuxin Xinqiu Hong Kong and China Gas Company Limited* | *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* |
| † *Guangxi Zhongwei Pipeline Gas Development Group Co., Ltd* | *RMB30.0 million* | *100* | *PRC* | *Gas sales and related businesses* |
| † *Guilin Hong Kong and 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* |
| *Jianyang Hong Kong and China Gas Company Limited* | *RMB150.0 million* | *100* | *PRC* | *Gas sales and related businesses* |
| *Jinan Pingyin Hongkong & China Gas Co., Ltd.* | *RMB100.0 million* | *82.2* | *PRC* | *Gas sales and related businesses* |
| *Jiujiang Hong Kong and China Gas Co., Ltd.* | *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* |

† Wholly foreign-owned enterprises

## Subsidiaries (Continued)

The following is a list of the principal subsidiaries as at 31st December 2017: (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) | | | | |
| † *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 & China Gas Co., Ltd.* | *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* |
| *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 Company Limited* | *RMB50.0 million* | *70* | *PRC* | *Gas sales and related businesses* |
| *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* |
| *Pingchang Hong Kong and China Gas Company Limited* | *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* |
| *Qingyuan Hong Kong and China Gas Company Limited* | *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* |
| *Qiqihar Hong Kong and China Gas Company Limited* | *RMB128.6 million* | *61.7* | *PRC* | *Gas sales and related businesses* |
| *Shao Guan Hong Kong and China Gas Co., Ltd.* | *RMB20.0 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 and China Gas Company Limited* | *RMB45.0 million* | *80* | *PRC* | *Gas sales and related businesses* |
| *Songyang Hong Kong & China Gas Company Limited* | *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* |

† Wholly foreign-owned enterprises

## Subsidiaries (Continued)

The following is a list of the principal subsidiaries as at 31st December 2017: (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) | | | | |
| † *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* |
| *Weiyuan Hong Kong and China Gas Company Limited* | *RMB30.0 million* | *100* | *PRC* | *Gas sales and related businesses* |
| † *Wuhu Jiangbei Hong Kong and China Gas Company Limited* | *RMB200.0 million* | *100* | *PRC* | *Gas sales and related businesses* |
| *Wulian Hong Kong and China Gas Company Limited* | *RMB20.0 million* | *70* | *PRC* | *Gas sales and related businesses* |
| † *Wuning Hong Kong and China Gas Co., Ltd.* | *RMB40.0 million* | *100* | *PRC* | *Gas sales and related businesses* |
| *Xin Du Hong Kong and China Gas Company Limited, Cheng Du* | *RMB30.0 million* | *100* | *PRC* | *Gas sales and related businesses* |
| *Xin Jin Hong Kong and China Gas Company Limited* | *RMB20.0 million* | *60* | *PRC* | *Gas sales and related businesses* |
| *Xin Jin Yong Shuang Hong Kong and China Gas Company Limited* | *RMB20.0 million* | *60* | *PRC* | *Gas sales and related businesses* |
| *Xingyi Hong Kong and China Gas Company Limited* | *RMB50.0 million* | *70* | *PRC* | *Gas sales and related businesses* |
| *Xiushui Hong Kong and China Gas Company Limited* | *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* |
| *Yanshan Hong Kong & China Gas Co., Ltd* | *RMB10.0 million* | *90* | *PRC* | *Gas sales and related businesses* |
| *Yangxin Hong Kong & China Gas Co., Ltd.* | *RMB18.0 million* | *51* | *PRC* | *Gas sales and related businesses* |
| † *Yifeng Hong Kong 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* |
| *Ziyang Hong Kong and China Gas Company Limited* | *RMB30.0 million* | *90* | *PRC* | *Gas sales and related businesses* |
| *大連瓦房店金宇港華燃氣有限公司* | *RMB40.0 million* | *60* | *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 (Shenzhen) Limited* | *RMB100.0 million* | *100* | *PRC* | *Investment holding* |
| † *Towngas Investments Limited* | *US$200.0 million* | *100* | *PRC* | *Investment holding* |

† Wholly foreign-owned enterprises

## Subsidiaries (Continued)

The following is a list of the principal subsidiaries as at 31st December 2017: (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$42.3 million | 100 | PRC | Chemical business |
| Inner Mongolia ECO Coal Chemical Technology Company Limited | RMB1,017.0 million | 100 | PRC | Chemical business |
| 1 唐山易高農業科技有限公司 | RMB3.0 million | 100 | PRC | Chemical business |
| †1 湖北易高生物能源有限公司 | RMB133.3 million | 100 | PRC | Chemical business |
| †1 河北易高生物能源有限公司 | RMB10.0 million | 100 | PRC | Chemical business |
| Inner Mongolia ECO 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 |
| 1 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 |
| Shandong ECO Juming Energy Co., Ltd | RMB150.0 million | 90 | 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（Formerly named as 嘉祥縣恒生貿易有限公司） | RMB180.0 million | 88 | PRC | Logistics business |
| ECO Orient Resources (Thailand) Ltd. | THB 425.0 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 |
| Anyang ECO Clean Energy Co., Ltd. | US$2.3 million | 100 | PRC | Vehicular fuel refilling station |
| 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 | 70 | PRC | Vehicular fuel refilling station |

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

## Subsidiaries (Continued)

The following is a list of the principal subsidiaries as at 31st December 2017: (Continued)

| Name | Issued share capital/ registered capital | Percentage of issued/ registered capital held | Place of incorporation/ operation | Principal activity |
|---|---|---|---|---|
| **New Energy businesses** (Continued) | | | | |
| Jining ECO Energy Co., Ltd. | RMB7.7 million | 100 | PRC | Vehicular fuel refilling station |
| Kaifeng ECO Clean Energy Co., Ltd. | US$2.4 million | 100 | PRC | Vehicular fuel refilling station |
| 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 |
| Shaanxi ECO Yida Clean Energy Co., Ltd. (Formerly named as Xian ECO Yida Clear Energy Co., Ltd.) | RMB12.0 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 |
| 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 |
| 周至易高清潔能源有限公司 | RMB9.6 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 |
| 偃師易高清潔能源有限公司 | RMB10.3 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 |
| [2] 巴彥淖爾市耀進燃氣有限公司 | RMB10.0 million | 90 | PRC | Vehicular fuel refilling station |
| [2] 杭錦後旗耀進燃氣有限公司 | RMB10.0 million | 90 | PRC | Vehicular fuel refilling station |
| [2] 韓城市易高美源清潔能源有限公司 | RMB41.0 million | 90 | PRC | Vehicular fuel refilling station |
| [2] 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
[2] Newly acquired during the year

## Subsidiaries (Continued)

The following is a list of the principal subsidiaries as at 31st December 2017: (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 | 81.4 | 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服務有限公司 | 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 | 98.14 | PRC | Telecommunications business |
| 名氣通網絡（深圳）有限公司 | RMB29.5 million | 100 | PRC | Telecommunications business |
| 萊陽名氣通電訊有限公司 | US$1.6 million | 90 | PRC | Telecommunications business |
| Hong Kong and China Technology (Wuhan) Company Limited | RMB21.2 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 | RMB30.0 million | 100 | PRC | Gas meter and related businesses |
| † 卓通管道系統（中山）有限公司 | RMB31.0 million | 100 | PRC | PE piping system business |
| U-Tech Engineering Company Limited | HK$15.7 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 |
| **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 | 67.1 | 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 |

# Direct subsidiaries of the Company
† Wholly foreign-owned enterprises

## Subsidiaries (Continued)

The following is a list of the principal subsidiaries as at 31st December 2017: (Continued)

| Name | Issued share capital/ registered capital | Percentage of issued/ registered capital held | Place of incorporation/ operation | Principal activity |
|---|---|---|---|---|
| **Financing & securities investments** (Continued) | | | | |
| 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 |
| 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) Ltd. | HK$100 | 100 | Hong Kong | Investment holding |
| ECO Environmental Investments (China) Limited | HK$100 | 100 | Hong Kong | Investment holding |
| [1] 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 |
| 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 | Investment holding |
| 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 |

[1] Newly formed during the year

## Subsidiaries (Continued)

The following is a list of the principal subsidiaries as at 31st December 2017: (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 (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 & 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 & 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 |
| Hong Kong and China Gas (Hainan) 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 |

## Subsidiaries (Continued)

The following is a list of the principal subsidiaries as at 31st December 2017: (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 (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/ Hong Kong | 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/ Hong Kong | 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/ Hong Kong | Investment holding |

# 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.

# CORPORATE INFORMATION

### Chairman

LEE Shau Kee

### Directors

LEUNG Hay Man*
Colin LAM Ko Yin
David LI Kwok Po*
LEE Ka Kit
Alfred CHAN Wing Kin
LEE Ka Shing
POON Chung Kwong*
Peter WONG Wai Yee

* Independent Non-executive Director

### Managing Director

Alfred CHAN Wing Kin

### Executive Director and Chief Operating Officer – Utilities Business

Peter WONG Wai Yee

### Chief Financial Officer and Company Secretary

John HO Hon Ming

### Registered Office

23rd Floor, 363 Java Road,
North Point, Hong Kong

### Company's Website

www.towngas.com

### Share Registrar

Computershare Hong Kong
Investor Services Limited
Shops 1712-1716, 17th Floor,
Hopewell Centre,
183 Queen's Road East,
Wanchai, Hong Kong
Tel: 2862 8555
Fax: 2865 0990

### Auditor

PricewaterhouseCoopers
Certified Public Accountants
22nd Floor, Prince's Building,
Central,
Hong Kong

### Principal Bankers

The Hongkong and Shanghai Banking
Corporation Limited
1 Queen's Road Central,
Hong Kong

The Bank of East Asia, Limited
10 Des Voeux Road Central,
Hong Kong

### Investor Relations

Corporate Investment and Investor
Relations Department
Tel: 2963 3189
Fax: 2911 9005
e-mail: invrelation@towngas.com

Corporate Affairs Department
Tel: 2963 3493
Fax: 2516 7368
e-mail: ccd@towngas.com

Company Secretarial Department
Tel: 2963 3292
Fax: 2562 6682
e-mail: compsec@towngas.com

# FINANCIAL CALENDAR

| | |
|---|---|
| Half-Year Results | Announced on Monday, 21st August 2017 |
| Full-Year Results | Announced on Tuesday, 20th March 2018 |
| Annual Report | Posted to Shareholders on Tuesday, 24th April 2018 |
| Register of Members | (i) To be closed from Friday, 1st June 2018 to Wednesday, 6th June 2018, for the purpose of determining entitlement of Shareholders to the right to attend and vote at the Annual General Meeting |
| | (ii) To be closed from Tuesday, 12th June 2018 to Thursday, 14th June 2018, for the purpose of determining Shareholders who qualify for the proposed issue of bonus shares and final dividend |
| Annual General Meeting | To be held on Wednesday, 6th June 2018 |
| Dividends – Interim | HK12 cents – Paid on Tuesday, 3rd October 2017 |
| – Final (Proposed) | HK23 cents – Payable on Friday, 22nd June 2018 |
| Bonus Issue of Shares (Proposed) | Share certificates to be posted to Shareholders on Friday, 22nd June 2018 |

Both printed English and Chinese versions of this Annual Report are available upon request from the Company and the Company's share registrar free of charge. The website version of this Annual Report is also available on the Company's website.

The Hong Kong and China Gas Company Limited
香港中華煤氣有限公司

23rd Floor, 363 Java Road, North Point, Hong Kong
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