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T O W N G A S  
C O R P O R A T E  
I N F O R M A T I O N

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2020

ENVIRONMENTAL  
SAFETY & HEALTH  
OPERATIONAL & FINANCIAL  
INFORMATION



煤氣  
Towngas

## FOREWORD

The Hong Kong and China Gas Company Limited (Towngas), in its endeavour to enhance the transparency of its operations and services, publishes the Corporate Information Booklet annually.

Supported by visuals, the Booklet presents an update of the Company's latest developments, ranging from its business and operational review to financial status.

Prominent in the Booklet is information on the Company's safety measures and practices. This reflects the heavy emphasis placed by the Company on these aspects, which include prompt response to emergency incidents as well as proactive efforts to maintain gas safety at customers' homes and enhance their knowledge of gas safety.

Towngas is also well aware that liaison with customers is a priority. Hence, complementary with the 24-hour Customer Service Hotline, the Customer Focus Team continues to serve as an effective direct communication channel between the Company and its customers.

Furthermore, the Company has continued to strictly adhere to its green policy to ensure an environmentally friendly operation.

Going forward, Towngas will continue to seek ways to further improve its operations and provide the people of Hong Kong and beyond with more efficient and high-quality service.

For enquiries, please contact Towngas' Corporate Affairs Department at 2963 3483.

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## OPERATIONAL INFORMATION

### 1. Annual Business Review

The Hong Kong economy was severely impacted by the coronavirus pandemic in 2020. With inbound tourism coming to a standstill and restaurant, retail and hotel sectors strongly hit, the local economy contracted sharply by 6.1 per cent in 2020 compared to 2019. As a result, during 2020, volume of commercial and industrial gas sales decreased notably, whilst volume of residential gas sales increased owing to a rise in both household cooking and use of hot water, both compared to 2019. Overall, total volume of gas sales in Hong Kong for 2020 was approximately 27,947 million MJ, a slight decrease of 2.7 per cent, whilst the number of appliances sold also decreased by 12.7 per cent due to a drop in the number of people moving into new properties and lower consumer sentiment impacted by the epidemic, both compared to 2019. Despite this, with an effective market strategy, appliance sales decreased only slightly by 8.3 per cent compared to 2019.

During the year under review, the Company invested HK\$1,042 million in production facilities, pipelines, plants and other fixed assets for the further development of its gas and gas-related businesses in Hong Kong.

#### (a) Hong Kong Gas Business Profit

The volume of gas sales decreased by 2.7 per cent in 2020, while our customer base further expanded to a total of 1,943,777 accounts, a slight increase of 10,050 over the previous year. In terms of total gas sales volume, residential customers accounted for 60 per cent while commercial and industrial customers accounted for 40 per cent. The Company has been implementing cost saving measures and optimising work flow. Net profit after tax from sales of town gas in Hong Kong for the year 2020 amounted to HK\$2,927.8 million.

#### (b) Sales and Marketing

During a challenging year when people's lifestyles changed as a result of the COVID-19 pandemic, our sales and marketing teams came up with a variety of innovative promotions to keep Towngas top of mind among consumers. To build customer loyalty and generate additional online revenue, we launched an exciting new membership programme titled Towngas Fun with redemption offers. The programme is designed to provide not only value-added services to our customers but also publicity exposure for participating merchants.

In 2020, we unveiled the top-of-the-town Towngas Cooking YouTube channel as a platform for flame cooking with celebrity chefs and experts. Topics included green and healthy diets, training for domestic helpers, and cooking tips for parents. Additionally, under the "new normal" of social distancing, the Towngas Cooking Centre offered a series of live cooking classes online, with ingredients for the

courses delivered to participants' homes in advance.

We achieved satisfactory sales for our Mia Cucina line of kitchen cabinets, which are popular among residential customers as well as property developers for their high quality. To promote sales, we showcased different Mia Cucina kitchen projects and shared design tips on digital platforms in addition to conventional channels, with the aim of providing design inspiration and increasing brand awareness among customers planning to renovate their kitchens.

In a similar vein, the social gathering ban during the pandemic led to school suspensions and the closure of venues such as two theme parks, public swimming pools and sport stadiums. The expansion of the two theme parks was also delayed, while a project was temporarily put on hold. Nevertheless, we continued to identify emerging opportunities in our commercial and industrial business with the conversion of ageing diesel boilers to use town gas.

An exceptionally promising market is for a gas-fired desiccant dehumidification system we developed, which enhances humidity control and provides significant improvements to indoor air quality. This compact integrated Desiccant+Primary Air-handling Unit (D-PAU) has already been installed at H Zentre on Middle Road and in the patient ward area of Hong Kong Baptist Hospital. The system can meet higher hygiene standards by integrating other air quality control devices for filtering fine particles and eliminating microbes.

Potential users for our D-PAU system include hospitals with hydrotherapy pools and operating theatres, hotels, office buildings, pharmacies, laundries, rehabilitation centres and homes for the elderly. As Hong Kong has a massive plan for hospital development, the potential for gas dehumidification application will be substantial.

#### (c) Serving Our Customers

Innovation continued to play a key role in improving our productivity and service quality. One such initiative is our artificial intelligence (AI) Chatbot that can handle customer enquiries and requests for gas services regardless of location and time. For the convenience of our customers, we introduced a new Wi-Fi/BLE (Bluetooth low energy) series during the year as an upgrade of our Smart Metering System. With this new device, meter readings can be done automatically and sent to our system via home Wi-Fi or Bluetooth.

During the year, we received over 5,800 compliment letters. In recognition of our service excellence, we received the Sing Tao Service Awards – After Sales Services award for the 12<sup>th</sup> year, and East Week's Hong Kong Service Awards – Public Utilities for the 10<sup>th</sup> year.

#### *(d) The Gas Infrastructure*

Our comprehensive network infrastructure is well regarded for its safe and reliable supply. To maintain a high level of supply reliability, we have been forming a ring-feed transmission network in the New Territories. The last 9 km of transmission pipelines linking Tuen Mun and Tsuen Wan were mostly completed in 2020, with commissioning expected in 2021. The announcement of two new railway developments, the Tung Chung West Extension and Tuen Mun South Extension, in 2020 will ultimately bring us about 20,000 potential customers. Work on these two projects is scheduled to commence in 2023. We are also undertaking the construction of a ring-feed supply network for the Airport Island and Ocean Park in order to increase supply security. Despite COVID-19, works progressed smoothly during the year. Additionally, in 2021 we will start a network upgrading project for all of Wong Chuk Hang District.

#### *(e) Towards a Sustainable Future*

An Environmental, Social and Governance (ESG) Committee, headed by the Managing Director and appointed by the Towngas Board of Directors, has been set up to oversee the Company's strategies, policies and practices on ESG matters. Guided by our ESG framework, Towngas' commitment to ESG extends to Creating Business Opportunities, Ensuring Health and Safety, Protecting the Environment, Contributing to Stakeholders, and Strengthening Corporate Governance, with a focus on innovation.

During the year, our businesses continued to support four prioritised Sustainable Development Goals (SDGs) of the United Nations, including SDG 6: Clean Water and Sanitation; SDG 7: Affordable and Clean Energy; SDG 11: Sustainable Cities and Communities; and SDG 13: Climate Action.

Consistent with the SDG on climate action, Towngas conducted a holistic Corporate Climate Change Risk Assessment to guard against potential business interruptions arising from extreme climate events, such as extreme temperature, flooding, sea level rise and storm surge. In 2020, we also conducted a comprehensive assessment of transition risks and opportunities across our energy-related businesses in Hong Kong and mainland China under various climate scenarios and time frames. By deepening our understanding of how policy changes, developments in technology, reputational impacts and shifts in market preferences could have a significant impact on our businesses, both positively and negatively, we are able to develop plans to mitigate risks and build adaptation and resilience strategies.

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

footprint while developing clean energy for homes, businesses and vehicles, with the ultimate goal of creating a more sustainable future.

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 23 per cent compared with 2005. Due to maintenance work at the North East New Territories Landfill, we fell short of our target to achieve a 30 per cent decrease in carbon intensity for 2020. We will, however, strive to meet this target in future. We also understand that our emissions along the value chain could be material and, in 2020, conducted a comprehensive review of our emissions along our value chain for gas production in Hong Kong. We are the first public utility in Hong Kong to have its carbon inventory verified against the ISO 14064-1:2018 (latest version) by an accredited third party.

Towngas is one of the pioneers in the development of renewable energy in Hong Kong and currently uses landfill gas from three sites. We also support Hong Kong's Feed-in Tariff (FiT) Scheme, and have been installing photovoltaic (PV) systems at our facilities including Tai Po Gas Production Plant, North Point Headquarters and offtake and pigging stations. Upon completion in 2021, our solar PV systems will ultimately generate more than 300,000 kWh of clean energy per annum.

Our efforts to achieve greater sustainability in our operations have been widely recognised. In 2020, we were ranked first on both the Hong Kong Business Sustainability Index and the Greater Bay Area (GBA) Business Sustainability Index, organised by The Chinese University of Hong Kong Business School's Centre for Business Sustainability. We were also the only company on the GBA Business Sustainability Index to be ranked at the highest Exemplar tier.

We will continue to focus on the five key areas in the ESG framework as well as innovation to drive our ESG performance and the development of our business. By setting clear targets, we shall monitor our performance and achieve long-term sustainability.

#### *(f) Empowering Our People*

We strive to retain and nurture our people by providing a desirable work environment that enables them to develop a fulfilling career with us. To help our employees achieve better work-life balance, we implemented flexible working hours at the beginning of 2020. In addition, we enhanced our medical benefits in Hong Kong and provided additional insurance coverage in mainland China related to the coronavirus.

With the outbreak of COVID-19, our primary concern was to minimise the risk of infection among our staff and to keep them healthy. For our employees and contractors, particularly frontline technicians who had to visit customers' homes, we provided appropriate protective gear and disinfectant supplies. To reduce employees' potential exposure at work and during their daily commutes, we introduced work-from-home arrangements and offered flexible working hours. Some non-emergency on-site services, such as regular safety inspections and meter readings, were suspended. We also required employees to quarantine themselves under specified circumstances and offered free tests if it was thought that they had come into contact with suspected COVID-19 cases.

During a year of global economic downturn and the worldwide COVID-19 pandemic, we organised training programmes under the theme of "Overcoming Challenges" to equip our staff with a positive mindset, skills and knowledge. In keeping with our work-from-home arrangements and social distancing practices, we replaced many of our face-to-face activities with online platforms and webinars or adopted blended training methods that combined online learning with smaller classroom sessions. We also produced new in-house e-learning videos and online training programmes, which were shared on our Smart Learning System. Topics included work practices during COVID-19, coaching and communication skills, as well as sales skills, among others. In 2020, we provided an average of 17.5 hours of training per employee in Hong Kong.

To meet the demands of our business development, we are directing our recruitment efforts to candidates of different age groups in various job categories, including both technical and non-technical personnel. Through our apprenticeship training schemes, we continued to recruit and develop young talent to ensure a competent workforce. During the year, we expanded the scope of our sponsorships so that our apprentices could pursue further studies or academic qualifications.

In support of the Post-50 Internship Programme organised by the Employees Retraining Board, we offered a four-week internship for candidates aged 50 or above to help them develop new skills. For students, we provided the opportunity to gain real-life work experience as summer interns and co-operative trainees and, in 2020, recruited 95 of them for the programme.

The Towngas Engineering Academy provides professional training to our technical staff, gas technicians, contractors and new joiners. This training underlies our excellent reputation for gas safety and customer service and helps attract young people to the gas industry. During the year, the apprentices in our gas utilisation, network and mechanical engineering training schemes won the Outstanding

Apprentice Award organised by the Vocational Training Council (VTC), which reaffirmed the high calibre of our apprentices and effectiveness of our training approach.

In addition, we sponsored apprentice graduates and frontline staff for the Diploma of Vocational Education in Gas Services Engineering. This diploma, which has been accredited by the Institution of Gas Engineers and Managers (IGEM), enables apprentices and our staff to acquire the professional EngTech MIGEM qualification. For our Professional Diploma in Gas Engineering programme, a second intake of 30 students started their studies in August 2020 at VTC.

## 2. Safety

### (a) Customer Safety

Our concern for safety underpins everything we do. We understand the need to educate and inform the public on the safe and responsible use of gas products and services. In 2020, we held eight safety exhibitions, maintaining our long-standing and well-proven methods of taking our safety message directly to consumers. As always, appliance safety was a high priority: We conducted more than 670,000 Regular Safety Inspections of gas facilities in customers' homes. This safety-driven programme has proven extremely popular with our customers.

### (b) Occupational Safety and Health

Employee safety and health is our priority. That is why we have implemented the Total Safety Management System to avoid accidents and improve safety and health performance continuously. We endeavour to ensure the implementation of health and safety policy and promote safety culture through organising training, seminars, promotion activities and more. In 2020, there were 17 industrial accidents, with an accident frequency rate of 0.32.

In 2020, we successfully upgraded the OHSAS 18001 to ISO 45001 to become one of the first city-gas companies in Asia to be accredited with this certification. Since obtaining ISO 45001 certification in 2019, we have been assisting our subsidiaries, including ECO Environment Investments Limited (ECO) and U-Tech Engineering Company Limited (U-tech), to become ISO certified. In 2020, both subsidiaries successfully received certification.

To encourage colleagues to pay attention to the relevant aspects of their work environment, we put in place the Health, Safety and Environment (HSE) Suggestion Scheme, Near-Miss Reporting Scheme and Instant Messaging HSE Reporting Channel for safety- and health-related reporting. Colleagues are invited to report both good practices and malpractices through the schemes to improve safety

standard, thus promulgating our safety culture.

Our promotion of Occupational Safety and Health (OSH) principles have also enhanced our safety culture. In 2020, we organised seasonal promotion programmes for our colleagues and contractors on topics such as infectious disease control, prevention of heat stroke, and work stress management. When training programmes could not be taught in a face-to-face setting, as was the case during the COVID-19 pandemic, we made extensive use of electronic platforms and webinars to deliver programme materials. We also organised a number of OSH programmes for contractors, including a training session and the Safe Foreman Award event, to promote accident prevention and OSH supervision.

Effective and efficient emergency preparedness allows the Company to respond in a timely and effective manner. In 2020, we organised numerous joint fire exercises with Fire Services Department, which provided opportunities for our emergency response team to work closely with Fire Services personnel in relevant operations.

Soon after the first appearance of the novel coronavirus in December 2019, Towngas took immediate steps to minimise the risk of infection among our staff, contractors, customers and business partners.

We also activated our Corporate Preparedness Plan for Infectious Diseases and set up teams to coordinate our response. Top management held regular meetings to facilitate decision making and ensure the timely implementation of COVID-19 measures.

With the active participation of staff at all levels and outstanding performance in advocating innovation and safety culture, we received numerous safety and health awards from the industry. We won eight awards at The 19<sup>th</sup> Hong Kong Occupational Safety and Health Award event, including Safety Management System Award – Gold Award, 5S Good Housekeeping Best Practices Award – Gold Award, OSH Annual Report Award – Gold Award, Best Workplace Infection Control Measures Award – Silver Award, Safety Performance Awards, and more.

#### *(c) Gas Production Plant Safety*

We have strong confidence in the safety, reliability and management systems of our Tai Po and Ma Tau Kok gas production plants. Both plants were designed and built by reputable international project contractors, based on proven engineering and chemical processes. Manned by competent and experienced operation and maintenance crews, the two gas works did not have even one interruption to the gas supply since the first day they were commissioned. On this basis, our Company's supply reliability continues to be one of the best among the utilities.

Our Company invested great efforts in safeguarding the condition and availability of the two gas plants. Our Ma Tau Kok gas production plant has over 43 years' history of safe and reliable production, while our Tai Po plant is equipped with modern computer control systems and sophisticated instruments, having run stably for 34 years. Both sites implement strict work rules and procedures to control various high-risk operations, with robust backup from automatic alarms and safety interlocks. A high degree of emergency response preparedness is achieved through a wide range of fire-fighting facilities, well-trained response teams, and frequent emergency drills. Our standards of safety control compare most favourably with other major utilities in Hong Kong and overseas.

Towngas abides by all legal requirements and cooperates fully with the various government departments responsible for enforcing stringent surveillance on the plants. The accident frequency rate of our gas production plants has always remained low, with about 1.54 cases per 100,000 man hours. Nonetheless, in pursuit of the target of zero accidents, our plant management team proactively review the root causes of each incident and implement every practicable preventive measure. There have been no major gas emergency at the plants for many years.

As a long-term strategy, Towngas will continue to develop various hazard controls and risk mitigation measures to maximise the safety of its employees, the plants' neighbourhood and the plants themselves.

#### *(d) Network Safety*

In terms of network safety assurance, we continue to monitor and enhance our pipeline infrastructure with an active maintenance and rehabilitation programme. Rigorous trench inspections and leakage surveys continue, while the introduction of better equipment and technology provides invaluable support in the maintenance of safety standards.

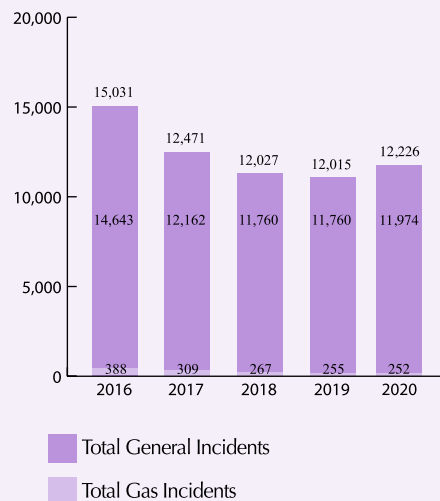
Emergency vehicles equipped with new tablets are now used in the handling of gas emergencies, while sensitive laser methane detectors are used for leakage surveys. Advanced technology were also introduced in recent years to monitor the condition of the coating on steel pipes.

In addition, we continue to check our pipes rigorously by conducting sophisticated leakage survey between six times and once a year to ensure their integrity.

We also augmented the number of trench inspections of third party excavation sites to circumvent damage to nearby Towngas pipelines. In 2020, about 141,427 trench inspections covering 8,866 active sites were made.

(e) Charts on Emergencies, Safety Inspections and Safety Promotion

(i) Number of Urgent Reports

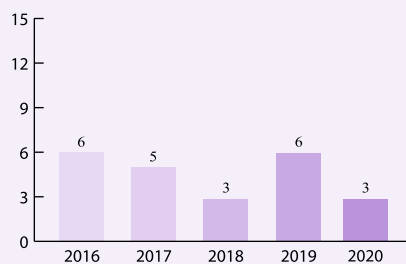


Urgent reports refer to incidents which require Towngas personnel to attend to immediately, whether the incident is gas-related or not.

Out of the 12,226 urgent reports received in 2020, only 252 cases were gas-related incidents. Town gas-related incidents are classified according to the following criteria:

- Reported by Police or Fire Services Communication Centre
- Uncontrolled gas escape (which cannot be stopped by turning off the meter control cock)
- Incidents involving injury to a person, whether fatal or non-fatal
- Incidents involving explosion or fire damage to property
- Supply defects

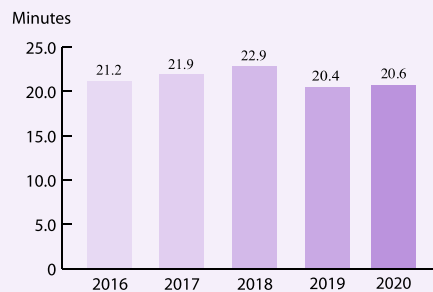
(ii) Number of Major Gas Emergencies



Out of the 252 gas incidents in 2020, three were major gas emergencies.

\* Nature of "major gas emergencies" is defined in the Gas Safety Ordinance. Suicide cases are not included.

(iii) Average Response Time for Gas Incidents



The promptness of Towngas' response to emergencies has achieved a world class standard. We shall strive to continue improving our relevant performance in the upcoming year.

(iv) Number of Fatal Gas Accidents

Year	2016	2017	2018	2019	2020
No. of Fatal Gas Accidents	0	0	0	0	0

\* Suicide cases are not included.

Thanks to Towngas' efforts to promote gas safety and respond promptly to emergencies, there were no fatal accidents from gas emergency incidents throughout the past five years.

(v) Number of Incidents Involving Third-Party Damage



Towngas has been able to keep the third-party damage at a relative low level, with only seven cases in 2020.

(vi) Trench Inspection

Total number of active sites inspected in 2020

Hong Kong Island	Kowloon	New Territories	Total
1,602	3,700	3,564	8,866

To minimise third-party damage to its network facilities, Towngas emphasises close coordination with road work companies. In addition to the provision of alignment drawings and safety advice to the relevant parties, the Company also organises safety talks for the construction industry. In 2020, a total of 162 members of the construction industry attended our safety talks. The Company also proactively sends its technicians to work at sites to ascertain the alignment of its facilities for maximum safety.



*(vii) Number of Leakages and Pipeline Surveys*

Type of pipelines	Frequency of leakage surveys
Transmission pipelines: - All HP & IPB mains	At least once a year
Distribution pipelines: - PE or steel pipes over or enclosed within structures - Medium pressure ductile iron pipes or all galvanised iron pipes - Low pressure ductile iron pipes - Others	At least twice a year At least six times a year At least three times a year At least once a year

HP – High Pressure IPB – Intermediate Pressure B PE – Polyethylene

Under the Company’s rigorous leakage survey programme, our qualified technicians perform regular leakage detection on our different types of gas pipes with the help of advanced instruments, including Flame Ionisation Detectors (FID) and Combustible Gas Indicators (CGI). With these sensitive instruments, even gas seepage at very low concentration can be detected and rectified before they develop into reported gas escapes. Considering these surveys as effective precautions against major gas escapes, we conduct more leakage and pipeline surveys than our foreign counterparts every year.

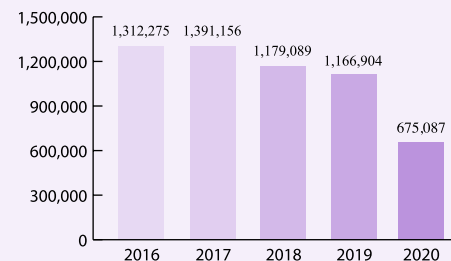
As a result of the stringent and proactive leakage survey and trench inspection programmes, the number of public-reported gas escape incidents in networks totalled just 0.009 per km per year in 2020. Even if minor seepages located by the sensitive leakage survey were also included, the number came to no more than 0.082 per km per year, which is much lower than the figures in many other similar metropolitan cities.

*(viii) Major Emergency Drills with Government Authorities in 2020*

Type of Drill	Joint Fire Exercise				Emergency
Venue	Tai Po Plant	Ma Tau Kok Plant	Aberdeen Depot	Braemar Hill Tunnel	Tai Po Plant
No. of Exercises	2	1	1	1	1

(Government authorities include Fire Services Department, Electrical and Mechanical Services Department and Police Force)

*(ix) Number of Regular Safety Inspections\**



Towngas has taken proactive measures to maintain gas safety at customers’ homes by initiating on-site safety inspections of their gas installations and service risers at intervals of 18 months.

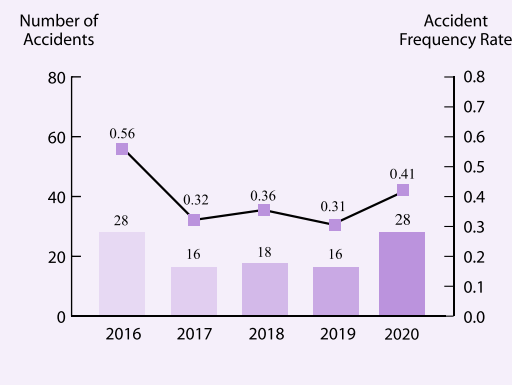
*(x) Number of Sub-standard Appliances Upgraded*

Towngas encourages customers to upgrade their sub-standard appliances through various educational and promotional programmes. In 1999, we introduced a discount scheme to encourage customers to upgrade their water heaters and cooking appliances. In 2020, 57 flueless (sink) and open-flued water heaters, and 287 cooking appliances without flame failure device were removed or upgraded.

*(xi) Number of Safety Exhibitions and Safety Talks*

Towngas has been widely recognised for its continuing efforts in promoting home safety. Safety talks and safety exhibitions are major channels through which Towngas enhances the public’s awareness and improves their knowledge of gas safety. In 2020, we organised eight safety exhibitions in the community. Information panels were exhibited and information booklets on gas safety were delivered.

*(xii) Industrial Safety Performance of Employees*



Towngas is committed to providing a safe and healthy environment for its employees. From 2016 to 2020, there have been less than one injury accident per 100,000 working hours. Towngas continuously provides training on occupational safety and health to employees with the aim of further reducing the occurrence of accidents.

\* Safety inspections may be conducted earlier or later than planned depending on respective situations. Thus, the number of inspections conducted may differ from year to year.

### 3. Service Pledge

Initiated in 1994, the Towngas Service Pledge has set high targets for major customer service areas: reliability of gas supply, safety, service attitude, the speed and convenience of service, appointments and complaint handling. Towngas has performed well in the past 26 years and pledges to continue improving its service and to set higher targets to ensure customers get the best possible level of service.

#### (a) Results of 2020

	Results
<b>Reliability</b>	
• Uninterrupted gas supply (over 99.99%)	99.990%*
• In case of supply interruption on account of maintenance or engineering work: customer notification 3 days in advance	100%
• Restoration of gas supply within 12 hours	99.99%
<b>Safety</b>	
• Emergency Team average arrival time (within 25 minutes)	Average 21.57 minutes
<b>Appointments</b>	
• Availability of maintenance and installation services within 2 working days	Average 1.21 days
<b>Speed and Convenience</b>	
• Customer Service Hotline (calls answered within 4 rings)	96.10%
• Connect or disconnect gas supply within 1 working day (upon customer request)	100%
• Deposit refunded at Customer Centres (2 hours after disconnection of gas supply) (upon customer request)	100%
<b>Service Quality</b>	
• Efficiency#	9.00
• Courteous and friendly attitude#	8.98
<b>Handling Suggestions</b>	
• Reply within 3 working days	100%
• Resolution, or a statement of how and when the matter will be resolved, within 2 weeks	100%

\* In 2020, gas supply to a large number of customers in wide areas was impacted by a few incidents of water ingress and third-party damage to gas pipes.

# The result was based on monthly surveys conducted by an independent research company. Our target was to exceed a score of 8.5 out of 10.

#### (b) Service Pledge for 2021

Towngas pledges to continue providing our customers with the best possible service. The new Pledge has taken effect from January 2021, and the annual performance results will be announced in January 2022.

Pledges	Target
<b>Reliability</b>	
• Uninterrupted gas supply	- Over 99.99%
• In case of supply interruption (on account of maintenance or engineering work)	- Customer notification 3 days in advance
• Restoration of gas supply	- Within 12 hours
<b>Safety</b>	
• Emergency teams	- Arrive on site within 25 minutes
<b>Appointments</b>	
• Availability of maintenance and installation services	- Within 2 working days
<b>Speed and Convenience</b>	
• Customer Service Hotline	- Calls answered within 4 rings
• Connect or disconnect gas supply	- Within 1 working day
• Deposit refunded at Customer Centres	- 2 hours after disconnection of gas supply*
<b>Service Quality</b>	
• Efficiency	- 8.5 out of a total score of 10
• Courteous and friendly attitude	- 8.5 out of a total score of 10
<b>Handling Suggestions</b>	
• Written comments or suggestions	- Reply within 3 working days
	- Resolution, or a statement of how and when the matter will be resolved, within 2 weeks

\* To enjoy this service, residential customers are advised to inform us of their request for refunds at the time of making their cap-off service appointment. The maximum refund amount is HK\$2,000.

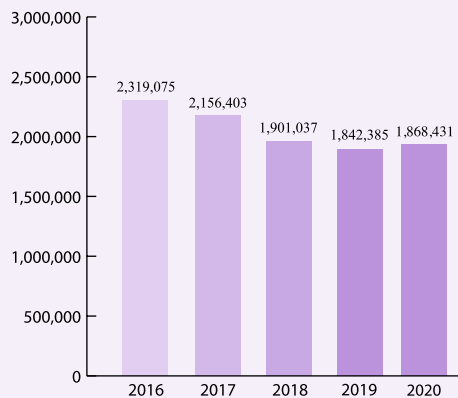
## 4. Customer Liaison

### (a) Customer Focus Team

Since its inception in 1993, the Customer Focus Team has provided an effective communication channel between Towngas and its customers. It is a key factor in ensuring that our services meet customer expectations. The Team, comprising managers from customer-related departments, visits public or private housing estates. Issues related to Towngas service, gas safety, bill payment and gas appliances are discussed at the meetings. Comments from customers contribute greatly to the improvement of Towngas products and services. In 2020, due to the COVID-19 epidemic, the Customer Focus Team conducted several online safety talks.

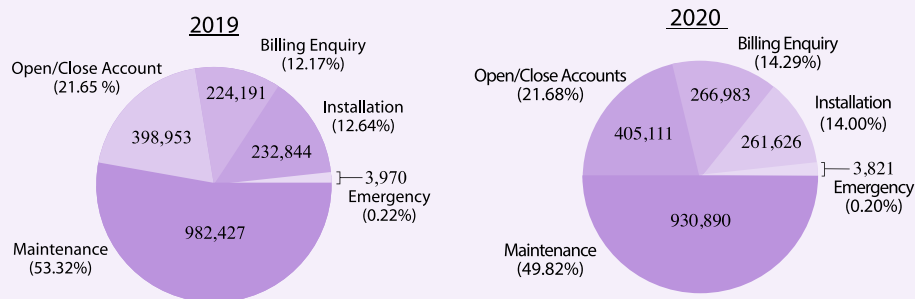
### (b) Customer Service Hotline and Emergency Hotline

Total Number of Incoming Calls



The public can always keep in touch with Towngas through its Customer Service Hotline (CSH) and Emergency Hotline. The CSH – 2880 6988 – provides a convenient one-stop service for customers to enquire about and arrange for the full range of Towngas services. The Emergency Hotline – 2880 6999 – operates around the clock, and responds to emergency calls immediately.

Number of Incoming Calls by Categories:

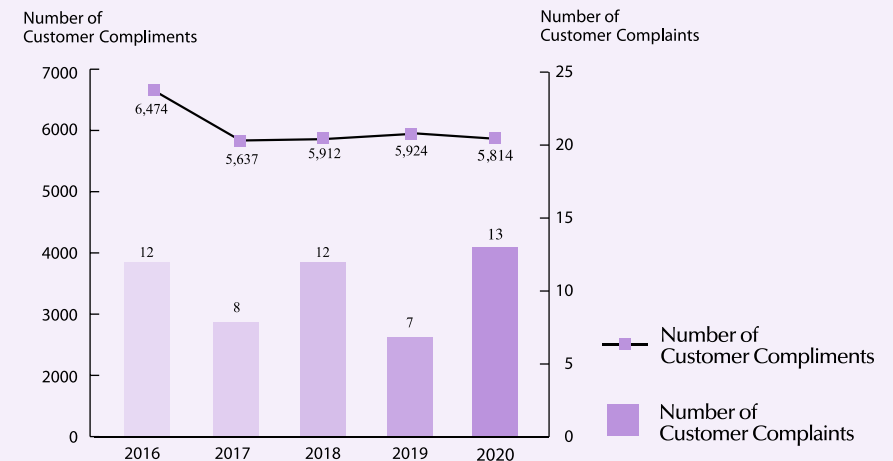


The largest category of incoming calls to the CSH and Emergency Hotline is maintenance, representing 49.82% of total calls in 2020 while other categories include opening and closing accounts, billing enquiry, installation and emergency.

### (c) Bill Inserts

Our bill inserts, which come enclosed with the bi-monthly gas bill, is an effective means to keep our customers informed. In 2020, a total of 35 information leaflets were sent to customers. The topics of these inserts were mostly related to Towngas services and products, including special offers on appliance, Towngas Avenue, Towngas Cooking Centre, Mia Cucina, Towngas Fun online redemption offers for members, green and health products, as well as ESG, gas safety and energy saving tips. Also, we have sent leaflets for seven non-governmental organisations without charges.

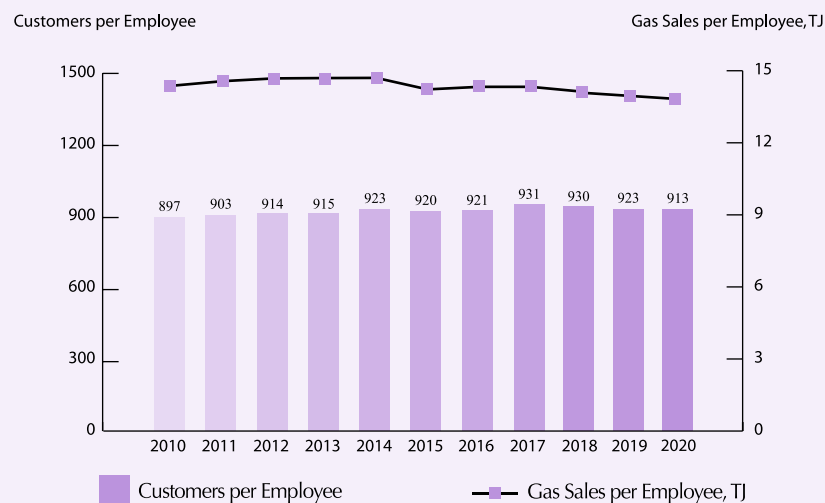
### (d) Number of Customers' Compliments and Complaints



Quality customer service has always been a Towngas priority. We are more focused than ever on the continuous enhancement of customer satisfaction by providing superior service. As a result, a total of 5,814 compliments on Towngas' service were received in 2020.

Towngas also received a total of 13 complaints in 2020. With 1,943,777 customer accounts as at 31 December 2020, the ratio is one complaint to every 149,521 customer accounts. Towngas is committed to taking proactive measures to improve product quality and the service of its frontline staff.

## 5. Efficiency (Products and Productivity)



In 2020, Towngas continued to strive to develop high quality and cost effective products for customers. These included accessories and parts that improve installation work efficiency; the new smart metering system AMR2.1 that fully automates the meter reading process by Wi-Fi communication; and the hydro-generator module that can convert water flow energy to electric power for ignition of balance flued water heaters. This not only helps save costs and time for battery replacement, but also protects the environment by replacing waste. Besides, the application of big data greatly enhanced the accuracy and efficiency of our business operations analysis, so that we can improve customer service and sales more effectively.

The productivity of Towngas is measured in terms of the number of customers served by each employee. As at the end of 2020, the number of employees engaged in town gas business was 2,130. In 2020, each employee served the equivalent of 913 customer accounts, and town gas sales averaged 13.1 TJ per employee. Towngas will continue to seek ways to ensure our customers receive the best and most cost-effective service.

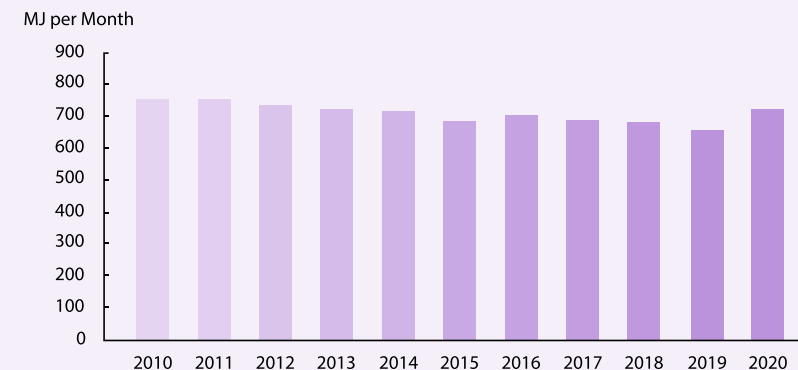
Towngas also works with commercial and industrial clients to provide more energy efficient and environmental friendly solutions for their operations. After the successful implementation of utilising landfill gas as a renewable source of clean energy in the combined heat and power (CHP) project at the Alice Ho Miu Ling Nethersole Hospital, we have been working with the Hospital Authority to include CHP arrangements in the blueprint stage of their new hospital developments. In addition, at the new H Zentre on Middle Road, a total application system that incorporates solar collectors and gas-fired water heaters to reactivate the gas desiccant dehumidifier will be installed to provide precise adjustments in indoor humidity. This system utilises renewable energy to ensure the excellent indoor air quality of the medial centres and clinics in the building.

In addition, our innovative use of landfill gas has also been gaining momentum. From our first landfill gas utilisation project at Shuen Wan Landfill to the commissioning of our North East New Territories Landfill project in 2007, the application of this renewable energy has grown exponentially. In 2020, landfill gas accounted for about 1% of our production fuel mix. In addition to treatment facilities in the North East New Territories Landfill site, which has been in operation for several years, another landfill gas utilisation project in the South East New Territories Landfill site is helping to further raise the proportion of landfill gas used by the Group, thus increasing our contribution to energy conservation and emission reduction in Hong Kong. The use of landfill gas has not only helped to cut carbon emissions released into the atmosphere, but also reduced our consumption of naphtha by more than 6,000 tonnes in 2020. These savings are equivalent to the annual carbon dioxide absorption of 0.8 million trees.

With the improvement in the efficiency of gas appliances, the average monthly household gas consumption has reduced over the years.

In 2020, due to the exceptional social distancing restrictions and dine-in ban at restaurants for COVID-19, gas consumption for residential cooking and water heating increased.

### Average Monthly Household Gas Consumption



## 6. Charges

The gas charge comprises the basic tariff plus fuel cost adjustment. The basic tariff is 26.05 cents per megajoule ("MJ") based on a consumption of 1,000 MJ per month with effect from August 2019. In addition to the gas charge, which is calculated based on customers' gas consumption, Towngas levies a fixed Monthly Maintenance Charge on residential customers which entitles them to reliable, efficient and comprehensive repair and maintenance services for all their gas appliances and installations. Towngas also adjusts the gas charge through a Fuel Cost Adjustment mechanism to reflect fluctuations in fuel prices.

### (a) Monthly Maintenance Charge

The Monthly Maintenance Charge (MMC), which has been frozen at HK\$9.5 since 1998, covers the labour charges for appliance maintenance and repair, on-demand appliance check-ups, Regular Safety Inspection whereby customers' gas appliances, gas installation pipes and service risers are inspected by our fully-qualified, registered gas technicians at intervals of 18 months, and the 24 hour Customer Service Hotline. Towngas conducted more than 520,000 on-demand maintenance works and more than 670,000 Regular Safety Inspections in customers' homes in 2020.

However, MMC does not include the costs of replacing spare parts, rubber hose, stainless-steel braided flexible hose or corrugated stainless steel tube for appliances, nor the costs of repair or replacement of gas installation pipes and external service risers, appliance disconnection and reconnection, or gas meter accuracy testing. To provide our customers with maximum protection, 24-hour emergency services are rendered free of charge.

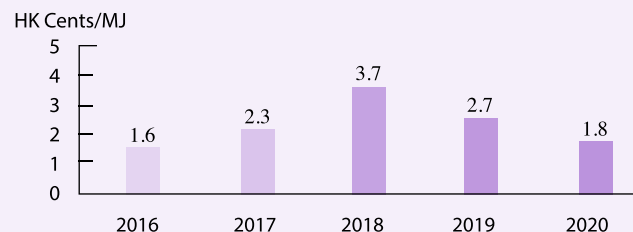
### (b) Fuel Cost Adjustment

The fuel cost adjustment calculation is based on gas consumption and monthly fuel costs. For every complete multiple of HK\$1 by which the effective feedstock cost\* rises above (or falls below) the equivalent of HK\$1,420 per kilolitre of naphtha, the charge for gas will be increased (or reduced) at the rate of HK0.004 cents per MJ.

In 2020, our customers saved a total of HK\$573 million in fuel cost adjustments due to our introduction of natural gas to the production of town gas.

\* Effective feedstock cost is the weighted average cost (based on energy content) of different feedstock used for production of town gas.

Average Monthly Fuel Cost Adjustment



### 7. Fuel Mix Percentage

In 2020, our fuel mix in terms of percentage of naphtha, natural gas and landfill gas used for gas production is as follows:

Feedstock	Percentage
Naphtha	36%
Natural Gas	63%
Landfill Gas	1%

### 8. Towngas Concession Schemes

Seeking to make a difference for some of our society's disadvantaged groups, we have launched four concession schemes to offer quality gas service at a discount to eligible applicants. Under the concession schemes, beneficiaries enjoy a 50% discount on basic gas tariff for the first 500 MJ (around 10.4 units) of town gas consumed, waiver of monthly maintenance charge, initial charge and security deposit, as well as free appliance maintenance and spare parts.

Towngas Concession Schemes	Qualified Applicants *
Concession Scheme for the Elderly	Applicants should be aged over 60 years, living alone or with other qualified senior citizens in self-care quarters within public housing estates, or qualified for the Comprehensive Social Security Assistance Scheme (CSSA).
Concession Scheme for People with Disabilities	Applicants should be receiving, or living with a direct family member who is receiving CSSA, and is classified as "100% Disabled" or "Requiring Constant Attendance" under CSSA.
Concession Scheme for Single-Parent Families	Applicants should be single-parent households receiving CSSA under the single-parent category.
Concession Scheme for Low Income Families	Applicants should be CSSA recipients who have or whose family member has a regular job income which is taken into account in the assessment of CSSA entitlement. (Their CSSA "Notification of Successful Application" or "Notification of Revision of Assistance" must bear the item of "Less net Earnings" indicated in two consecutive months out of the CSSA payment period.)

\* All applicants should be registered Towngas account holders.

In 2020, the overall average amount of annual savings per beneficiary customer under the Towngas Concession Schemes was about HK\$572. Over 45,000 households from Towngas Concession Schemes benefited from concessions totalling HK\$26 million.

## ENVIRONMENTAL PROTECTION

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Our ESG Report clearly elaborates our ESG strategies and sets out the targets and standards that we encourage all employees, contractors and suppliers to work towards. As a responsible public utility, our responsibility is not limited to our own operation. We also promote environmental awareness amongst our stakeholders in support of sustainable development.

### 1. Environmental Promotion Programmes

We continue to offer our support to green groups and government-led environmental protection programmes. In 2020, we supported and sponsored The Green Earth's five-year Plantation Enrichment Project to build native tree woodland, as well as the Drink Carton Boxes Recycling Programme by the Green Sense. We also sponsored and participated in the Mooncake Recycling Programme by Food Grace, Hong Kong Green Day 2020 by the Green Council, Let Our Children Breathe by the Clean Air Network, and Earth Hour by WWF.

### 2. Environmental Training and Education Programmes

Towngas has provided a great variety of environmental training and educational activities to nurture a culture of environmental awareness among our stakeholders. Programmes conducted in 2020 included the annual Outstanding Environmental Sub-committee Award, seminars on waste management, solar energy, sustainable travel and water resources, a workshop on urban organic farming, and more. Health, Safety, Environment & Security Bulletins were also published, uploaded and distributed to our employees and contractors. Green promotional messages were conveyed to employees via email and intranet on a regular basis. Since we consider public engagement to be essential, we joined Friends of the Earth (HK) to organise the Used Clothes Recycling Bin Design Competition for primary and secondary students in Hong Kong to promote public awareness of and support for used clothes recycling. More than 400 works of art were received from students.

### 3. Environmental Achievements

Towngas was conferred with the Gold Award in Public and Community Services of the 2019 Hong Kong Awards for Environmental Excellence by Environmental Campaign Committee. The Excellence Level Wastewi\$e Certificate which the Environmental Campaign Committee conferred upon us for 19 consecutive years was testimony to our strong commitment to waste reduction.

### 4. Environmental Performance

In 2020, Towngas' 12 functional environmental sub-committees achieved around 40 environmental objectives, one of which was to optimise the energy performance of the oil-free variable speed water-cooled chillers in our North Point Headquarters by using big data with artificial intelligence. In addition, we also held the Used Gas Appliance Recycling Programme for over ten years to recover metals from unwanted appliances. In 2020, more than 1,600 tonnes of metal was recovered under this programme. For more details about our environmental performance and targets, please access our corporate website to view or download our ESG Report.

(a) Environmental Performance Table

(All legal requirements relating to environmental protection were fully complied with)

Ozone Layer Protection

- All of our vehicle air conditioning systems now operate with refrigerant R134A.
- All BCF portable fire extinguishers have been replaced by dry powder extinguishers.
- The central chiller plant system in our North Point headquarters and Ma Tau Kok building operate with HCFC-free refrigerants.

Air Quality

- Total NOx output was 4.0 kg/TJ of town gas (Annual total of 108,978 kg, equivalent to a daily average of 298 kg).
- Total SOx output was 0.01 kg/TJ of town gas (Annual total of 366 kg, equivalent to a daily average of 1.0 kg).
- Total CO2 output was 11.9 MT/TJ of town gas (Annual total of 323,579 MT, equivalent to a daily average of 884 MT).

Greenhouse Gas Emission

- Annual total greenhouse gas emission was 344,549 MT in terms of CO2 equivalent.

Volatile Organic Compounds (VOC)

- Estimated annual total VOC emissions was 6.3 kg/TJ of town gas (Annual total of 171,095 kg, equivalent to a daily average of 467 kg).
- \* Before introduction of natural gas feedstock, estimated annual total VOC emission was 9.83 kg/TJ of town gas (Annual total of 268,242 kg, equivalent to a daily average of 735 kg).

Water Quality

- Total waste water output was 3.5 m<sup>3</sup>/TJ of town gas (Equivalent to a daily average of 270 m<sup>3</sup>).

Chemical Waste

- Total chemical waste output was 2.0 kg/TJ of town gas (Equivalent to a daily average of 145 kg).

Noise

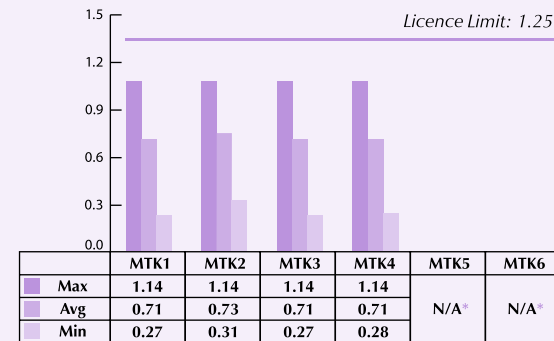
- All installations and operations complied with the statutory requirements. No noise abatement notice has ever been received.

(b) Operation of Gas Production Plant for 2020

As one of the leading energy suppliers in Hong Kong, Towngas provides a safe and reliable gas supply to its customers every day. During the year, the availability of Tai Po plant was 84.5%, while its thermal efficiency reached 88.4%. The installed capacity of the two plants in Tai Po and Ma Tau Kok totalled 12.596 million standard m<sup>3</sup>/day and the peak daily demand was about 5.859 million standard m<sup>3</sup>/day.

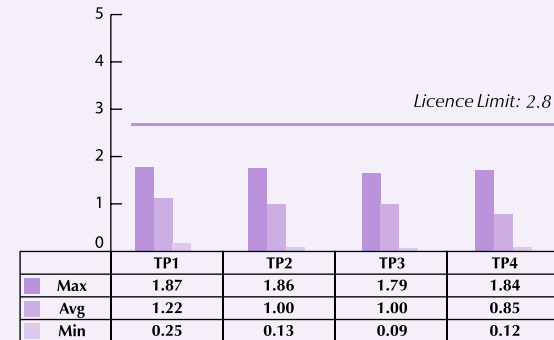
(c) Emission Levels of Gas Production Plants for 2020

(i) NOx emission levels of Ma Tau Kok (MTK) gas making units (kg/hour)

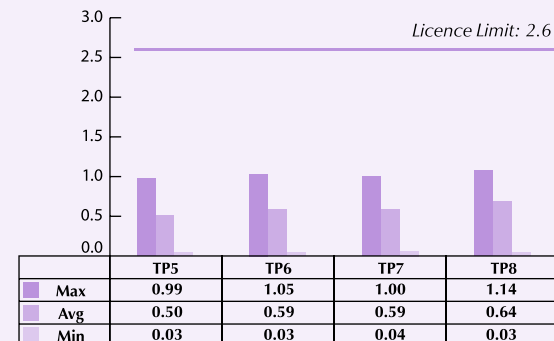


\* MTK5 and MTK6 at cold standby in 2020

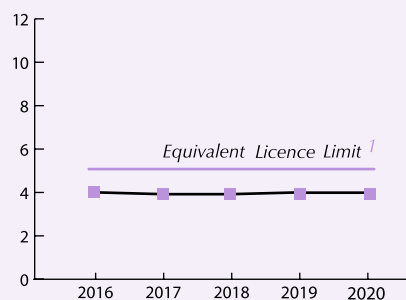
(ii) NOx emission levels of Tai Po (TP) gas making units Phase 1 (kg/hour)



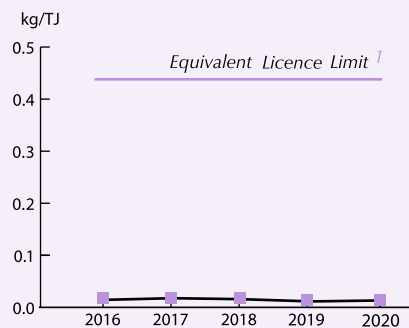
(iii) NOx emission levels of Tai Po (TP) gas making units Phase 2 (kg/hour)



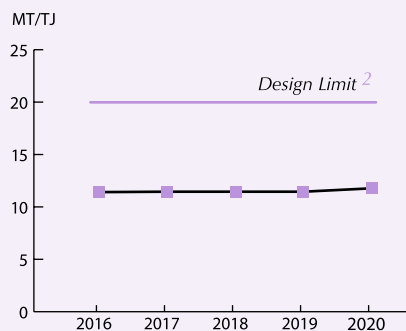
(iv) NOx emission levels



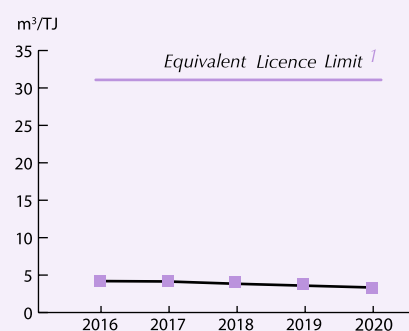
(v) SOx emission levels



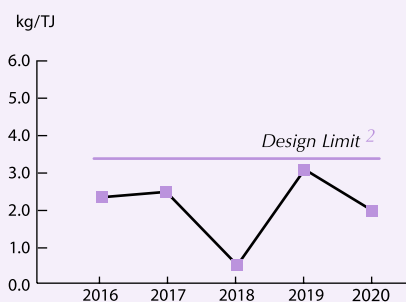
(vi) CO2 emission levels



(vii) Waste water output



(viii) Chemical waste output



1 "Equivalent Licence Limit" (kg/TJ OR m³/TJ) = "Weighted average of actual licence limit" (kg/hr or m³/hr) ÷ production rate of the plants for the year 2020 (TJ/hr).

2 As there is no Licence Limit for the discharge levels, we applied the design limit of our production plants as a reference point for the emission level.

FINANCIAL INFORMATION

The figures and financial information shown in this section do not constitute the statutory annual consolidated financial statements of The Hong Kong and China Gas Company Limited (the "Company") for the year ended 31 December 2020, but are derived from those financial statements. Further information relating to these statutory financial statements required to be disclosed in accordance with section 436 of the Hong Kong Companies Ordinance (Cap. 622) (the "Companies Ordinance") is as follows:

The Company will deliver the consolidated financial statements for the year ended 31 December 2020 in due course to the Registrar of Companies as required by section 662(3) of, and Part 3 of Schedules 6 to the Companies Ordinance.

The Company's auditor has reported on these consolidated financial statements. The auditor's report was unqualified, did not include a reference to any matters to which the auditor drew attention by way of emphasis without qualifying its reports, and did not contain a statement under sections 406(2), 407(2) or (3) of the Companies Ordinance.

1. Consolidated Income Statement

for the year ended 31 December 2020

	<b>2020</b>	<b>2019</b>
	<b>HK\$'M</b>	<b>HK\$'M</b>
Revenue	40,927.0	40,628.1
Total operating expenses	<u>(32,527.1)</u>	<u>(32,604.4)</u>
	8,399.9	8,023.7
Other (losses)/gains, net	(481.9)	1,048.7
Interest expense	(1,268.6)	(1,230.4)
Share of results of associates	1,187.0	1,820.4
Share of results of joint ventures	<u>1,089.2</u>	<u>741.5</u>
Profit before taxation	8,925.6	10,403.9
Taxation	<u>(1,713.2)</u>	<u>(2,289.6)</u>
Profit for the year	<u>7,212.4</u>	<u>8,114.3</u>
Attributable to:		
Shareholders of the Company	6,007.3	6,965.7
Holders of perpetual capital securities	110.3	98.6
Non-controlling interests	<u>1,094.8</u>	<u>1,050.0</u>
	<u>7,212.4</u>	<u>8,114.3</u>
Earnings per share – basic and diluted, HK cents	<u>33.8</u>	<u>39.2*</u>

\* Adjusted for the bonus share issue in 2020



## 2. Consolidated Statement of Financial Position

as at 31 December 2020

	2020	2019
	HK\$'M	HK\$'M
<b>Assets</b>		
<b>Non-current assets</b>		
Property, plant and equipment	68,133.7	61,082.7
Investment property	827.0	830.0
Right-of-use assets	2,802.4	2,725.2
Intangible assets	5,462.9	5,291.1
Associates	28,670.3	27,475.5
Joint ventures	11,981.2	10,613.5
Financial assets at fair value through other comprehensive income	2,492.8	3,141.9
Financial assets at fair value through profit or loss	4,687.3	5,030.6
Derivative financial instruments	305.0	354.1
Retirement benefit assets	111.9	66.3
Other non-current assets	4,649.1	3,729.8
	<u>130,123.6</u>	<u>120,340.7</u>
<b>Current assets</b>		
Inventories	2,671.0	2,363.7
Trade and other receivables	8,572.5	8,001.2
Loan and other receivables from associates	401.7	526.7
Loan and other receivables from joint ventures	442.9	800.4
Loan and other receivables from non-controlling shareholders	206.3	240.0
Financial assets at fair value through profit or loss	205.4	188.5
Derivative financial instruments	28.5	1.4
Time deposits over three months	173.3	158.6
Time deposits up to three months, cash and bank balances	7,455.0	7,848.9
	<u>20,156.6</u>	<u>20,129.4</u>

## 2. Consolidated Statement of Financial Position (Continued)

as at 31 December 2020

	2020	2019
	HK\$'M	HK\$'M
<b>Current liabilities</b>		
Trade payables and other liabilities	(17,031.1)	(14,718.0)
Amounts due to joint ventures	(486.3)	(943.2)
Loan and other payables due to non-controlling shareholders	(108.3)	(100.4)
Provision for taxation	(1,188.1)	(1,165.3)
Borrowings	(10,852.3)	(9,240.6)
Derivative financial instruments	(140.2)	–
	<u>(29,806.3)</u>	<u>(26,167.5)</u>
<b>Total assets less current liabilities</b>	<u>120,473.9</u>	<u>114,302.6</u>
<b>Non-current liabilities</b>		
Deferred taxation	(7,059.1)	(7,180.5)
Borrowings	(31,286.3)	(28,695.6)
Derivative financial instruments	(478.6)	(571.0)
Other non-current liabilities	(2,496.6)	(2,458.8)
	<u>(41,320.6)</u>	<u>(38,905.9)</u>
<b>Net assets</b>	<u>79,153.3</u>	<u>75,396.7</u>
<b>Capital and reserves</b>		
Share capital	5,474.7	5,474.7
Reserves	<u>61,283.8</u>	<u>58,734.7</u>
<b>Shareholders' funds</b>	66,758.5	64,209.4
<b>Perpetual capital securities</b>	2,384.0	2,384.2
<b>Non-controlling interests</b>	<u>10,010.8</u>	<u>8,803.1</u>
<b>Total equity</b>	<u>79,153.3</u>	<u>75,396.7</u>

### 3. Directors' Emoluments

The aggregate amounts of emoluments payable to directors of the Company for their service on the Board of the Company and its subsidiaries undertaking for the year ended 31 December 2020 are as follows:

	HK\$/M
Fees	4.7
Salaries, allowances and benefits in kind	13.4
Performance bonus	32.2
Contributions to retirement scheme	9.1
	<u>59.4</u>

Number of directors whose emoluments fell within:

#### Emoluments band (HK\$/M)

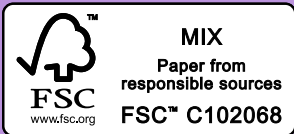
0.0 - 1.0	6
3.0 - 3.5	1
17.0 - 17.5	1
34.5 - 35.0	1

The above remuneration paid to directors of the Company also represents the amount of short-term employee benefits of HK\$50.3 million and post-employment benefits of HK\$9.1 million paid to the Group's senior management during the year ended 31 December 2020. There were no other long-term benefits, termination benefits and share-based payment paid to the Group's senior management during the year.

### 4. Analysis of Residential Maintenance

Net loss on residential maintenance of the Company under the Fixed Monthly Maintenance Charge for the year ended 31 December 2020 is as follows:

	HK\$/M
Residential maintenance revenue	213.6
Less expenses:	
Manpower costs	(169.7)
Other operating and administrative expenses	(114.3)
Net loss	<u>(70.4)</u>



香港中華煤氣有限公司  
The Hong Kong and China Gas Company Limited  
June 2021      [www.towngas.com](http://www.towngas.com)