

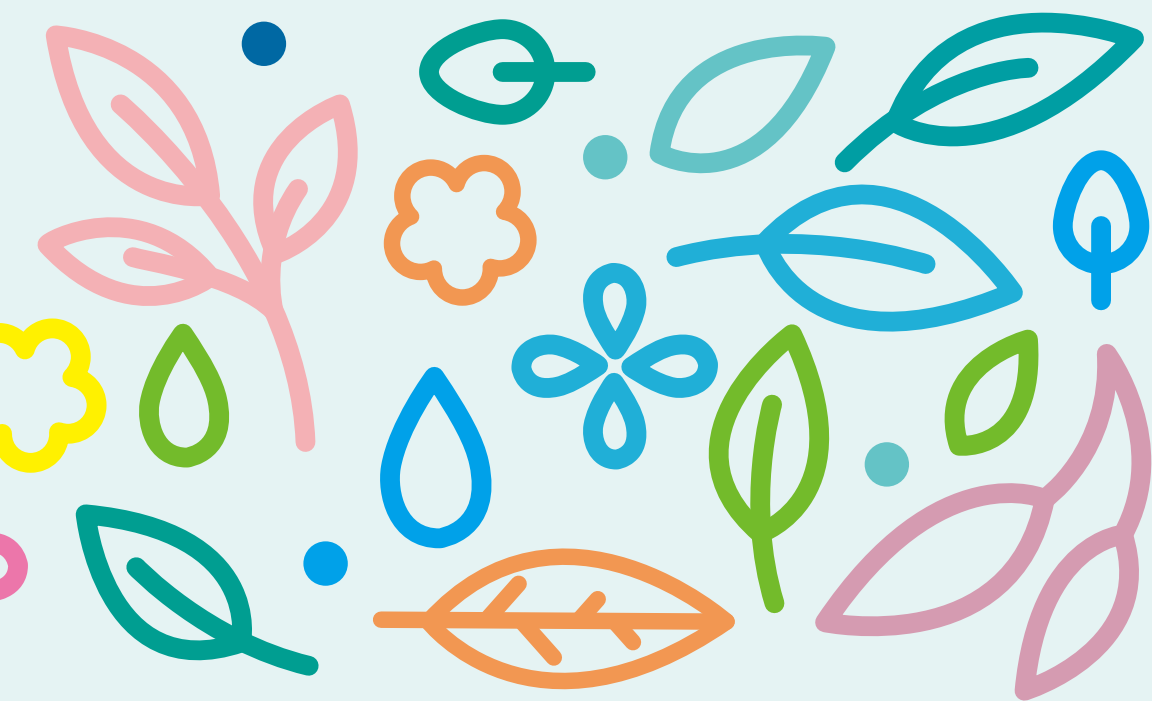


Go Green Every Day

Towngas China Company Limited
Environmental, Social and
Governance Report 2019



To be Asia's leading clean energy supplier and
quality service provider, with a focus on innovation
and environmental friendliness.



About This Report

As the industry's leading provider of city gas, Towngas China Company Limited ("Towngas China" or "the Company") deeply understands the importance of practising sustainable development and proactively incorporates environmental, social and governance practices of the highest standards in its strategic planning and business operations. The Company regularly evaluates these measures in a continual effort to enhance its practices. Since 2013, Towngas China has released annual Environmental, Social and Governance (ESG) Reports (formerly named Sustainability Reports) based on the principles of objectivity, systemisation, transparency and comprehensiveness. Focusing on the performance of corporate social responsibility (CSR) via a comprehensive suite of strategic campaigns and targeted activities aimed at creating value, the ESG Report underscores the Company's commitment to promoting social progress through sustainable development and its responsibility towards its stakeholders and members of the public.

Reporting Period

This Report covers the period from 1 January 2019 to 31 December 2019 and any prior period where applicable.

Publication Schedule

The Towngas China ESG Report is published annually and issued concurrently with the Company's annual report.

Scope of Report

This Report covers information relating to Towngas China Company Limited and its project companies in mainland China. For the purpose of this Report, terms including "Towngas China Company Limited", "Towngas China", "Towngas Group", "the Group", "the Company", "we", "us" and "our" are used herein.

Editorial References

- Appendix 27: Environmental, Social and Governance Reporting Guide under Rules Governing the Listing of Securities on The Stock Exchange of Hong Kong Limited
- G4 Sustainability Reporting Guidelines issued by the Global Reporting Initiative
- Guidelines on Corporate Social Responsibility Reporting in China (CASS-CSR 4.0) issued by the Chinese Academy of Social Sciences (CASS)
- ISO-26000 Guidance on Social Responsibility issued by the International Organisation for Standardisation (ISO)

Data Clarification

Information with reference to 2019 cited in this Report are based on final statistical data. Please refer to the concurrently issued Towngas China Annual Report 2019 for relevant financial data. All monetary amounts mentioned in this Report are denominated in Renminbi (RMB) unless otherwise specified.

Head Office and Principal Place of Business

Address: 23/F, 363 Java Road, North Point, Hong Kong
Telephone: +852 2963 3298
Facsimile: +852 2561 6618

Access to Report

This Report is available in three formats - print, electronic and mobile. To obtain a print copy, please call +86 755 2151 5056. The electronic version of this Report can be downloaded from the official Towngas China websites at www.towngas.com.cn or www.towngaschina.com. For the mobile version, please scan the QR code:



CONTENTS

Chairman's Statement	01-03
About Us	04-08
Effective Governance	09-20
Environmental Efforts	21-32
Sustainable Safety Culture	33-48
Service with a Smile	49-62
Empowering Talent	63-74
Giving Back to Society	75-82
Outlook	83-84
Appendix	85-89
Verification Statement	90-91
Feedback	92

Chairman's Statement

With the rapid development of the economy and significant increases in social productivity, China's energy consumption level has been continuously on the rise, with remarkable enhancements to its energy structure, conservation and efficiency. As a clean energy supplier committed to environmental improvements, Towngas China has upheld the nation's fundamental sustainable development policies. Shouldering the accountability of its business performance, environmental and social responsibilities, the Company has created a sustainable development system with shared value and dedicated its effort to realising quality growth.

In the past year, the Group has further strengthened its governance with a focus on the management theme of Embodying Corporate Integrity. Upholding the operational principle of integrity and compliance, we guided our project companies with transparency and accountability in their establishment of comprehensive internal monitoring mechanisms as well as checks and balances, and asked of all our staff to produce practical results in their work which demonstrated the integrity owed to our shareholders, government, customers and partners. Faced with sizeable development and a diversifying business, we apply an independent, objective, scientific and stringent approach to our internal audit to ensure the healthy operation of the Group. Through operating

with integrity, the Group has gradually become a leader in the public utility sector, and won the respect and acknowledgement of various fields.

In its process of transitioning into ecological civilisation, China has continuously adjusted its economical and industrial structure, which has provided new momentum to boost in-depth natural gas applications. During the year, the Group continued to invest in the connection of gas pipeline networks. Its coal-to-gas initiatives have entered the stage of crucial enhancements, while industrial and commercial gas applications have continuously expanded, with multi-dimensional research and development in industrial energy conservation as well as breakthroughs in its distributed energy business. Through the deepening advancements of civilian-use heating and urban village pipe reconstruction projects, we have promoted the steady increase of the urban gasification rate and contributed towards China's low-carbon economy and air quality improvement. In addition, we have taken the initiative to shoulder the responsibility for gas storage. Towngas' Jintan gas storage currently has four salt-cavern gas storages with a capacity for up to 200 million cubic metres of gas. During the year, the storage has officially launched reverse gas transmission via the west-east gas pipelines, and its



peak-shaving product has also been launched on the Shanghai Petroleum and Natural Gas Exchange (SHPGX). Together, these projects are evidence of the Group's commitment to the promotion of industrial enhancement and social economic development, with the aim of ensuring people's quality of life through a steady supply of energy.

The safety and professionalism of public utilities is a testament of the extent of a city's modernity, while the amount of care and effort demonstrated in the service of a public utility is a reflection of the degree of a

city's civilisation. The Group has always regarded safety as its priority. Through the launch of regional safe production year, safety and risk management audits, indoor safety checks, old pipeline network reconstruction and management process optimisation, standardisation of engineering and installation processes, innovation technology applications and other measures, the Group has maintained its leading position across various industry safety indices. In the context of Internet+ industrial enhancements, while maintaining our existing customer service channels including Customer Service Centres, Hotlines Centres

and on-site services, we have launched the smart and comfortable Bauhinia brand appliances and established Towngas Lifestyle as a reliable online lifestyle service platform in the digital ecosystem and created more value for our customers.

Charity work is also a focal point of the Group's sustainable development. In 2019, we aimed to help underprivileged groups and promote the development of youth education. During Dragon Boat Festival, the Group launched the traditional event Rice Dumplings for the Community, mobilising volunteers to make dumplings for charity organisations and disadvantaged groups to show our care for those in need. As a charity brand that embodies people's hopes, Towngas China Gentle Breeze Movement has made its way into Pingchang county, Sichuan province as well as Qiqihar city, Heilongjiang province through its educational aid

activities to offer schools a quality environment for teaching and support the development of education in rural areas.

As Towngas China's seventh Environmental, Social and Governance Report, this publication discloses the Group's measures on economy, environmental and social responsibility as well as their results. It is also an effective channel for us to communicate with our stakeholders, through which we can gather the opinions and suggestions of various parties and benefit from the monitoring and guidance of members of different sectors. A quality enterprise must not only optimise its economic value, but also optimise its comprehensive social value. Towngas China shall continue to strive to fully shoulder its responsibilities as a corporate citizen and become a leader in sustainable development.

Chairman and Executive Director, Towngas China Company Limited
Managing Director, The Hong Kong and China Gas Company Limited

Alfred Chan Wing-kin

16 March 2020



About Us

Company Profile

Towngas China Company Limited (HKG: 1083, "Towngas China") is listed on the Main Board of The Stock Exchange of Hong Kong Limited (SEHK) and a subsidiary of The Hong Kong and China Gas Company Limited (HKG: 0003, "HKCG"). As a public utility enterprise in the People's Republic of China, Towngas China primarily engages in sales and distribution of piped gas in the mainland. Its core businesses include provision of piped gas, construction of gas pipelines, operation of city gas pipeline networks, operation of natural gas refilling stations for vehicles and sale of gas appliances.

With innovation and environmental friendliness as its cornerstone, Towngas China endeavours to be the leading supplier of clean energy and provider of quality service in Asia. The Company has always formulated overarching management directives rooted in public interest while maximising stakeholder value. In its drive

for sustainable social and economic development, the Company has created comprehensive value through consistent best practices and engaged in exemplary corporate social responsibility (CSR) initiatives across diverse aspects, including corporate governance, safe operations, quality services, environmental protection, fostering development and community services.

To date, Towngas China is operating a total of 127 projects in 21 provinces/autonomous regions/municipalities spanning across Anhui, Fujian, Guangdong, Guangxi, Guizhou, Hebei, Henan, Heilongjiang, Hubei, Hunan, Jilin, Jiangsu, Jiangxi, Liaoning, Inner Mongolia, Shandong, Sichuan, Shanghai, Yunnan, Zhejiang and Chongqing, among others. As at 31 December 2019, we have 52,031 kilometres of gas pipeline networks. The Company achieved 11,120 million cubic metres in total gas sales volume and recorded an annual revenue of HK\$12,924 million in 2019.

Corporate Philosophy

Vision

To be Asia's leading clean energy supplier and quality service provider, with a focus on innovation and environmental friendliness.

Mission

Whilst improving the environment, we are also providing our customers with reliable, efficient, safe and clean energy.

Values



Management Philosophy



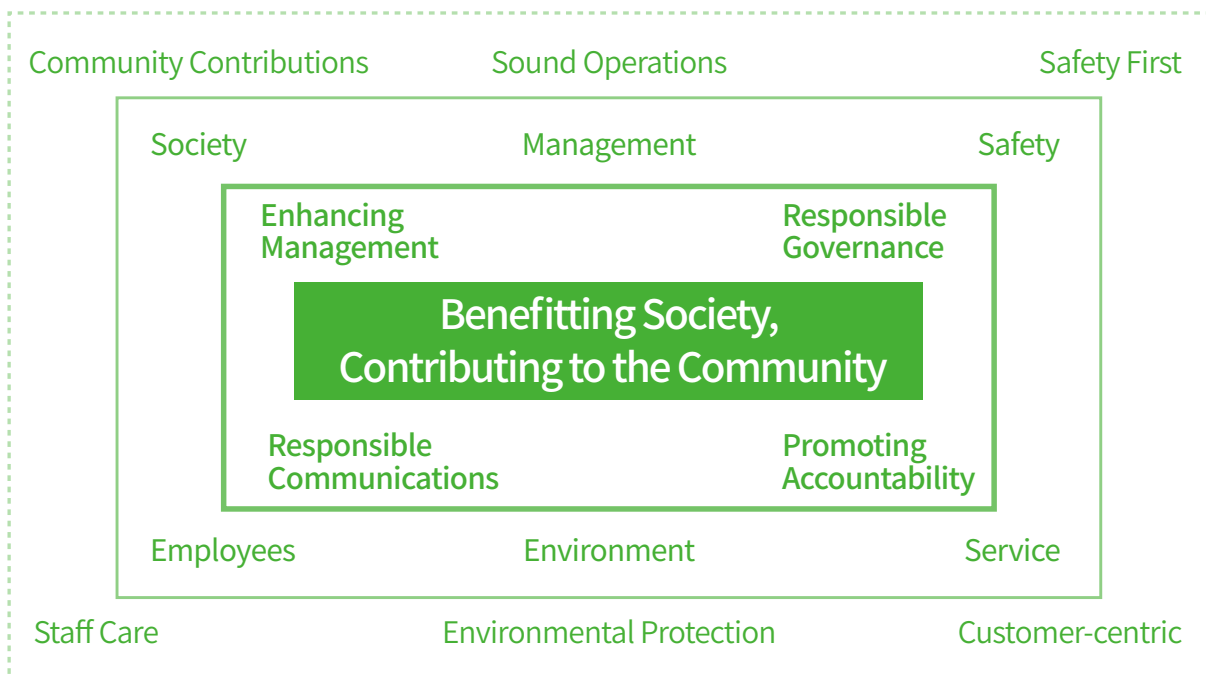
Total Quality Culture

Courtesy, Ingenuity and Integrity

Social Responsibility Philosophy

Benefitting society through active participation in social services;
contributing to the community through dedicated efforts in environmental protection.

Social Responsibility Management Model



Financial Performance

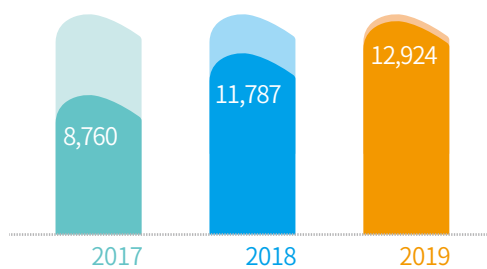
Although the business environment in 2019 was increasingly challenging and complex, various measures were implemented by the Government, which stabilised economic growth. As China was at the key juncture of building a society that is relatively affluent overall, the increasing application of clean energy to improve the environment and meet the

public's demand for quality lifestyle aligns with the major trends. Natural gas has also become a key factor in the adjustment of the country's energy structure due to its cleanliness and safety. In the context of the macroeconomy and the opportunities and challenges brought about by the nation's policies, Towngas China's business sustained a steady growth.

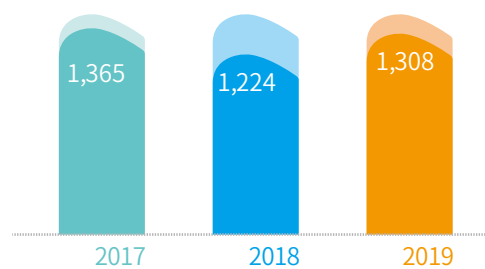
In 2019, Towngas China's revenue amounted to HK\$12,924 million, with a basic earning of HK 46.06 cents per share, and a final dividend of HK 15 cents per share. The profit after taxation attributable to

shareholders of the Company amounted to HK\$1,308 million. During the year, the Group's piped gas sale totalled 11,120 million cubic metres, a growth of 11% on the same period in last year.

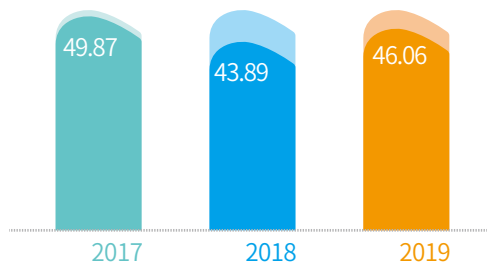
Revenue HK\$ million



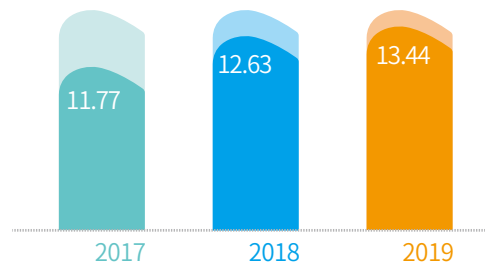
Profit after taxation attributable to shareholders of the Company HK\$ million



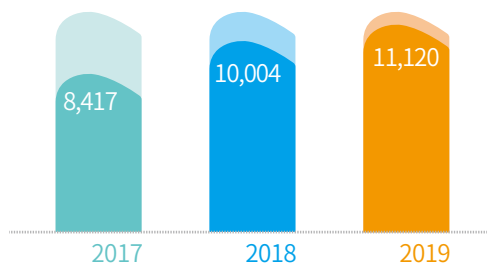
Earnings per share HK cents



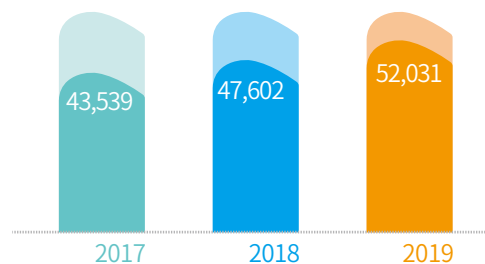
Number of customers Million households



Gas sales volume Million cubic metres



Length of pipeline network Kilometres



Major Accolades

Key awards bestowed upon Towngas China in 2019:

■ ESG Leading Enterprises 2019

Awarded by: Bloomberg Businessweek/Chinese Edition and Deloitte China



■ Most Outstanding Contributor Award

Awarded by: China Energy News and China Institute of Energy Economics Research



■ Top 10 Green Contributors among Energy Listed Companies 2019

Awarded by: Energy, China Petroleum & Chemical Corporation and CHN Energy Investment Group Co., Ltd.

■ Five-star Chinese Corporate Citizen 2019

■ Chinese Corporate Citizen Public Welfare Project 2019 (Towngas China Gentle Breeze Movement)

Awarded by: Corporate Citizenship Committee of the China Association of Social Workers





Effective Governance





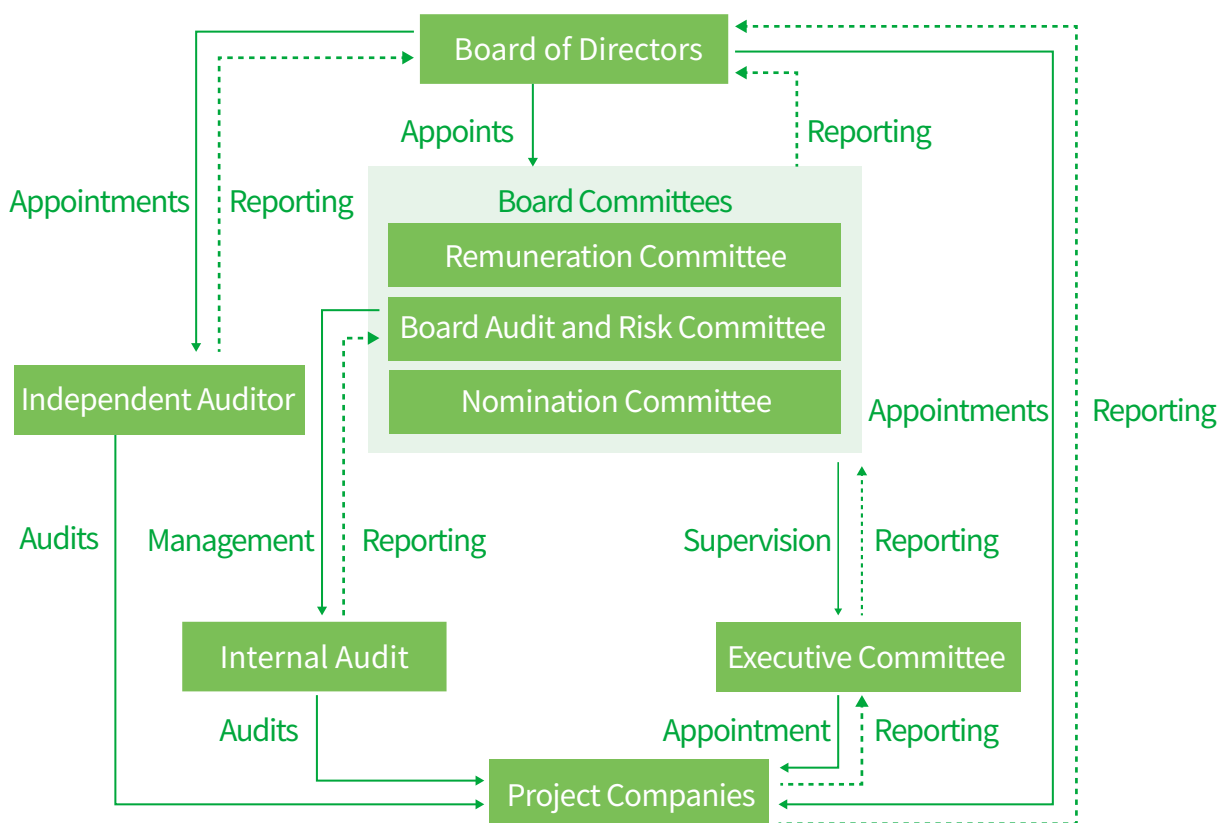
Corporate Governance

Towngas China places heavy emphasis on maintaining good corporate governance. To this end, the Company has established a comprehensive governance framework and efficient management controls in compliance with stringent ethical principles and prudent core practices.

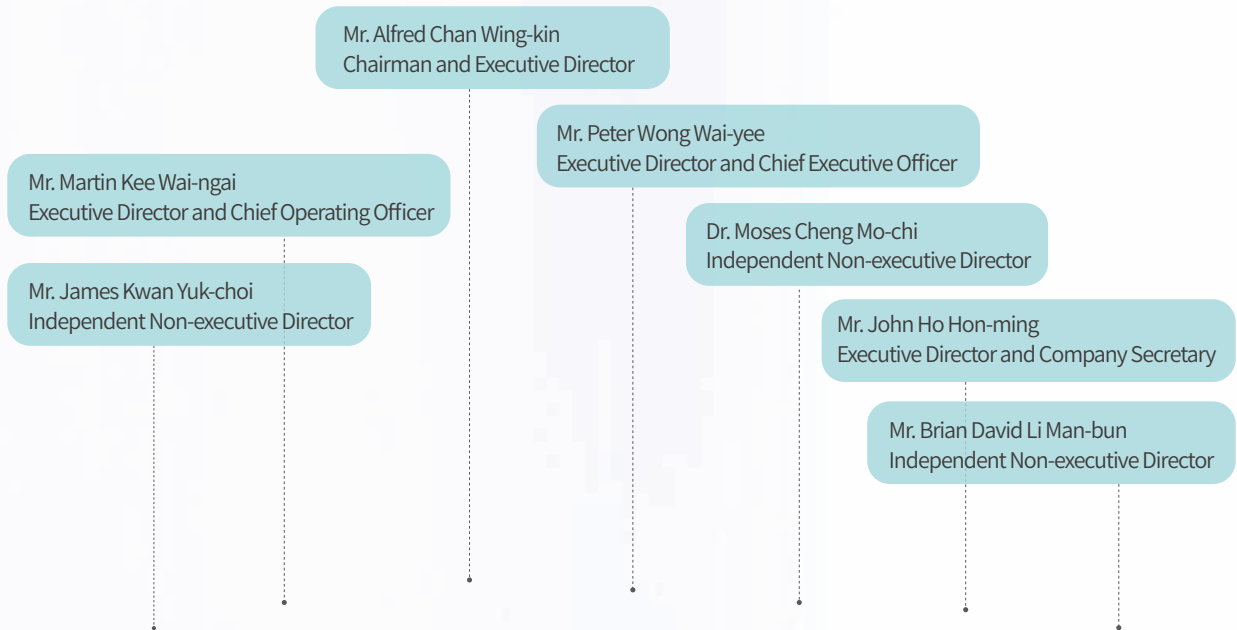
As the Company's highest governing body, the Towngas China Board of Directors (the Board) is accountable for upholding the highest standards on corporate governance and undertakes the responsibility of formulating overall strategies, setting management goals and performance

targets, evaluating business performances and other duties. Comprising seven members, including four executive directors and three independent non-executive directors, the Board oversees strategic developments with three specialised committees - namely the Remuneration Committee, the Board Audit and Risk Committee as well as the Nomination Committee. It ensures stakeholders' long-term interests by ensuring that the Company's projects are in line with the corporate values of integrity, transparency and accountability.

Towngas China - Corporate Governance Framework



Board Members



This division of work between the Towngas China Board of Directors forms a highly effective management system empowered by the layered structure of "Group–Regional Divisions–Entities". In accordance with state laws and regulations as well as the companies' articles of association, the Group designates and appoints a team of supervising professionals from relevant backgrounds to be Board Directors of subordinating project companies to oversee the latter's operations. The Group also continually seeks to enhance its information platforms for the Board of Directors so as to empower its directors and supervisors with timely, accurate and comprehensive data on respective entities. A secretary is assigned to each team across all levels. The Group holds board meetings for all of its 100 strong project companies every financial year, with the addition of an interim meeting for some. Every significant board resolution is followed up by corresponding departments at the regional and Group levels in order to ensure good operational practices, effective and thorough execution of the Group's development strategies, and respective board resolutions passed by individual entities.

In 2019, the Group further revised the Handbook of Appointment of Directors and Supervisors of Towngas China Group (2019 edition) and the Normative Document for Towngas China Board of Directors (2019 edition) to promote the culture of legally compliant corporate

governance across all entities such that respective Board Directors may perform their duties in a highly efficient and effective manner. The Group also drafted board report templates for relevant project companies and project teams to use as reference guidelines with respect to new areas of business developed in recent years, namely the Report on Additional Equity Financing Projects, the Report on New Urban Gas Projects and Special Project Report for New Business Extensions. Furthermore, consultative opinions on the Guidelines on Expenditure Claims for Investments by Entities of Towngas China Company Limited has been compiled and the document is expected to be officially issued in 2020.

In terms of investment management, the Group had stipulated specific principles and permissible extent of authorisations at Group level when reviewing and approving projects, and clearly defined the roles and responsibilities of respective departments in line with HKCG project review guidelines and reporting principles for project review meetings set out by Administrative Committee. This is to minimise investment risks and maximise investment returns through a standardised and centralised investment management model that practises collective decision-making, hierarchical authorisations, peer supervision and entire business process management.

Sustainability Governance

The ESG Committee* established by Towngas China comprising a panel of senior management executives is dedicated to reinforcing directives on sustainability

efforts by the Group. For 2019, the ESG Committee closely reviewed all Group matters pertaining to sustainable development, including but not limited to

aspects relating to health and safety, environmental protection, operational protocols, employee, customer and supplier relations, and community engagement initiatives. The Committee endeavours to promote

sustainable developments through creative means and is responsible for reviewing the ESG Report for the year ended 31 December 2019.

ESG Committee Members

Towngas China Executive Director and Chief Executive Officer	Mr. Peter Wong Wai-yee (Chairman)
Towngas China Executive Director and Company Secretary	Mr. John Ho Hon-ming
Towngas China Executive Director and Chief Operating Officer	Mr. Martin Kee Wai-ngai
Towngas General Manager - Corporate Affairs	Mr. Isaac Yeung Chung-kwan
Towngas General Manager - Corporate Sustainability	Mr. Victor Kwong Chiu-ling
Towngas China Senior Vice President (Safety and Risk)	Mr. Lam Ming-wing
Towngas China Company Secretarial Manager	Ms. Esther Leung Pak-ling (Secretary)

*ESG Committee was formerly named as Sustainability Committee

Under the leadership of the ESG Committee, the Group continually optimised its work protocols and boosted management efficiency on sustainability development. In line with the 17 Sustainable Development Goals (SDGs or

collectively, the "17 Goals") promulgated by the United Nations ("UN"), the Committee incorporated Group strategies and set out operational targets and took appropriate actions.

Response to SDGs



Focused on energy accessibility and green energy development, the Group has supplied environmentally friendly and conveniently accessible natural gas as well as launched coal-to-gas and clean energy initiatives to realise China's Blue Sky project. Through innovative applications, the Group has developed integrated energy services that increase the efficiency of energy use, and launched distributed energy projects in industrial parks, multi-functional commercial buildings, public construction and civilian developments. In addition, we also explored new energy business

development models such as microgrids, incremental distribution networks and energy storage to ensure that our customers can enjoy clean energy that is stable and dependable. At the same time, a dedicated department was set up to formulate relevant policies and systems in a bid to realise our low-carbon target across all processes, ranging from production to operation. These measures contribute towards building sustainable communities and cities, as well as enhancing our ability to combat environmental issues such as climate change, for us to realise the blueprint to a brighter future for mankind.

Corporate Risk Management

To protect the long-term interests of its stakeholders, Towngas China takes a serious stance on corporate risk management and is committed to establishing a stable and reliable risk identification and management system, including continual enhancements to internal supervisory controls and mechanisms on checks and balances so as to maximise capabilities on risk prevention.

Towngas China has set in place a multi-layer structure for its risk management to effectively identify, evaluate, mitigate, report and monitor all major categories of risks for the Group and its subordinating project companies. The Group also adopts dynamic management practices targeted at lowering risks with specific corresponding solutions and exercises prudence when formulating strategies and project execution plans.

The Board Audit and Risk Committee supports the Board of Directors in supervising the Group's overall risk management system and furnishes the Board of Directors with corresponding effectiveness verification reports. The

Group Executive Risk Management Committee is responsible for setting control parameters for said risk management system and comprises key administrative executives. The Corporate Risk Management Committee, comprising management executives and specialised personnel on risks and liabilities from the respective project companies, facilitates members of the Group Executive Risk Management Committee in reviewing major and primary risks, supervising risk mitigation measures and overseeing implementation of such measures, and regularly submits risk management reviews to the latter.



Concurrently, a Safety and Risk Work Report from respective project companies is submitted to the Board of Directors as a separate agenda item at Towngas China. This report includes additional in-house assessments on major risks faced by individual entities and relevant risk monitoring indicators to guide project companies in its risk analyses and management. For supervisory positions, the Group typically appoints

specialised staff from its corporate treasury and investor relations department as well as finance and audit personnel. The designated supervisors are adept in the Group's businesses and possess the macro perspectives to oversee entity operations in a manner that can reinforce corporate risk management to eliminate potential risks and malpractices in the Group's best interests.

Aspects Covered under In-house Corporate Risk Assessment

1 Production Risks

2 Operational Risks

3 Legal Risks

4 Raw Material Supply Risks

5 Health, Safety and Environmental Risks

6 Financial Risks

7 Human Resources Risks

8 Market Risks

9 Cyber Security Risks

Legal Risk Management

In response to the opportunities and challenges brought forth by the national campaign on lawful governance, and to bring the Group's legal compliance and corporate governance to greater heights, Towngas China has established a robust interlocking system of preventative, control and review measures to prevent and minimise legal risks.

To further enhance its legal risk evaluation system, Towngas China has drafted a Checklist for Assessing Legal Risks and Quantifiable Evaluation Standards tailored to suit the unique characteristics of a public utility enterprise and its business protocols. The Group has also established reporting mechanisms for major risks to ensure that pertinent legal risks are expeditiously escalated to the Group's Board of Directors and management. This system put in place at

Group level and across subordinating project companies demonstrates Towngas China's ability to effectively identify, control and resolve potential legal risks. The system is equipped to collect, organise and interpret laws and regulations, case studies and theories relevant to the Group's array of businesses, and to perfect the mechanisms monitoring the legal environment in a macro, in-depth and timely manner.

To implement the concept of lawful governance, Towngas China has designated regional legal personnel on each frontline, engages professional legal consultants, and organises staff training to boost legal awareness at subordinating project companies. The Group also publishes the Towngas China Legal Affairs Quarterly Journal to ensure that the entire staff body remains vigilant on complying with state laws and

regulatory requirements so as to maintain safe, orderly and highly efficient operations amid changing policies and market environments.

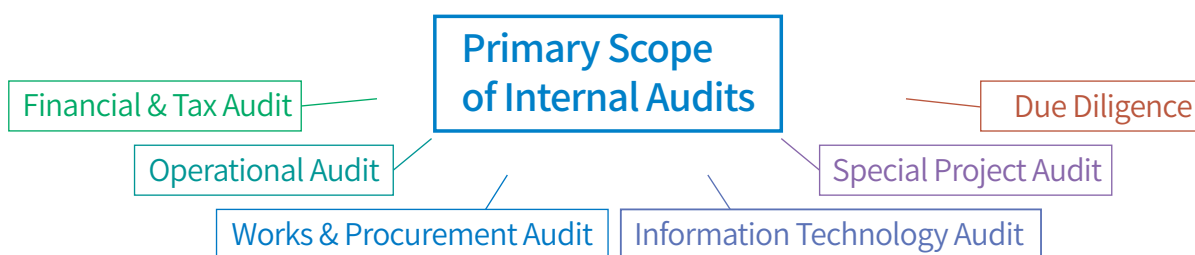
Furthermore, the Group assigns project lawyers to facilitate new project developments, including due diligence, project evaluation, contract drafting, negotiations, asset

handovers and contract reviews etc., so as to keep a firm grasp on legal risks faced by new projects from the very beginning. This ensures that all legal matters for new project developments are in tandem with existing work practices while relevant legal information is complete and kept in good order.

Internal Audit

The Towngas China Internal Audit Division (IAD) functions independently of the Group's management and undertakes the role of evaluating and supervising the Group's management as well as the effectiveness of internal controls. Through internal audits, the Group and its project companies are subjected to objective assessments on all operations and management aspects. Results of

internal audits will include proposed solutions and action plans to address issues uncovered during audit processes, so as to ensure adherence to normative governance and enhance internal controls at project companies. By working on the fundamentals to improve overall operational efficiencies and economic benefits, the Group can stay assured on its developments.



The IAD is responsible for drafting and revising the Towngas China Internal Audit Division - Project Management Rules in accordance with state and local laws and regulations, national standards and industry norms, accounting principles and Group requirements etc., where the directive is to standardise audit processes and establish corresponding audit protocols for different types of businesses under audit so as to ensure that all audits are conducted in compliance with strict standards. Subsequent to the establishment of the Specialised Audit Scoring System on Capital Arrangement, the IAD set up in 2019 the Specialised Audit Scoring System on Information Technology (IT) Security to assess and score project

companies on their management of system updates, IT security, system operation and personal data protection, which can in turn facilitate targeted improvements to IT security and management.

The IAD reports to the Towngas China Board Audit and Risk Committee and the HKCG Corporate Audit and Risk Management Division biannually. It covers primarily updates on audits undertaken in the past six months, including audit results and derived values, information pertaining to internal audit staff, planned schedules for the year and any other matters of concern. In addition, the IAD will conduct and give an annual report to the Audit

Committee of relevant project companies on any audit matters of significance. This is to ensure that audit findings and recommendations are attended to and actioned on by the management.

As at December 2019, the Group had established audit committees for 33 project companies and internal audit divisions for 11 project companies.

In 2019

- Commenced 36 audits
- Followed up on the execution of recommendations in 28 audit reports
- Supported project companies in establishing regulatory frameworks and optimising 47 rules and regulations
- Conducted annual reporting to audit committees of 14 project companies

Business Ethics

Towngas China deems ethics to be a key principle in its business operations. The Group has issued strict guidelines on its internal code of conduct and upholds a strong anti-fraud policy to counter acts of bribery and corruption, conflicts of interests, insider trading, and acceptance of gifts and receptions, and to offer guidance on handling conduct issues such as inequality at the workplace. The Group has also established official whistleblowing channels for all stakeholders to report suspected fraud or any other misconduct, and encourages our business partners to jointly uphold principles of business ethics by adhering to the Group's anti-fraud policy. Specific policies are published on the Corporate Governance section of the Group's official website at: <https://www.towngaschina.com/en/About-Us/Corporate-Governance>.

Other than conducting regular training on the Group's code of conduct and anti-fraud policy, all staff are also mandated to partake in routine online assessments. They are required to sign the Staff Declaration and Conflict of Interests Declaration Form and declare any matters that may contravene any rule set out by the Group. This is to ensure that all operational activities are conducted in strict compliance with laws and regulations and conform to ethical practices.

In 2019, the Group did not encounter any litigation related to staff bribery, extortion, fraudulent acts or corruption.

Supply Chain Management

In addition to operating with integrity, Towngas China has also incorporated the concept of corporate social responsibility (CSR) into its supply chain management. On the premise that their product quality complies with required standards and is approved by onsite inspection teams,

suppliers with outstanding CSR performance will be prioritised for selection and subjected to routine appraisals. At the same time, the Group encourages all project companies to proactively engage in responsible procurement and contribute towards a green supply chain.

To motivate our suppliers to join our cause, Towngas China unrelentingly enhances its supply chain management systems. The Group mandates all suppliers to comply with relevant ethical, social and environmental provisions set out in the HKCG CSR Guide for Suppliers and furnish self-appraisals for annual random checks on their CSR performances conducted by the Group, whereby the Group will subsequently offer official feedback with recommended improvements. Concurrently, the Group mandates that its suppliers adhere to the Basic Requirements for Towngas Group Suppliers and conduct business with integrity, in a voluntary, equal and fair manner, and in compliance with the laws and business ethics. To date, the Group has already received the 2019 CSR Self Evaluation and Feedback from over 130 key suppliers.

In compliance with relevant laws and regulations on procurement practices, Towngas China selected a total of 225 suppliers to work with over the past year; of which 200 were mainland suppliers primarily in the business of supplying polyethylene (PE) products, gas stoves, measurement instruments, risers, steel pipes and miscellaneous fittings such as anti-corrosion materials, pressure regulators, copper valves and pipe valves etc. The 25 overseas suppliers were primarily in the business of supplying pipe valves, detection instruments and other products. The majority of our suppliers possess valid ISO 9000, ISO 14000 and OHSAS 18000 certifications.

Joint Purchase Partner Management Conference

On 20 June 2019, Towngas China hosted the Joint Purchase Partner Management Conference which was attended by more than 300 business partners and staff from the Group's procurement, engineering, customer service and operations divisions. With the theme set as Commitment to Integrity and Innovation: Consistent Product Quality Benefits All, the conference was centred around quality, integrity and the importance of shouldering CSR. Business partners of Towngas China

were reminded to place value creation at the core of production management, storage and sustainable developments, and to take initiative in commencing 6S applications*, to improve environmental practices and increase efficiencies while proactively shouldering CSR that can result in win-win situations for all parties.

*6S refers to the Japanese words: Seiri (Sort), Seiton (Set in order), Seiso (Shine), Seiketsu (Standardise), and Shitsuke (Sustain), as well as Safety.



Respecting and Protecting Intellectual Property

Towngas China holds the protection of intellectual property in high regard and undertakes effective means of preventing acts of infringement such as enforcing proper declarations for intellectual property and applying for relevant certifications. For instance, Towngas Lifestyle, a specialised online platform under Towngas China, attained the ISO 20000 IT Service Management System (SMS) certification and the ISO 27001 Information Security Management System (ISMS) certification. Copyrights were issued to six of the software programmes developed by the Group: the Group's Gas Management System, Bauhinia Mall, Towngas Lifestyle Membership System, Towngas Lifestyle Recipes, Virtual Customer Centre (VCC) and Gas Guardian.

The Group has established an annual statistical audit on its genuine software and regularly conducts relevant training for all IT management staff at its project companies. The Group also mandates all contracts with external suppliers to clearly stipulate that supplied products and/or services do not constitute any infringement of rights, and provisions to be made for the protection of intellectual property rights of software and/or collective systems belonging to business partners. In addition, both parties to the contract must covenant to abide by the non-disclosure agreement and permitted scope of licensed use.



Environmental Efforts





Going Green

Towngas China has always been an advocate of clean energy and staunch supporter of state-proposed structural reforms for China's energy industry. In response to the national campaign for Winning the Blue Sky Defense Battle, Towngas China has taken action to implement initiatives of its own to echo the cause, such as the Coal to Gas boiler conversion project and the Connect Every Village programme. In 2019, the Coal to Gas boiler conversion project entered a crucial stage in

upgrading works. As the commercial market for small- and medium-sized food and beverage customers continued to expand and grow, the Group acquired 9,500 new customer units during the year.

Northern China Advances Coal to Gas Conversion by Leaps and Bounds



Since 2013, state policies on green controls and environmental protection measures have been progressively promulgated, such as the Ten National Measures for Air Control, Haze Control for Beijing-Tianjin-Hebei Region, the Two Mountains Theory (TMT) and the Blue Sky Defense Battle. Out of the "2+26 cities" identified as "air pollution transportation channels" in the

Mechanism for Coordinated Prevention and Control of Air Pollution in Beijing-Tianjin-Hebei and Surrounding Areas, 11 of them were in the Northern China region. In accordance with state requirements, Towngas China began to work on provision of clean heating for the regions involved.



In 2019, the Group's "coal-to-gas" boiler projects contributed 1,760 million cubic metres to the overall gas sales volume. In addition, the Group made headway on various gas applications such as commercial water heating, commercial gas-powered clothes dryers, gas-powered air conditioners, radiant heating systems, gas-powered vegetable dehydrator, steel rolling with natural gas, processing of powdered iron ore and heat rollers etc., while making multidirectional forays into industrial energy conservation.

With regard to the Opinions on Accelerating the Construction of Gas Storage Facilities and Improving Market Mechanisms for Gas Storage and Peak Shaving Ancillary Services jointly issued by National Development and Reform Commission (NDRC) and National Energy Administration (NEA) wherein city-gas enterprises are mandated to maintain gas storage capacity of no less than 5% of its annual gas consumption volume, Towngas China has been proactive in its response by establishing a Key Management Focus (KMF) team to conduct in-depth



studies on gas storage strategies and research on the strategy of constructing interconnected pipelines to effectively regulate and leverage on stored gas resources as well as the feasibility of building a multi-tier gas storage and peak shaving system. The initial plan is to build a three-tier gas storage and peak shaving system at Group, regional and entity levels. The Group will coordinate the external pipeline networks for regional gas storage facilities and liquefied natural gas (LNG) terminals; regional divisions will coordinate pipeline networks for entities within its region, as well as interconnected upstream and midstream pipeline networks; and business entities (project companies) will coordinate interconnectivity with other business entities within its administrative zone.

In the past year, the Towngas China Jintan Gas Storage showcased the prowess of its gas storage and peak shaving effects once production commenced. The facility was able to ensure steady gas supply for heating purposes throughout the winter and contributed extensively to the use of clean energy for winter heating. In October 2019, gas storage products were officially launched on Shanghai Petroleum and Natural Gas Exchange (SHPGX) for online

trading; in November 2019, China saw its first online trade of a gas storage and peak shaving product, opening a door to commercialised operations that will facilitate sustainable development of clean energy sources. Following that, in December, gas storage facilities officially commenced use of the West-East Gas Pipeline and recorded a total of 609,000 standard cubic metres in gas volume transported on the first day. This is the first time that city-gas enterprises in mainland China have managed to reversely feed into upstream pipeline networks. This major breakthrough marks a significant boost in the country's peak shaving capabilities for natural gas and reinforces the assurance of a steady supply of energy.



Green Policies

Towngas China has established a specialised division for environmental protection which is responsible for formulating management policies and systems, drafting the Staff Handbook on Safety and Environmental Protection, and conducting supervisory checks on the Group's environmental management. It identifies and assesses key environmental factors pertaining to its scope of businesses across various aspects, including resource and energy utilisations, exhaust gas emissions, effluent discharge, discharges on soil, energy releases and

generation of waste etc., and formulates goals and benchmarks to manage these environmental factors, along with operational controls and protocols as well as emergency responses and contingency plans in compliance with state laws and regulations.

The Group also sets out Guidelines on Waste Management and engages professional entities equipped with the relevant technologies and capabilities to process hazardous waste in accordance with relevant state and

local regulations, so as to prevent contamination and transfer. Non-hazardous waste and household waste are sent to garbage bins for regular disposal and cleaning in accordance with stipulations set out by the local environment hygiene authority. Towngas China also controls the amount of production waste that it generates

by implementing cleaning protocols for its production facilities and eliminating outdated machinery. In addition, the Group further reinforces waste management awareness and environmental practices by issuing memorandums and guidelines, on top of conducting staff training, on refuse classifications.

Guidelines on Managing Solid Waste

Solid waste is classified into general waste and hazardous waste according to its contaminating characteristics. General waste is sub-divided into recyclable and non-recyclable waste, the former is sent to professional recycling companies while the latter is transported to management units for environmental hygiene or landfills

for treatment in accordance with state requirements. For hazardous (harmful) waste, there are clear stipulations on storage requirements and matters of concern. Additionally, it is recommended to maintain a record of waste disposal and statistics categorised by treatment methods, e.g. to be recycled, landfilled, or incinerated.

Guidelines on Managing Exhaust Gas Emissions

Project companies should eliminate equipment that may potentially cause serious atmospheric pollution. If a production facility discharges atmospheric pollutants in its course of operations, such facility is mandated to install dedicated discharge outlets in strict compliance with specifications as set out by the Administrative Department for Environmental Protection under the State Council.

Additionally, the Group monitors and compiles statistics on exhaust gas emissions, in accordance with state laws and regulations and based on its set of Identification and Assessment Protocols on Environmental Factors. Original records of such monitoring and statistical data are kept for use as a reliable basis for future improvements.

Guidelines on Managing Effluent Discharge

Project companies must eliminate equipment that causes serious water pollution and comply with the standards imposed by the General Standards for Discharge of Wastewater. If project companies need to directly or indirectly discharge liquid pollutants, they must install dedicated discharge outlets according to stringent specifications set out by the Administrative

Office for Environmental Protection under the State Council. The companies should also engage credible testing organisations to monitor their industrial wastewater and ensure that it conforms to national standards imposed by local authorities, and maintain records of such effluent discharges and monitoring logs.

In terms of controls on noise pollution, the Group has adopted advanced low-noise equipment and facilities, and conducts daily repairs and maintenance work to ensure that noise-producing equipment are kept in excellent working condition, in addition to reinforcing noise detection checks.

In the Guidelines on Environmental Management, the Group had referred to relevant laws and principles set out by state authorities and provisioned specific clauses on conservation of resources and energy sources. These include taking separate measurements for resources and energy sources, designating specialised personnel to conduct statistical analyses for resources and energy sources, drafting and setting energy efficiency benchmarks, conducting site inspections on energy conservation efforts etc., and meeting specific requirements on energy efficiency plans for production facilities, buildings and offices, and transportation and logistics etc.

Concurrently, the Group mandates its project companies to formulate energy saving measures that maximise energy efficiency by gradually reducing energy consumption and emissions. Project companies are required to adopt more environmentally friendly materials and technologies in their daily operations and reduce the amount of waste generated through reuse and recycling where possible. In addition, companies are expected to conduct regular training to educate and raise the environmental awareness of all staff, clients and business partners. Project companies must abide by relevant environmental laws and conduct annual reviews and updates on its environmental policies, which should subsequently be signed off by the General Manager and put up in conspicuous locations at respective offices for staff to better understand and comply with such policy

updates. Throughout the course of the year, there were zero cases of state penalties imposed upon the Group or its project companies as a result of waste emission issues.

At present, Towngas China has a total of seven project companies that have attained the ISO 14000 Environmental Management Standards certification.

Carbon Audit



Towngas China has run its Carbon Audit programme since 2009, and compiles an Annual Report on Greenhouse Gas Emissions where subordinating project companies are mandated to report on total consumption or utilisation for water supplies and various fuel sources including gas, electricity and refrigerants for air conditioning systems etc., and in accordance with relevant state laws and regulations, the Group also sets out the specifics of its environmental policy and environmental management in its Guidelines on Environmental Management (HSE/ZY-33), which clearly stipulates the policy and criteria for audits, reviews and inspection checks pertaining to environmental protection.



Towngas China

Environmental Management Guidelines

Established by Towngas China Safety
and Risk Management Department

Document Number	Towngas China/HES/ZY-33
Version	4.0
Date	15 December 2016

Stipulating Standards for Site Environments

To reduce adverse impact on the environment, Towngas China appoints a First Responsible Person at its project sites to be in charge of civilised construction and environmental protection during the construction process. The Group has stipulated clear specifications on civilised construction and environmental protection measures to be undertaken at project sites in all contracts signed with contractors and in the descriptions for responsibilities of different roles. The Group conducts stringent inspections and closely monitors the levels of dust, noise and waste generated at all project sites, and formulates relevant preventative measures for timely elimination of dust, gas and wastewater pollution while ensuring that the cleanliness level of construction sites and project progress rates meet the standards set out by the Group.

As urbanisation continues to maintain a strong momentum in mainland China and the impact of environmental policies take effect, relevant state authorities have become increasingly strict with approving relevant paperwork for conducting excavation works. In 2019, the Group began to promote to its project companies a pipe laying method that could repair pipes using trenchless insertions. By tapping on old pipeline networks already existing in various cities, this method is able to greatly reduce the scope of work required, reduce the resulting noise and dust, shorten project timelines and boost construction efficiency. Upon its introduction, the concept was well regarded by residents and relevant state departments alike.

Promoting Green Products

As the Group's own brand of household gas appliances, Bauhinia is committed to providing customers with energy-efficient and environmentally friendly products. Its product offerings feature the incorporation of highly efficient engines, technological controls for low nitrogen oxide emissions and the world's leading condensing heat exchange technology. Bauhinia's "Inner Flame" built-in hob is designed to keep the heat centralised within its burner to maintain consistent temperatures at energy efficiency rates of more than 55%, achieving far lower gas consumption rates compared to similar products in the market.

Bauhinia adheres strictly to the specifications set out in the

state-issued Measures for the Administration of the Restricted Use of the Hazardous Substances Contained in Electrical and Electronic Products. Any hazardous substance that may be contained in its products and corresponding amounts are clearly stated in the product descriptions for all of its product lines, making it convenient for Bauhinia customers to understand relevant product information. Bauhinia also endeavours to minimise waste and pollution generated by product packaging during its manufacturing process. In light of the increased sales of product and wider selection of gas appliances, as well as the feedback we received from customers on the packaging, the Group's statistical data for the year is revised.

Total weight of product packaging 676.2 tonnes		Average weight of product packaging 0.002 tonnes
Total weight of plastics 93.8 tonnes	Total weight of paper 582.5 tonnes	

Organising Green Activities

The Group encourages its staff and project companies to actively participate in green activities. We believe in sending a strong message to people on co-building a green planet for all by adopting a low carbon lifestyle. Over the past year, Towngas China launched a plastic reduction campaign. The campaign comprises four main themes, namely Tree Planting Day, Earth Hour, Plastic Reduction Through Action and the Green Creative Show.

In 2019, close to 90 project companies participated in our tree planting activities. Over 2,200 volunteers took part and planted close to 6,000 trees in total. Featuring hot topics on environmental protection, project companies actively organised creative activities to promote low carbon lifestyles, such as Plastic Revamps and Green Graffiti Showcase. Plastic Revamps injected new life into plastic waste by transforming them into brand new items for keeps. Aside from promoting the recycling of limited

resources, the event gave participating staff hands-on experience in using forgotten items or plastic garbage as raw materials for DIY products of practical value. Taking the Towngas China brand logo as a design element, the Green Graffiti Showcase had participants incorporating the trademark into unique designs for reusable bags that became personalised shopping bags at the end of the day.



Plastic Reduction Campaign



On 12 March 2019, Qingyuan Towngas China held a tree planting charity event as part of the Plastic Reduction Campaign. Together, volunteers planted a total of 100 golden bell trees and did their part for the environment by taking action.



On 20 April 2019, Foshan Gas conducted classes on innovative ways to protect the environment. The Labs of Tomorrow seminar was themed after the Plastic Reduction Campaign and centred on encouraging students of the day to co-build a greener home for all by reducing the use of plastic products.



On 12 March 2019, the Chizhou Towngas China Volunteer Service Team hosted a voluntary tree planting exercise - A Date at Towngas Forest - where participants planted more than 100 saplings in total.



2019 Disclosure on Emissions and Utilisation of Resources

Data on Emissions from Fuel Burning and Vehicles



Nitrogen oxide (NOx)
21,310 kg

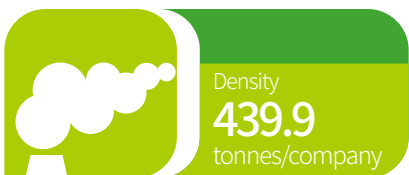


Sulphur dioxide (SO₂)
139.5 kg



Respirable suspended particulates PM₁₀
1,563.2 kg

Total Greenhouse Gas Emissions & Density



Total greenhouse gas emissions
34,751 tonnes

Total Volume & Density of Hazardous Waste Generated

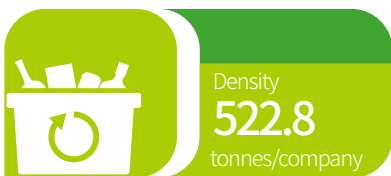


Harmful/hazardous waste (solids)
16.9 tonnes

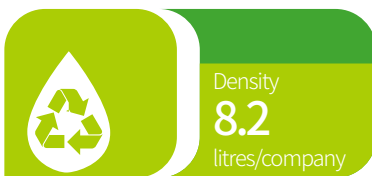


Harmful/hazardous waste (liquids)
6,763.9 litres

Total Volume & Density of Non-hazardous Waste Generated



Non-hazardous waste (solids)
41,303.6 tonnes



Non-hazardous waste (liquids)
651.4 litres

Energy Consumption & Intensity



Diesel

8,666.3

gigajoules



Natural Gas

107,175.4

gigajoules



LPG

48.6

gigajoules



Coal

0

gigajoules



Others

58,120.7

gigajoules



Consumption of non-renewable
resources (from burning fuels)

174,011

gigajoules



Electricity
consumption

141,546.8

gigajoules

Total Water Consumption & Intensity



Intensity of water consumption

3,675.3

cubic metres/company

Water consumption

290,346.2

cubic metres



Intensity

3,994.4

gigajoules/company

Total energy consumption

315,557.8

gigajoules



Sustainable Safety Culture



Comprehensive Safety Management

"The only way to do it is to do it safely." Towngas China prides itself on adhering to the highest safety standards and remains vigilant on every possible type of potential hazard. For years, the Group has upheld a "safety first" culture and has dedicated resources to maintain high safety awareness throughout the company. As part of its comprehensive management structure on safety and risks, Towngas China has appointed the top executives at Group, regional and entity levels to head the respective Safety Committees. Each committee comprises a panel of senior executives and department heads of the respective entity. The Safety & Risks

Management Department is responsible for guiding and supervising safety and risk management of entities within respective regions, and ensuring that each and every company has an operational risk and safety management department where headcount is determined based on the company's size and minimum headcount required for the risk management department. Each company is also mandated to have a safety production responsibility system in place and staff at all levels are required to perform their corresponding safety responsibilities.

Regional Safe Production Year Campaign

Since 2008, Towngas China has implemented the annual Regional Safe Production Year campaign on production safety across all regional sites. In 2019, the Group launched its annual safety campaign themed as TQM (Total Quality Management): Reinforcing Occupational Safety. In July 2019, Towngas China Chairman and Executive Director Mr. Alfred Chan Wing-kin led the Group's Safety Committee in conducting safety inspections at its facilities in the

Northern China region. From Zibo Towngas to Tai'an Towngas of Taishan district and Pingyin Towngas of Jinan city, the entourage conducted on-site safety inspections at pressure-regulating stations, LNG vapourising stations, grid control centres, operations in confined spaces, commercial and household customers, and locations under the Connect Every Village initiative.

Safety Inspections in Northern China Region



On 23 July 2019, Towngas China Chairman and Executive Director Mr. Alfred Chan Wing-kin led a safety inspection entourage to Zibo Towngas China to better understand the operational status of a pressure-regulating station in Koujia, Zibo. The team conducted spot checks on the pool of sand reserves for firefighting purposes, and personally tested the remote intercom systems of unattended stations by using them to communicate with the Grid Control Centre. Real-time monitoring data from various equipment covering multiple functions were transmitted to the company's Grid Control Centre via optical fibre connections, including backup video surveillance for remote intercom systems, infrared beam detection police alert systems, remote intercom systems at production facilities, detection systems on combustible gas and other

triggers etc. The centre then made corresponding adjustments for continuous monitoring according to the circumstances of each unattended location. Subsequently, the inspection entourage headed to a drill on operations in confined spaces outside the Koujia station. Safety checks were conducted on fire alarms and four-in-one gas detectors. The highly experienced operations crew added safety nets to the opening of the company's valve wells and hung inspection cards with QR codes for ease of information verification on the respective valve well. The inspection entourage commended the local team on this brilliant idea and suggested additional support for securing rescue tripods as an area for improvement.



General Manager Monthly Safety Inspections

Towngas China launched its General Manager (GM) Monthly Safety Inspections in 2008 and extended this to intercompany cross-inspections in 2015. The scope of inspection covers a total of 18 aspects, including operations and maintenance of pipeline networks, production operations, site safety, fire defence equipment, routine safety inspections on customers' equipment, suspension and reactivation of gas supplies and environmental management. Among them, a "contractor safety inspection" item was added during the year to strictly monitor the contractors' safety level. It focuses on the performance of the construction unit's

project department, from safety management systems, staffing and certification to employment, safety agreements and insurance, labour protection supplies, safety education and training, hazard identification, dangerous work authorisation management, on-site safety inspection, etc. In 2019, the Group conducted a total of 12 GM inspections and implemented improvements on preventive measures for a number of potential hazards. The exercise reinforced employees' safety awareness and bolstered safety management standards which in turn reduced operational risks.



Overview of General Manager Monthly Safety Inspections

Timeline	Inspection Items
January 2019	Inspection of pipeline networks and testing for gas leaks
February 2019	Routine safety inspection
March 2019	Occupational safety and health
April 2019	Safety management at production facilities
May 2019	Safety management on transport
June 2019	Safety management on security
July 2019	Safety management of building contractors
August 2019	Corporate risk assessment
September 2019	Operations and maintenance of pipeline networks
October 2019	Safety management of engineering projects
November 2019	Safety management on fire defence
December 2019	Crisis management

Safety and Risk Management Audit

Since 2006, Towngas China had put in place a Safety and Risk Management Audit regime. Covering close to 1,000 audit items across 10 categories, namely occupational safety, fire defence safety, pipeline network safety, customer safety, production facility safety, emergency response, security management, transport safety and environmental protection, a comprehensive audit is done for all project companies on a regular basis, once every two years. To date, this is the seventh round of audit. For this round of audit, the scoring system on safety-related

Key Performance Index (KPI) performance was optimised in line with revisions to the Group's supervisory audits. As part of its efforts to audit project companies in an even more objective and fair manner, the Group had also specially designed the Codes of Practice for Safety and Risk Audits, which stipulates that all auditors shall be subject to supervision by project companies. For 2019, the Group conducted scheduled audits on a total of 33 project companies and random audits on another nine project companies.

Deepening Safety Management Practices

Underground pipeline networks form the "arteries" and critical assets of any city-gas business. It is the key to safe supply of natural gas for our customers. Towngas China has always placed great emphasis on the comprehensive management of its gas pipelines. The Group constantly underscores the importance of conducting regular maintenance and inspections to detect and prevent corrosion of its underground pipes, and seeks to standardise work processes for pipeline inspections.

In 2016, the Group began to design a set of uniform standards on pipeline inspection and started to compile a list of qualified inspection entities. In 2019, Towngas China issued a notice on the approved list of qualified inspection entities for underground steel pipelines after three stringent rounds of evaluative selections. A total of 10 inspection entities made the list as being qualified to inspect pipelines belonging to the Group. To ensure that all inspection items and

processes meet relevant standards, the Group followed up with supervision and reviews on inspection works conducted by these qualified entities throughout and after such work processes, which demonstrates the Group's commitment to elevating the operational safety levels of its pipeline networks.

The Group also carried out replacement and enhancement works to its underground pipeline networks as part of its efforts to bolster operational safety efficiency levels for a safe and secure supply of gas, including a switch from grey cast iron pipes to steel and polyethylene pipes (or PE pipes) as the latter materials possess stronger mechanical and anti-corrosion properties. Throughout 2019, the Group replaced a total of 20 kilometres of grey cast-iron pipes, bringing total enhancements on its pipeline networks to 2,662 kilometres and logging a cumulative pipeline transformation rate of 98.77%.

At the same time, the Group utilised advanced detection equipment and monitoring technologies to regularly inspect its underground pipelines for potential hazards arising from common underground factors such as like humidity, corrosion or damage caused by external forces, on a best-effort basis to ensure the safety and reliability of its underground pipeline networks. In addition, Towngas China is continuously improving its safety-related technologies and measures by proactively conducting precautionary replacement and enhancements works to boost safety levels as well as promoting a cohesive safety culture within the Group with safety training and awareness campaigns. The Group firmly believes in investing in protective gear and relevant safety equipment to ensure a safe working environment for its staff. Testament to the Group's dedication to "safe production", its safety enhancement cost alone amounts to a total of RMB 370 million.

In terms of operational maintenance on pipeline networks, the technique of measuring in open ditches is a tried and tested method of obtaining accurate data on the location of pipelines. Such accurate mapping of pipeline network greatly enhances work efficiencies when it comes to inspecting and repairing pipelines for gas leaks and any other issues. In turn, this not only reduces damages caused by contractors but also minimises operational costs in the long run. Adopting systems science as the reliable fundamentals for its risk assessments and emergency response designs, Towngas China has tapped China's Beidou Precision Positioning Technology to promote the application of modular designs pertaining to emergency

responses and risk evaluations on the back of this geographic information system (GIS) and correspondingly issued a Handbook on the Functional Requirements of a GIS. The Group has also brought in dogs from Hong Kong that have been professionally trained to detect gas. These sniffer dogs are capable of detecting traces of an odour added to natural gas and pinpoint the locations of gas leaks with higher precision. At present, the sniffer dogs have been despatched to Benxi Towngas and Shandong Jihua to boost the gas safety and reliability at these sites.

Over the past year, Towngas China's regional divisions proactively spearheaded works on the monitoring and control systems at its terminals and conducted extensive maintenance and repair works on its control rooms. The Group exercised much prudence in selecting premium service providers for its outsourced maintenance works to ensure that all equipment and facilities are kept running in tip-top condition. At the same time, the Group invested in operational training for the staff of its project companies as part of its efforts to bolster emergency response and management levels. To date, such measures have been successfully rolled out across the Southern China, Jiangsu-Zhejiang and Southwest China regions.

To ensure safe gas operations for its customers, Towngas China introduced regular safety inspections in 2003. Under this programme, specialist staff pay visits to customers' homes to conduct onsite inspections on gas pipes and facilities every 12 to 24 months, and take the opportunity to promote

awareness on gas safety. Within the year, the Group managed to boost efficiency on its gas safety inspection routine by optimising and shaving three minutes off its check procedures.



Meeting of the Customer Service Strategic Committee



Towngas China has always been dedicated to ensuring safe gas operations for its customers. At the 2019 Meeting of the Customer Service Strategic Committee, discussions on plans for implementing routine inspections on the airtightness of gas risers, drafts for new Guidelines on Managing Gas Meters by the Group and designs for an evaluation model on customer service experiences with the Customer Service Hotline Centre were conducted at length. Results of professional research conducted on split installations were also shared at the meeting. The chief editors of the Code for Design of City Gas Engineering for Users and the Code for Construction and Quality Acceptance of City Indoor Gas Engineering were also invited to present on key provisions in the newly promulgated state standards. The Group also shared several internal normative documents at the meeting, such as the 2019 Guidelines on Maintaining Image

Database on Potential Hazards and Managing Rectification Works, Guidelines on Safety Inspections and Rectification Standards for Potential Indoor Hazards at Customer Sites, Guidelines on Routine Safety Inspections for Residential Customers, Handbook on Standard Product Applications for Aboveground Gas Facilities and Guidelines on Conduct for Occupational Safety, as part of its efforts on further standardising work protocols and ensuring safe gas operations.



Sniffer Dogs "Sniffed Out" Gas Leak



On 13 November 2019, Towngas China's professionally trained sniffer dogs made their debut appearance at Jinan, Shandong along with their trainers to conduct an extensive round of inspection checks for gas leaks. On 19 November, while going about their routine checks in the neighbourhood of Nansha, the sniffer dogs began to tug at their leashes and sprinted towards a nearby manhole cover before staying put at that very spot. Using specialised detection devices, the inspection team was able to ascertain a gas leak in the area. The emergency repairs team from Shandong Jihua swiftly responded and meticulously inspected the community's gas facilities in accordance with the required emergency response protocols. Upon determining the exact position of the gas leak, the repair crew decided to temporarily shut down the faulty sections so as to avoid impacting regular gas supply to the residents during the day. Urgent repairs began in the evening at 7:45pm and were completed in 95 minutes. The emergency repairs stopped the gas leak at the Nansha neighbourhood in a timely manner and gas supply was subsequently fully restored. Thanks to the exemplary work of these sniffer dogs, complemented by coordinated efforts from respective work units, the gas leak was discovered in time and repaired immediately, making the first joint operation led by Shandong Jihua a resounding success.

Prior to this joint operation, regular gas inspections required staff to collect gas samples for further chromatographic analysis before a gas leak could be determined. Such sample collections were often impeded by the cumulation of sewer gas in manholes, septic tanks and underground drainage systems as the primary composition of sewer gas is strikingly similar with those of natural gas. Besides, in the event of a gas leak, such leaked gas could spread to and affect surrounding green belts and municipal drainage systems even before it reaches ground levels. This would extend the distance and potentially widen the scope of detection beyond regular inspection coverage. Since sniffer dogs are trained to swiftly detect the presence of Tetrahydrothiophen (THT) in the air - an odour specially added to Towngas China's natural gas, they are capable of determining the locations of gas leaks with relatively higher precision. At the suspected site of a gas leak, the leak location within our pipeline networks can be quickly determined with high precision using manual analysis complemented with the GIS positioning system. This can greatly reduce unnecessary excavations and boost efficiency levels of emergency repairs.



Building on Project Site Quality

As underground piping and cabling becomes increasingly dense following urbanisation and development, keeping a firm grip on quality control for trenchless works has become a key focal point. Towngas China has introduced a technique that originated in Hong Kong to its site operations in mainland China - by repairing pipes through trenchless insertions, the Group is able to shorten its construction period, reduce the scope of excavation works and minimise the impact of site works to third-party vendors' pipelines and surrounding residents. Currently, the technique is already in use by the Group's project companies.

Quality site constructions and subsequent maintenance are key factors in upholding gas safety. As such, the Group has issued various standards, benchmarks and guidelines, and strongly encourages its project companies to establish independent quality assurance (QA) departments or

interdepartmental QA teams to reinforce quality controls on constructions as part of the Group's QA system for gas pipelines and facilities. In 2019, the Group implemented the Construction Management Evaluation System (CMES) based on the existing Checklist of Project Quality Monitoring Items and Polyethylene-Pipeline Project Quality Assurance System (PEQA). Taking Southwestern and Southern China regions as pilot sites, the evaluation system underwent further enhancements corresponding to feedback from pilot site operations. In November, the Group formally introduced CMES across all project sites. By consolidating management resources, leveraging on collaborative synergy, maximising the use of TMS (Towngas Management System) mobile engineering application and capitalising on potential information tools, the Group was able to implement a common set of management controls for ensuring project site quality that is rooted in integrity and effective in monitoring quality standards for project sites.

“As Good As Being Onsite” Mobile Engineering Application Competition



Towngas China continued to drive and promote the use of TMS mobile engineering applications in 2019 and held a competition themed As Good As Being Onsite to further boost the Group's capabilities and standards on project site management through the use of IT. Contestants were tasked with designing a set of quantitative scoring tables to evaluate project site management processes, and highlight key areas of control through scoring weightage by category. The design was to clearly illustrate to all parties involved the high quality standards set out by Towngas China for its project sites such that the quality control requirements can be properly communicated to the building, construction and supervising teams, thus ensuring comprehensive quality control at project sites. The competition resulted in a new batch of demonstrative,



innovative and highly practical project site management methodologies that showcases the Group's achievements in quality and safety practices, stringent operational standards for its project sites, and heightened traceability for its engineering projects.

Leading Engineering Innovations

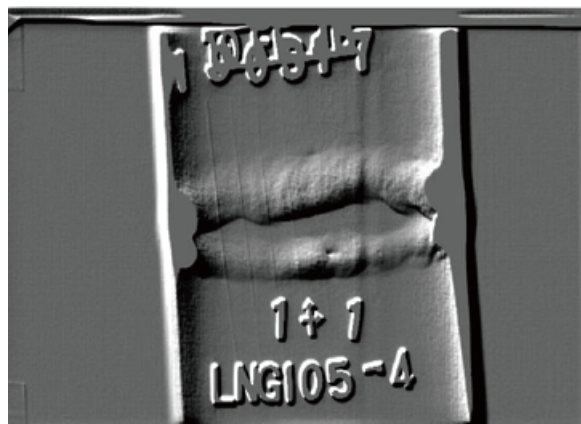
Driven by the Group's unique management concept of Company Growth = Innovation×Implementation (G = i×i), Towngas China has continually sought innovative technological developments, coming up with yearly research topics as a means of overcoming hurdles and challenges encountered in the course of executing the company's engineering plans. In 2019, the Group inceptioned two key research themes, namely the Discussion on Application of Electronic Radiographic Imaging for Defects Detection and the Application of Video Surveillance and Alarm Systems at Terminals/Facilities, and commenced trial studies on rapid leak detection technologies in pursuit of attaining higher accuracy and work efficiencies for gas pipeline leak detections. The study using Qingyuan Towngas China, Yixing Towngas China and Tongxiang

Towngas China as trial sites conducted functionality comparisons between laser leak detectors of Part Per Billion (ppb) grade and traditional detectors of Part Per Million (ppm) grade and obtained highly desirable results. Over the year, the Group also attained software copyright for the Towngas Positioning System for Eastern Inland Pipeline Networks and utility model patent for Equipment for Cleaning Internal Pipeline Walls during Trenchless Repairs on Old Pipelines.



Discussion on Application of Electronic Radiographic Imaging for Defect Detection

The method of using traditional film to store image records has certain environmental requirements. In addition, traditional films are subject to blurring over time which leads to image distortion and loss of traceability on welding quality of gas pipelines. Relevant studies have demonstrated the effectiveness of restoring true image quality for original films through the use of electronic films, thereby meeting quality standards for assessing welded interiors. This discussion was aimed at resolving existing challenges faced by existing image recording methods using traditional film through the use of electronic film in radiographic imaging for detecting defects. With electronic film, images can be processed using an embossed filter to simulate realistic dimensional effects that better illustrate to the user welding defects and increase accuracy of images under assessment. The application of this innovative technology meant that information on defects detection records can now be stored on a permanent basis. It also allows for greater convenience and accessibility through



remote film checks, and provides far more reliable information for managing pipeline life cycles by leveraging on data analytics to conduct intelligent searches that could accurately pinpoint "false images". To date, the Plan for Using Electronic Film in Radiographic Imaging for Detection Purposes has been successfully implemented at the LNG vapourising station of Jinan Pingyin Towngas in Ancheng county. It will later be promoted for application on high pressure pipe projects.

Application of Video Surveillance and Alarm Systems at Terminals/Facilities



At present, the video surveillance system has yet to be standardised across Towngas terminals and facilities, thus resulting in less than ideal alarm operations. This study sought to explore solutions for reducing the rate of false alarms triggered by video surveillance systems, prolonging product life for surveillance and alarm systems, decreasing difficulty thresholds for system installations and increasing traceability of information records. In combination with increasingly mature image recognition technologies, the study experimented with allocating four CCTV cameras and one spherical webcam for each well site. Based on different alarm functions at each surveillance site, parameters comprising different virtual requirements were set using video analytics software to implement a

defence grid of multiple detection and alarm functions, including invasion detection alarms, irregular video signal alerts, alarms triggered upon detecting lack of safety helmet use, fire alarm systems, etc. The experimental combination reported low error rates on the whole, fast responses and strong traceability. Relevant software was easy to install and the value created was similar to building an infrared deterrence system while being far less costly compared with invasion detection systems using tension fences. The study will continue to develop standardised alarm solutions based on the unique characteristics of gas terminals and facilities and tailored to individual client needs.

Promoting Safety Culture in More Ways Than One

June 2019 marked the 18th National Safe Production Month. Centred on the theme of "preventing risks, eliminating hazards and curbing accidents", the campaign championed for safe production by setting three goals: preventing and resolving major risks, eliminating safety hazards expeditiously and curbing accidents during production effectively. With safe operations as the Group's core mission, Towngas China has always placed strong emphasis on safety supervision and control and implemented stringent safety inspection regimes in line with the highest safety standards. Together with its project companies, the Group launched an enriching and multi-faceted campaign comprising a plethora of activities to promote gas safety and advocate comprehensive safety measures for gas operations. Grasping the importance of

safe production, the Group's project companies kept in line with requirements set out by the Work Safety Committee of the State Council, endeavouring to fulfil the target tasks on safe production reforms and meet relevant laws, regulations and standards. Taking the Safe Production Month as a perfect opportunity for reviewing inhouse safety management and safe production responsibilities, project companies examined major safety risks and eliminated safety hazards. In addition, the project companies also conducted emergency drills and reinforced promotional and educational efforts on safe production to raise safety awareness and capabilities across respective teams of staff. During the Safe Production Month, the Group's project companies conducted over 250 safety training courses, amounting to

over 8,600 hours of training time for over 8,800 participating members of staff in total. The companies also held approximately 260 safety-related activities involving nearly 5,500 staff members and organised over 60 safety-related competitions that saw the participation of over 8,300 staff members. A total of 132 emergency drills were conducted, involving approximately 3,600 staff members.

Over the year, the Group continued to build a Safety Network for project companies to interact and exchange ideas on promoting a safe work culture across the board. Through "leadership influence, direct responsibilities and localised management", the concept of safe production translated into habitual behaviour by staff and management of all levels, bringing about a complete transformation on corporate safety culture. The Group further promoted safety awareness across a multitude of channels including the Towngas China WeChat official account, online learning platforms, training workshops, tool box for advancing Occupational Health, Safety and Environment (HSE), and the HSE communication

platform. In 2019, the Group launched over 2,800 safety activities for staff, amounting to 607,800 training hours.

"The rock from another mountain suffices to polish one's jade." In addition to keeping in tradition with the fine safety management practices upheld by HKCG over the years, Towngas China has continually exchanged insights with other companies boasting excellent track records in safety management in a bid to learn from the strengths of others so as to further elevate the Group's safety management standards. During the course of the past year, Towngas China led risk management personnel from multiple project companies graded as Excellent in the Group's Safety and Risk Management Audit for three consecutive years on field expeditions to Japan's famous brands and companies to further their understanding of gas safety management. They also exchanged ideas on topics such as 6S management and environmental management. In addition, the Group also organised interactive activities with CLP Power Hong Kong Limited to exchange insights on safety management.



HSE Walk

To further promote occupational safety awareness, champion a culture of safety and perform corporate social responsibility, HKCG and Towngas China jointly organised the HSE Walk during the 2019 National Safe Production Month in hopes of raising public awareness on safety issues in support of the state's cause. The theme was Going a Thousand Miles to Enhance Workflow, and it revolved around the topics of gas pipeline inspections, staff knowledge on safety matters, Towngas China's motto of Three Courtesies, as well as environmental protection etc. to advocate the concept of "taking steps towards better health, stepping up to the frontline on safety consciousness, and stepping into nature and living a green lifestyle." The event received widespread support from project companies across the Northeast, North China, Anhui-Jiangxi, South China and Southwest regions, garnering participation of close to 8,800

members of staff from 90 project companies. Some of the project companies took one more step to spread the Group's culture of safety even further by inviting relevant state agencies and vendors from their respective regions to partake in the walk.



Gas Safety Tips Everyone Should Know

Towngas China has always advocated a standard of Zero in Accidents. In 2019, the Group held a creative promotional campaign themed Gas Safety Tips Everyone Should Know to deepen customers' knowledge of gas safety so as to better protect their lives and property. Campaign organisers selected 10 safety awareness activities and 10 design works as award

winners for the creativity displayed, and handed out another five team awards for best contribution. The Group is planning to compile the galore of creativity resulting from the Gas Safety Tips Everyone Should Know campaign into a booklet that will be disseminated among project companies as a reference guide.

Resounding Industry Influence

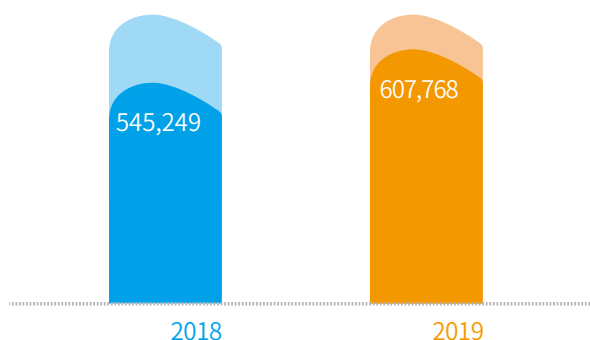
As the leading city-gas enterprise in the industry, Towngas China has proactively partaken in the drafting and revising of state regulations and industry standards for many years. The Group upholds the highest standards for its own operations and hopes to promote a culture of quality through its influence across the industry. In 2019, the Group participated in the drafting and revision of 20 regulations and normative documents at state, industry, group and local levels. The Group also offered its opinions on multiple state and industry standards.



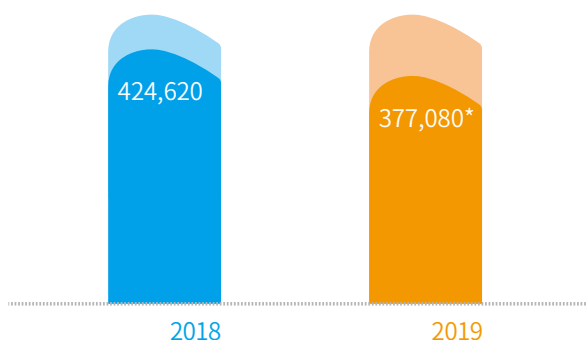
1	Code for Design of City Gas Engineering
2	Code for Design of City Gas Transmission and Distribution Engineering
3	City Gas Pressure Regulators
4	City Gas Pressure Regulating Installation
5	LNG Fuelling Stations
6	LNG Gasification Installations
7	Gas Transmission and Distribution Equipment - Security Basic Technical Requirements
8	City Gas Trial Operations and Pre-operations Security Inspection Standard
9	Technical Specification for Design and Construction of City Gas Facilities in High Rise Buildings
10	Measurement Management Specifications for City Gas Transfers
11	China City Gas Technological Development Research Report
12	China Gas Association Standard System Research Report
13	Code for Design of City Gas Engineering
14	Standards for Indoor City Gas Construction Works and Quality Inspections
15	Gas Services
16	General Technical Requirements for Non-household Smart Gas Meters
17	Galvanised Steel Pipes for City Gas Use
18	Technical Specification for Stainless Steel Pipes for City Gas Use
19	Technical Specifications for Compress-Type Carbon Steel Pipeline Engineering
20	General Guidelines on Kitchen Safety for Food and Beverage Industry in Jiangsu Province

2019 Safety KPIs

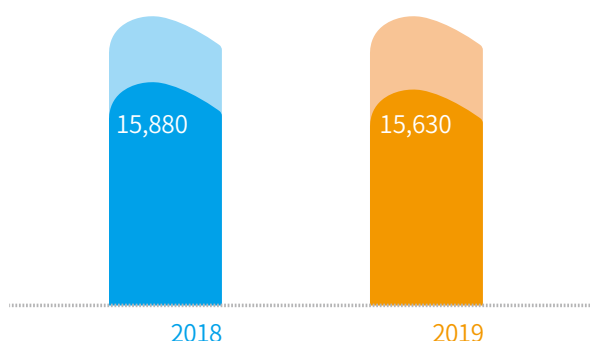
Safety Training Hours



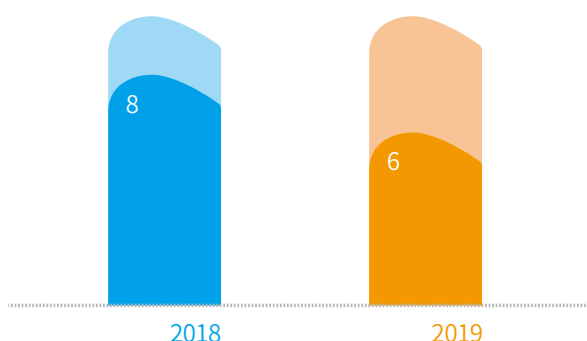
Safety Enhancement Costs RMB '000



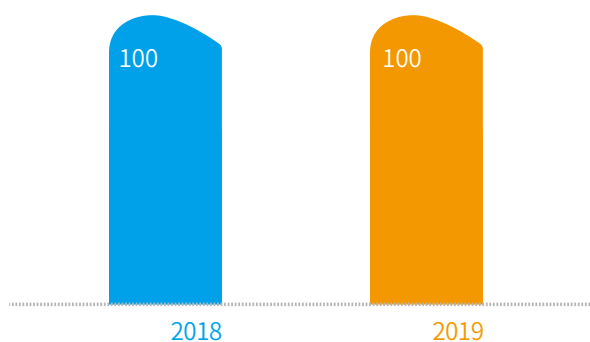
Safety Promotion Costs RMB '000



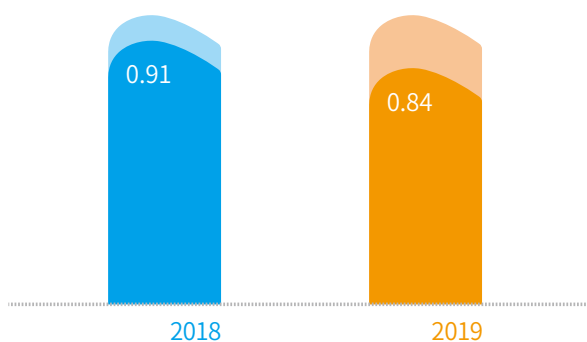
Gas Accidents of Tier 4 or higher Cases



Potential Risks (Class 1) Rectification Rate %



Emergency Repairs (Indoor) Cases/1,000 Households



* Note: As some of the Group's project companies have launched large-scale facilities and pipeline network overhauls for a few consecutive years, there is a decline in the remaining renovation construction projects, resulting in a decline also in safety enhancement costs.



Service with a Smile





Comprehensive Service Platform

Public utility enterprises (PUEs) provide services that are closely related to the public's everyday lives. As such, the key to business development for PUEs lies in meeting and exceeding customer expectations and providing people-oriented services. Towngas China has always sought to provide its customers and institutional clients with amiable, professional and highly efficient services. The Group prides itself on being customer-centric and people-oriented, and adopts a service culture based on three elements of courtesy - manners, etiquette and politeness. Ensuring safe gas supply is but a fundamental cornerstone of Towngas China's services. On the basis of this solid foundation, the Group continually seeks to optimise its customer service for a pleasant user experience at all times, and is always looking for ways to improve the quality of people's lives. The Group attaches great importance to caring for people so as to build a cohesive and harmonious society.

In recent years, project companies under Towngas China have been expanding product reach to offer greater ease and convenience in terms of services. In 2019, the Group further enhanced its Virtual Customer Centre (VCC) by adding even more functions relating to its gas provision services, including options for easier self-service account management such as e-statements, corporate account opening, WeChat app, AliPay app, retail merchandise, and promotional vouchers for members. Over the year, customers accessed the services of Towngas China's VCC

platform 5.92 million times. In sync with the latest 5G and Narrowband-Internet of Things (NB-IoT) developments, the Group had also begun to develop an IoT Connected Management Platform to achieve uniformity via a standard platform-agreement-access protocol.

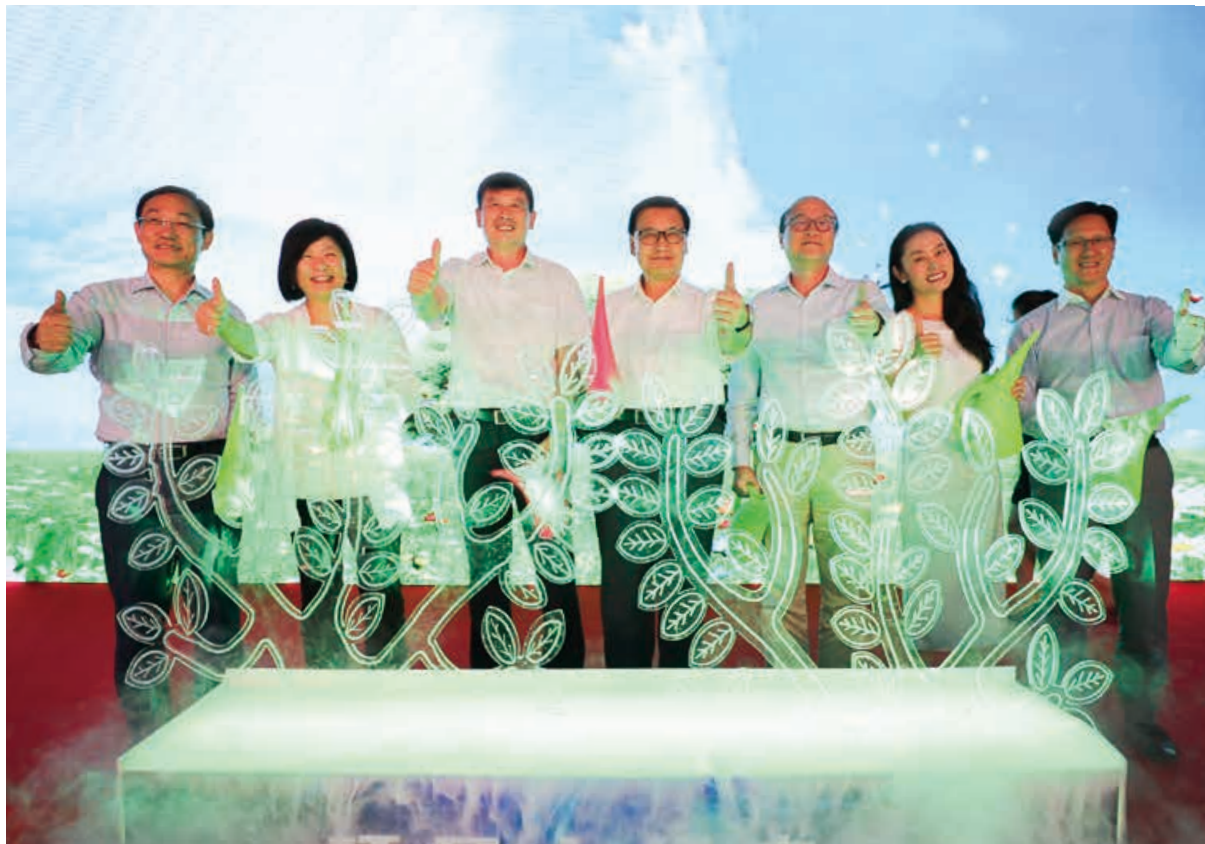
Also notable in 2019 would be the trial operations of an Internet+ Towngas Total Solution (TTS+) system launched by the Group - the first of its kind in the country's gas industry. The system integrates a variety of information technologies and consolidates existing resources including multiple system functions such as the Towngas Customer Information Systems (TCIS), VCC, TMS and GIS to congregate business divisions and systems through merging internet capabilities with this IT upgrade, thereby realising maximum synergistic effects with IT-powered management tools.

The launch of the TMS and TCIS systems interfaces have been hugely successful, and they have been adopted for use by 31 project companies as at the end of 2019. Concurrently, the Group has been actively researching on the use of Robotic Process Automation (RPA) for financial and accounting purposes in yet another technologically powered business process enhancement to reduce costs of manpower and man-hours spent on financial checks. In the past year alone, eight project companies have joined this project and commenced online use of this RPA application.

In support of the state campaigns on optimising business environments such as the Run Zero Errands and Run Errands Just Once campaigns, Towngas China's project companies have also rolled out a series of convenient services at customer centres targeted at minimising enquiry times for customers by providing people-oriented services which in turn boosts operational efficiencies.

Taking a serious stance on protecting customer privacy

and personal data, Towngas China has formulated a comprehensive set of Towngas China IT Emergency Contingency Plan (ITECP) and Towngas Group Corporate IT Management System V2.1 (Revised Edition). Its inhouse TMS system has also passed the Shenzhen Information Security Classification Assessment and attained Class 3 status for its IT security infrastructure - a strong testament to the Group's dedication towards cybersecurity and personal data protection.



Foshan Gas Holds Online Press Event for Smart CS Mobile e-App



On 8 September 2019, Foshan Gas held an online press launch for its Smart Customer Service Integrated Platform Mobile e-App (hereinafter referred to as the "e-App"). The integrated platform offers streamlined one-stop online management services for users, staff and companies across an assortment of Towngas China's services. Customers only need to subscribe to the Foshan Gas WeChat official account to access various account services online from the comfort of their home, such as online booking, paying bills, making enquiries on orders and work progress, sending feedback and leaving real-time

reviews. Customers' online appointment bookings will be directed via this platform to a staff member who will directly communicate and liaise with the customer throughout the entire process. Through audio recordings, photography and video functions as well as technologies such as GPS tracking, the e-App is also capable of collecting and analysing data to map out optimal work flows for frontline staff. In addition, the system is able to generate behavioural summaries for subsequent reviews and discussions on enhancing service efficiencies.



Dayi Towngas China Bolsters Customer Satisfaction with Optimised Service Environment



For 2019, Dayi Towngas China proposed establishing an elite team led by the Director of Customer Service (CS) to collect feedback from customers using installed gas services. This initiative themed Boosting Customer Satisfaction on All Fronts was successfully executed by the CS Elite Team where existing service issues were investigated and correspondingly resolved, further

raising the level of customer satisfaction with Towngas services. Complementing the Action Plan for Creating Conducive Business Environments for Advanced Cities-Comprehensive Service Reforms in line with Globalised Business Environments issued by the CPC Chengdu Municipal Party Committee and the Municipal People's Government, the company's CS Elite Team made up of

members from various departments also worked closely with each other to execute plans on optimising internal procedures based on a common directive - to streamline operational procedures and reduce turnaround time. Measures undertaken included assigning dedicated staff to follow up on gas installations for major clients and completing all operational procedures within a specific time frame in strict adherence with procedural protocols. In addition,

the company launched a quick installation channel for eligible non-residential clients on gas installations. On the premise that client information and documentation are complete and installation sites are safe and ready for installation works, the initiative set a turnaround time of six working days to complete gas installation and access to safe gas supply - a feat that won much praise from the Chengdu Municipal Committee of Economic and Information Technology.



Swift Response to Customer Complaints

Towngas China values the opinions and respects the needs of every customer. Endeavouring to empower customers with a voice, the Group has established multiple feedback channels, including official websites, WeChat official accounts, Sina Weibo microblogs and TikTok video-sharing social network, and has an effective system in place to ensure all customer feedback is handled with care and efficiency. Over the

course of the year, Towngas China continued to strengthen its CS capabilities with 24-hour hotline centres to handle gas-related enquiries, feedback and complaints. All work protocols and operational procedures relating to CS are based on the Handbook on Service with a Smile. Every complaint must be followed up on until the case is closed. In addition, all frontline CS staff are well-trained on the company's

service culture, denoted by the concepts of Service with a Smile and You Can Hear Our Smile, and mandated to adhere to the principles and specific code of conduct to render the highest standards of CS.

To gain a comprehensive understanding of how customers view Towngas China, the Group commissioned its fifth third-party survey in 2019. Conducted by a professional survey consultancy firm once every two years, a series of discreet field visits and phone interviews on the Group's service quality was carried out on selected project companies that fulfilled certain criteria. Through ascertaining standards,

monitoring circumstances and pinpointing issues, such surveys were of great help in boosting the Group's CS levels. The 2019 service quality survey attained desirable results. Compared with results gathered in 2017, the Mystery Customer Survey posted a score increase of 2.69%. In terms of customer satisfaction, results were up 1.29% from 2017, testifying to the Group's excellence in customer service.

The Group responded to every customer complaint in a serious manner. In 2019, the Group has received a total of 54 complaints.

Shandong Jihua Debuts "Hear It from the Manager + LIVE" Broadcast Series



Shandong Jihua Towngas China rolled out a special series on 13 June 2019 - "Hear It from the Manager + LIVE" broadcast. A panel of special guests comprising senior managers from the safety and risk management departments were invited on the series' debut broadcast. Every guest on the panel were either senior engineers with professional gas-related accreditations or certified safety engineers. The hour-long live broadcast answered eight hotline calls, five queries from Sina Weibo microblog and another ten questions posed via the WeDoCrm online customer service platform. Hundreds of online users watched the live broadcast and the debut eventually garnered over 2,000 cumulative views in total. After the live broadcast ended, the company extended the hotline answering segment for another two hours based on a "follow-through" responsibility system, where the manager who took the call was responsible for following

up on the customer enquiry until the question is answered to the customer's satisfaction or the issue was resolved. The company also took note of public opinion from a multitude of channels including hotlines, Sina Weibo live broadcasts, WeChat messenger board and VCC etc., to learn of gas-related feedback and issues for subsequent improvements.



Qiqihar Towngas China Awarded for Caring Touch



On 17 September 2019, a customer with hearing disabilities showed up at the Qiqihar Towngas China customer service centre to enquire on the company's services. Upon communication in sign language, frontline staff came to learn that the residential gas supply for this customer had been disconnected without prior warning, even though the account was not in arrears. Frontline staff immediately contacted the Meter Reading Centre and within 30 minutes, an inspection team attended the site in question to determine the underlying cause and address the customer's woes.

Once again, the streamlined approval protocols implemented at Qiqihar Towngas China customer service centre proved to be a great boost on service efficiency and empowers frontline staff to render highly effective solutions and caring services for Towngas China customers in a timely manner. As long as

customer data is complete and meets legally mandated formats, frontline staff will be able to provide one-stop services. In the event of exceptional circumstances that cannot be resolved immediately, customers will be given a contact number for direct liaison with the staff member in charge of his/her case. This standard operating procedure provides customers with an easy and convenient access to urgent customer services. By adopting a highly mobile response system, customers' issues can be tended to and resolved within a short turnaround time. The Qiqihar Towngas China customer service centre currently attends to about 1,200 customer queries each day. With a "Zero Waiting Time" service approach, the centre endeavours to respond to each and every case in an expeditious manner, winning much praise from customers for its speedy and dedicated service responses.

Developing Diverse Extension Services

Always keeping a keen eye on customer needs, Towngas China has introduced a plethora of premium and innovative products and services on top of various household appliances to offer a heartwarming consumer experience and the convenience of modern living for countless households.

The Group's signature gas appliance brand, Bauhinia, is committed to providing high quality, safe and reliable gas appliances and related services. Its current product range already includes gas hobs, cooker hoods, sanitising dishwashers, water heaters, combi-boilers and

gas-powered clothes dryers. In 2019, as the retail market for Bauhinia's gas dryers stabilised, the Group proactively sought cooperation projects with domestic property developers to penetrate the pre-decorated deluxe housing market.

To drive business developments in the gas heating market, the Group set up heating experience zones across its retail stores where customers can feel the comfort of gas-powered heating for themselves and better understand the structural designs of home heating systems. In terms of marketing, Bauhinia launched a

proprietary software for designing inhouse home heating systems. With this software, sales staff can now offer residential customers tailored home heating solutions and corresponding quotations on the spot in a quick and easy manner.

All Bauhinia products adhere to the strictest quality standards. For any newly introduced technology or function, the Company imposes a double inspection regime on its accessories and parts from the design stage, and conduct final reliability tests on all prototypes. Even as accessories and parts satisfy the most stringent requirements, the product is still mandated to undergo another round of inspection during the assembly process. A new product will only be launched onto the market when it fulfils the standards across all indicative criteria.

After a product is launched, the Company continues to uphold quality control by conducting random quality inspections on production lines and final products, and maintain a low threshold on defect rate on top of maintaining continuous after-sales service data analyses.

In 2019, the Company conducted a total of 40 random inspections, including 26 on the final product and 14 on key components. A total of 145 sets/parts were randomly inspected to cover all product types and production lines.

Shall any project company come across defective Bauhinia products, the case must be escalated to the Bauhinia quality assurance department. The department will investigate the underlying cause and ascertain if the defect is an isolated case or a batch issue before setting corresponding response strategies and rectification plans with relevant suppliers. In the event of batch issues, the department will notify respective project companies to return all products within the defective batch to suppliers. In turn, suppliers will replenish project companies with new, qualified stock for the same product model and recall quantity.

Bauhinia Product Quality Index

Indicator	2018	2019
Product recalls due to health concerns or safety issues	0%	0%
Defect rate	0.01%	0.01%



In terms of after-sales service, Towngas China has a comprehensive feedback loop in place. Through group interactions with the maintenance team and regional product training, the Group is continually collating in-depth feedback on after-sales product performance from frontline maintenance staff so as to conduct quality analyses and pinpoint any issues in a timely manner for subsequent rectification planning with suppliers. The Group has also implemented a Bauhinia After-sales Service Skills Competition as a platform for encouraging frontline staff to upgrade their after-sales service techniques. In 2019, the Group held its third Bauhinia After-sales Service Skills Competition. Top performers from each project company were selected to partake in the preliminary round where 20 staff members would be selected to enter the finals after going through written tests on theories and hands-on practical evaluations. In line with the MasterCraft spirit championed by the Group, the competition was geared at fostering a culture of promoting learning and training through motivational competitions, and fully showcased the participants' excellence both in terms of professional knowledge and technical expertise. Through this competition, the Bauhinia after-sales service team was able to upgrade their technical skills and provide higher levels of quality customer service from a frontline maintenance perspective, which in turn completed the feedback loop for enhancing total user experience.

Bauhinia also actively partakes in the drafting and discussions of industry standards relating to gas appliances as part of the company's contributions

towards driving industry development. Throughout 2019, the Group participated in a number of study discussions on industry standards with the Guangdong Gas Combi-boiler Chamber of Commerce (GDGCC), including the Review on After-sales Services for Gas Combi-boilers and Systems, Evaluation of Energy Efficiency Measurement, Hybrid Water Heating Systems, and Hybrid Heating Systems. The Group offered quite some suggestions on draft revisions for these normative standards and was invited to join the review panel for final approval. In 2019, Bauhinia was honoured with the Hong Kong Top Brand, the Top 10 Brands in China for After-sales Service and the Excellent Enterprise in the Gas Appliance Industry awards. The company was also selected as one of the featured brands in the Guangdong Consumer Products Supply Guide (Batch 1).

Further to these, Towngas China has adopted a value-oriented strategy for its business expansion by capitalising on its existing VCC platform to extend business reach via digital means. As at the end of 2019, there have already been 58 project companies operating on the Group's VCC proprietary platform covering more than 6.90 million customers, with platform membership exceeding 3.40 million. At present, the VCC platform is already providing 46 project companies with uniform operational services, and is connected with the membership systems of platforms like Hua Yan Water, Zhongyuan Gas Power and Han Win etc., to realise seamless access for e-commerce trade.

Kickstart a New Lifestyle with a Trendy Home - Launch of Bauhinia Gas Dryer



On 10 October 2019, Bauhinia hosted a launch reception for its gas-powered clothes dryer in Nanjing under the theme of Kickstart a New Lifestyle with a Trendy Home. The event was graced by representatives from 74 reputed property developers. At the launch reception, the company specially designed a lifestyle gallery featuring various home settings where the brand's gas dryer discreetly blended in with a variety of interior designs to showcase the product's trendy design to event attendees and VIPs, who were also treated to a live product demonstration. The event proved to be a resounding

success, with agreements for five real estate projects signed, involving a supply of close to 1,200 Bauhinia gas dryers.



Promoting a Heartwarming Service Culture

Over the course of 2019, Towngas China elevated its core quality management practices to fully embrace the Group's values of Courtesy, Ingenuity and Integrity. These core values served as the Group's primary driving force for its quality management by instilling the spirit of "nothing but the best" in the staff, so as to achieve the goal of Apex Quality in providing customers with services that exceed expectations.

In the past year, Towngas China centred its management approach on the theme of "Corporate Integrity Year" and requested its project companies to conduct business with integrity as foremost priority, in order to convey a strong, positive message and shoulder corporate social responsibility by implementing zero tolerance on falsifications, displaying commitment to service pledges and being sincere in each and every opportunity for frontline contact with customers. Through a series of

campaigns, including the Faith in Integrity Lead-In Activities, the Sunshine Fun Case Study Contest, the OK! No Worries Video Clip Contest, and the Good Manners and Good Faith Offline Promotional Activities, the Group took the lead in sharing its core values to the public as well as its staff and family, customers and clients, business partners, campuses and state agencies.

Since launching the Dandelion Scheme in 2013, the Group has been unremitting in its efforts to improve its CS training system. The Group firmly believes that internal training is the best way to instil its service culture of courtesy, ingenuity and integrity amongst frontline staff and the most effective way to uphold its high service standards. During the year, the Group held a Dandelion Scheme Course Trainer Selection Contest. Each region picked its top performing CS trainer to partake in the contest which included simulated course presentations, role plays and a live Q&A segment where contestants had to respond to field questions posed by panel judges. The four final winners awarded with the title of "CS Master Trainer" were determined according to scores given by a panel of five professional judges and votes from elite trainers that had

participated in previous years' contests, based on contestants' performances over three rounds. Going forward, the winners will be co-developing training curriculum and software along with other Master Trainers and be responsible for conducting training as the Group's elite CS internal trainers in a continuous company-wide effort to bolster Towngas China's overall CS. Software for internal training courses are designed based on three main categories, namely the CS Centre, Hotline Centre and House Call Service. Master Trainers will contribute concrete examples and role-play scripts based on their real-life experiences so as to instil the Group's service culture and standards in less experienced colleagues and, in turn, boost individual service capabilities and techniques.

The Group also arranged for the "Three Courtesies Service with a Smile Ambassadors" to embark on exchange visits with the HKCG office, Hong Kong International Airport and Hong Kong Airlines. Through these exchanges, the Group hoped to spread the culture of etiquette and "service with a smile" to corporates beyond the Group in a bid to foster a more cohesive and harmonious society.



Blue Flames Youth Volunteer Team from Chizhou Towngas China



The youth volunteer team established by Chizhou Towngas China bears a name that is aptly symbolic of Towngas China - Blue Flames. By holding various community and campus activities, Blue Flames seeks to convey the Towngas China culture of "Three Courtesies" and customer-centric service approach, and foster a culturally harmonious atmosphere in Chizhou where the three pillars of courtesy, namely manners, etiquette and politeness, are shared common values embraced by all. A notable initiative launched would be the 5:30pm Classes programme that provides after-school care for children lacking guardian care. The Blue Flames youth volunteers not only offer tutoring

assistance for these young students, but also hold extracurricular activities such as DIY handicraft, reading exercises and ball games. The volunteer team seize the chance to educate these children on the concept of Three Courtesies using news snippets to better drive home the point, with the addition of fun elements such as quizzes and prizes. Now that the programme has run for some time, the participating children have learnt to be more courteous when communicating with others, and become more proactive in learning the basics of etiquette in their daily lives. In turn, their polite conduct is bound to influence those around them as well.

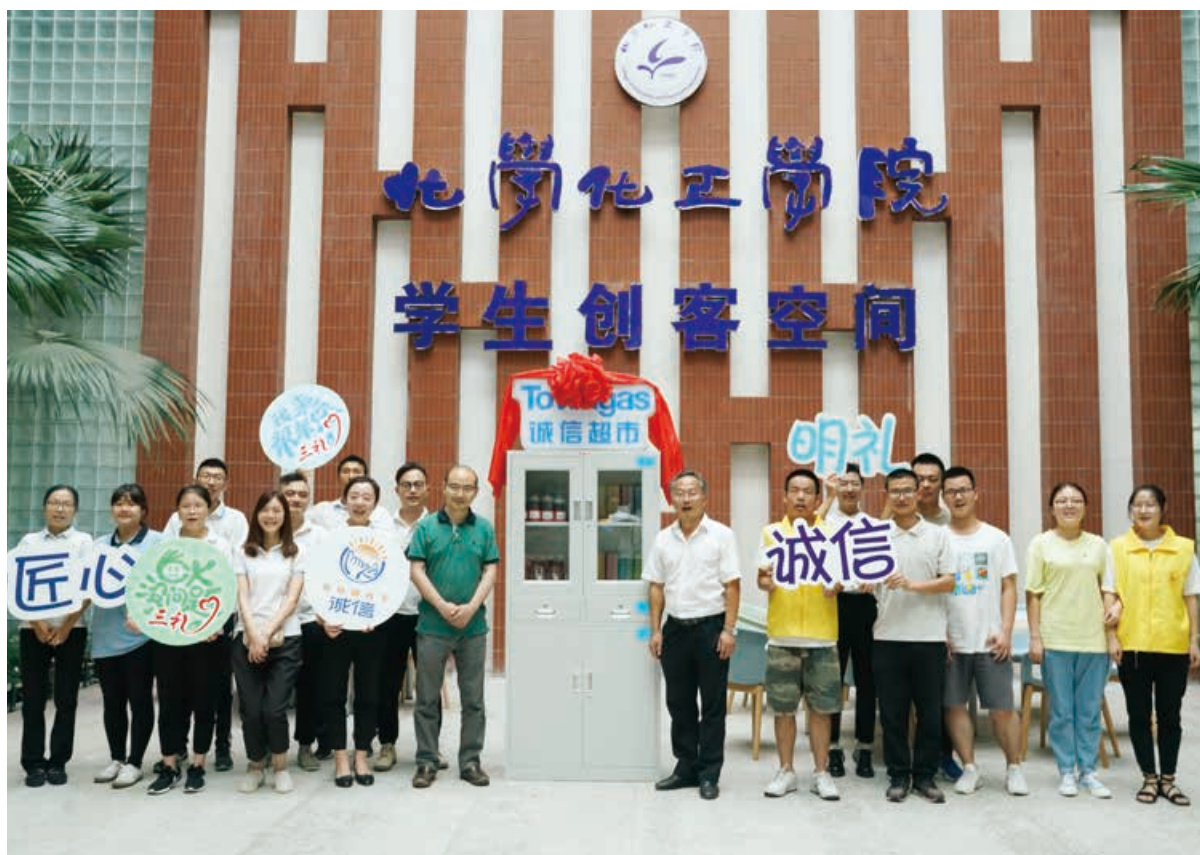


Chengdu Xindu Towngas China Unveils "Towngas Integrity Mart"



On 2 July 2019, Chengdu Xindu Towngas China jointly unveiled the Towngas Integrity Mart along with Southwest Petroleum University at the Sunshine Fun Storytelling Contest. Initiated by Chengdu Xindu Towngas China, the project includes modifications to existing campus filing cabinets and sale of school supplies and stationery such as notebooks, measuring instruments and ball pens. Modified cabinets feature a stationery retail display on the top half, with the middle section being a self-payment and

loose change machine, while the bottom half doubles as merchandise storage. The company also put up promotional posters of the Towngas China Integrity Campaign at the sides of these modified cabinets to advocate the three pillars of integrity - to be "uprighteous, responsible and competent". The goal is to instil such values in students subtly and gradually while providing them with convenience, and spread the message that "he who has no credibility, has no standing".





Empowering Talent





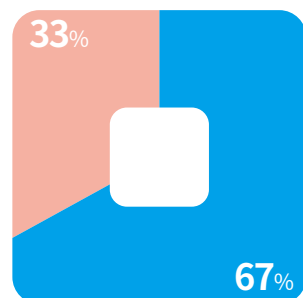
Overview of Human Resources

As at the end of 2019, Towngas China had a total of 22,385 full-time staff members on record. For the

years between 2017 and 2019, staff turnover rate was 2.6%, 3.34% and 3.31% respectively.

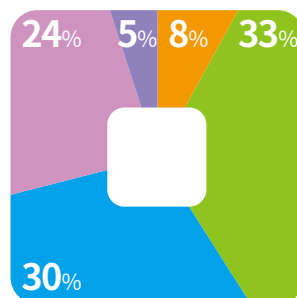
Staff Strength by Gender

Male Female



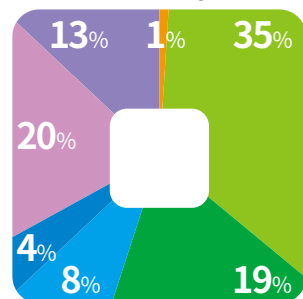
Staff Ratio by Age Groups

25 and below 26-35 36-45
46-55 56 and above



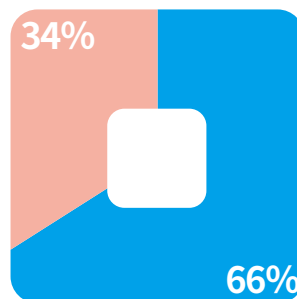
Staff Ratio by Region

Group Head Office Northeast China Region
Northern China Region Anhui-Jiangxi Region
Jiangsu-Zhejiang Region Southwest China Region
Southern China Region



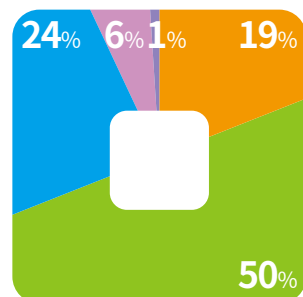
Gender Breakdown of Staff Turnover

Male Female



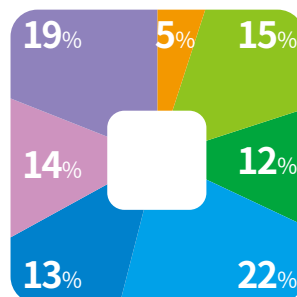
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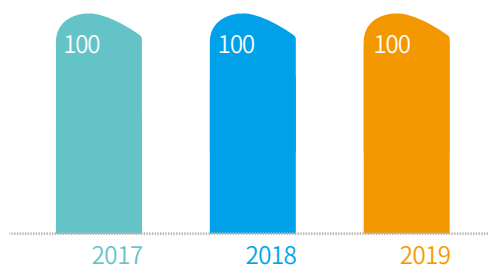


Regional Breakdown of Staff Turnover

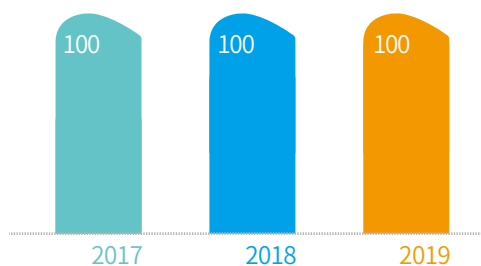
Group Head Office Northeast China Region
Northern China Region Anhui-Jiangxi Region
Jiangsu-Zhejiang Region Southwest China Region
Southern China Region



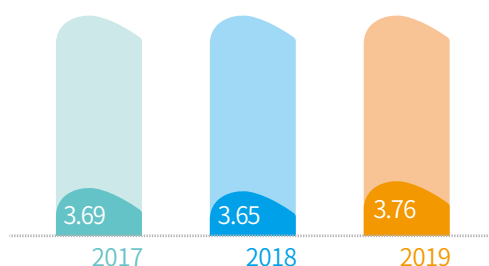
Staff Covered by Labour Contracts %



Staff Covered by Social Insurance %



Ratio of Female Management %



Nurturing Talent

To further advance staff development and boost staff capabilities, Towngas China has adopted multi-faceted strategies and measures to build a robust career

development and performance management system to motivate employees in upgrading their skill set.

All-round Career Development

The Group offers employees a comprehensive career development platform comprising vertical promotion in ranks, lateral transitions in career tracks, and the flexibility and fluidity in moving between key positions. Taking a measured balance between staff intent and capability, the talent-oriented evaluation model places emphasis on competencies while exploring personal fortes in the creation of job criteria.

In 2019, the Group's Human Resources (HR) Department organised an exchange on competency models, entitled the Towngas Group Human Resources Best Case Study Exemplary Learning Journey. HR personnel from over 30 project companies attended the exchange to share their insights on implementing systemic schemes, facilitating staff upgrades to elevate HR management capabilities, enhancing professional qualities of talented staff and driving long-term development for talent at project companies.

Talent Ladder Scheme

The Group recruits outstanding employees to take part in major projects through the Talent Ladder Scheme which provides a source for forming a pool of senior management human resources, paving the way to the

long-term development of the Group. To date, the Group has assigned more than 70 young managers from the scheme to support its businesses.



Participant's Thoughts

"As a participant in the Talent Ladder Scheme, I have been given opportunities to step up to many different challenges within a short time frame while being empowered to access the massive resources provided by the Company. This has immensely accelerated my professional growth. I used to focus only on professional knowledge, but now, I have been exposed to other skill sets that help to strengthen my abilities in handling interpersonal relationships and interactions. At my new position, I learnt

to broaden my horizons and reach beyond the scope of my professional skills. In fact, I have become more flexible in applying my professional expertise across various scenarios to bring about greater benefits for the Company, which is even more important. The Talent Ladder Scheme taught me to venture out of my comfort zone. By taking on a more macro perspective, I am able to create much greater value for the Company."

Yang Wanli, Deputy General Manager of Finance, Wuhu Jiangbei Towngas China

Multi-tier Training Channels

Towngas China attaches great importance to nurturing and grooming young talent within the Group, and provides staff training categorised by work specialties. In 2019, the Group launched the TMP HKCG Management Course aimed at grooming key talent within the Group. Having conducted 24 classes, the course imparted knowledge on management systems to 645 Towngas China employees. As a further step to ensure that the course attendees will have the chance to put what they have learnt to good use, the Group organised the TMP Leadership Application Competition to select winners based on real-life cases of exemplary management as a means of encouragement and recognition that can bolster management capabilities

among Towngas' talent pool. In terms of junior staff, the Group offers the Superior Quality Service (SQS) programme which includes quarterly training and activities at project companies to promote the culture of innovation, offer guidance on research projects, and impart project research methodologies among other agenda. Driven by SQS teams from over 100 project companies, programme organisers strategically planned a variety of goal-oriented events to enhance staff awareness on staying creative and innovative, boost personal capabilities and reduce company expenditure while elevating the quality of CS and promoting a positive corporate image to the public.



Professional Skills Training

In 2019, the Shandong Hong Kong and China Gas Training Institute under Towngas China commenced a series of training courses across four main categories for frontline staff, internal trainers, professional technicians and career upgraders, clocking over 98,000 training hours for over 6,000 staff members. Mostly conducted in small classes with 12 to 16 staff members per class, course curriculums were carefully thought out to include a balanced mix of theory and practical training.

In addition, the institute partnered with Jiangsu Urban and Rural Construction College, Guangzhou Traffic and Transportation Vocational School, and Shandong Urban Construction Vocational College once again to continue the Training on Demand for Frontline Staff programme over the past year. The programme generated a total of 98 internships, of which 47 interns were offered employment with the Group or its project companies after their internships ended. A total of 378 students successfully completed the course at the three institutes and were awarded with the relevant Towngas China Skills Accreditation after passing assessments in specific skills such as indoor safety inspection, operating gas regulators, gas installations and gas detection inspection.

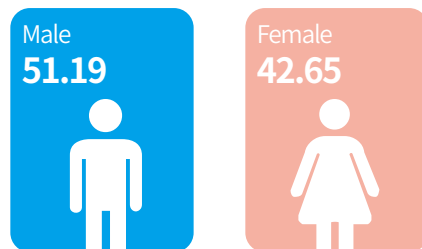
Dedicated to driving development in the gas industry, the institute is unremitting in its efforts to nurture and groom professional talent for the industry. Over the course of the year, the institute held new professional training courses and accreditations for the first cohort of Type 3 employees from gas companies in Shandong province and trained a total of 708

employees over nine batches and 19 classes. Of these, 678 of them passed stringent assessments to be accredited with corresponding certifications, registering a commendable passing rate of 96%.

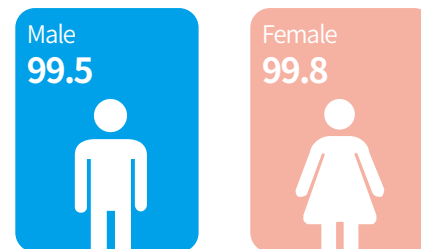
Online Learning and Training

In 2019, Towngas China continued to provide its staff with online courses via its online learning platform to meet their various learning needs.

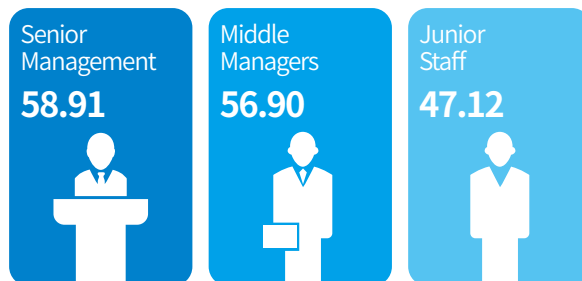
Per Capita Learning Hours by Staff Gender Hours



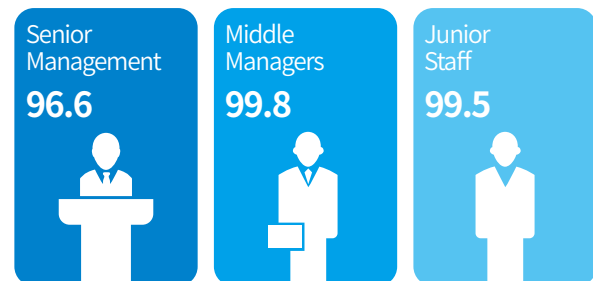
Training Ratio by Staff Gender %



Per Capita Learning Hours by Staff Type Hours



Training Ratio by Staff Type %



Performance Management Optimisation

In order to assist project companies in optimising their performance management standards, in 2019, KMF1906, "Perfecting the Enterprise Performance Management System and Human Resources Allocation", was carried out in the form of a special research project on key positions in the enterprise. The engineering department and customer service department heads were selected as pilot positions, focusing on the performance optimisation of the project company's senior management, as well as the selection, training and succession of senior and middle management personnel.

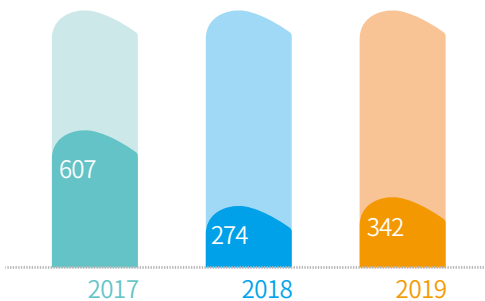
The research takes the capability model as the entry point to establish a performance management optimisation system and human resources allocation system. Project company employees and their supervisors were interviewed. In the light of the Group's opinion on relevant interviews, a capability model for the project company's engineering department and customer service department heads was drawn up as a result, with a view of matching the project company's key position development objectives with the strategic goal of the enterprise, to further enhance the competitiveness of the project companies and bring about core assurance.

Occupational Health and Safety

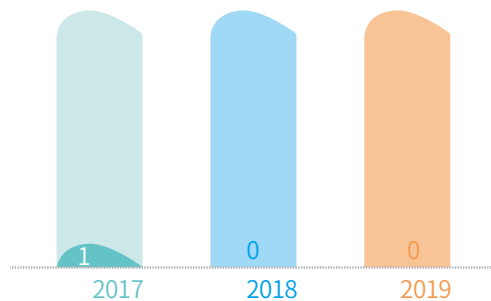
In 2019, Towngas China carried out safety campaigns through various channels, such as WeChat official account, e-learning platform, engineering workshops, HSE Toolbox, HSE Newsletter, etc. In 2019, trainings undertaken by the Group's staff amounted to 607,800 training hours.

In 2019, there were zero cases of death from work at Towngas China. Throughout the year, the Group was not penalised by the government for violation of workplace safety.

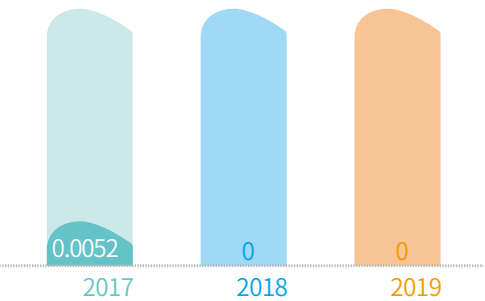
Work Days Lost to Occupational Injury Day(s)



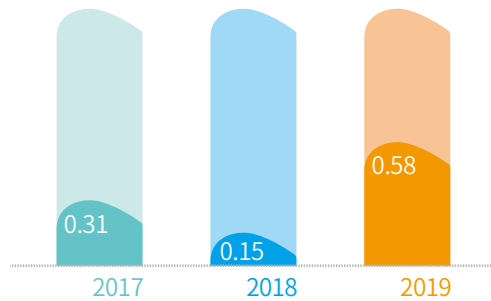
Death from Work People



Percentage of Death from Work %



Accident Rate per 1,000 Employees Cases



A Fair Professional Environment

Towngas China provides equal opportunities to job seekers under its strict guidelines on the recruitment process and the principles of fairness, transparency and openness in recruitment. In 2019, no discrimination on the grounds of gender, ethnicity, age, health, etc. occurred in the recruitment process of the Group.

In compliance with national laws and regulations, Towngas China put together the "Manual on Labour Laws and Regulations for Enterprises with Foreign Investment". The Manual clearly states that the mainland project companies of the Group should strictly prohibit forced labour and the recruitment of minors under the age of 16. During the year, the Group did not engage in illegal child labour employment.

The Group actively implemented relevant state laws and regulations and protected the employees' legitimate rights and interests. In 2019, every member

of staff in Towngas China was covered by employment contracts and social insurance.

The Group respects employees' freedom of association and their right to participate in collective bargaining in accordance with state laws as well as their right to express views in a proper manner. It also promotes the "Management System of Employee Relations and Communication" and has established a mechanism for employee claims.

In regard to anti-corruption, the Group implemented the "Towngas China Code of Conduct" in all its project companies, which regulates business interactions, accountability to stakeholders, the establishment of a harmonious working environment and a governance culture. It provides guidance and regulations on the daily work of employees as well.

The Welfare Caring System

Towngas China places great importance on staff welfare, providing fair treatment and humane care to

its employees in all aspects to ensure their physical and mental well-being.

Staff Welfare Guarantee

Social security	Pension, medical, unemployment, maternity and work-related injury insurance, etc., and housing provident fund.
Commercial insurance	Accidental death/disability, accident, hospitalisation allowance, critical illness, and maternity insurance.
Leave and holidays	Statutory public holidays in China, paid annual leave, fully paid sick leave, work-related injury leave, medical leave, fully paid examination leave, special leave (including marriage leave, maternity leave, paternity leave, and compassionate leave).
Other benefits	Subsidies for telecommunication expenses, festive benefits, recreational activities and company training.

Enriching Staff's Life

Staff travel

During the year, the Group's self-planned travel package was once again upgraded in cooperation with an Internet+ urban light outdoor travel platform to provide flexible and convenient options for employees in terms of route designing, group planning, travel arrangements, billing etc., which increased the participation rate. The platform can also be used to

share travel experiences through journals, encouraging employees to take an active part in the corporate cultural life, and promoting the Group's cultural value of "courtesy, ingenuity and integrity". Since its launch, seven routes were successfully planned and organised. Travel groups have set off in June, July, September, October, and November in 2019.



Staff cultural and sports activities

Towngas China upholds a people-oriented principle and is committed to fostering a warm corporate culture. The Group places emphasis on the leisure life and health needs of its employees. It organised four activity groups based on staff's preference in sports, including

badminton, basketball, soccer and yoga. Through various types of cultural activities and sports, it hopes that staff members will do sports even when work becomes busy, to achieve a balance between work and leisure.



Staff noon lectures

In order to enhance the cultivation of our Shenzhen headquarters' staff, to help them pursue further personal growth and broaden their horizon, the Group organised two noon lecture sessions during the year. Professor Poon Chung-kwong, President Emeritus of The Hong Kong

Polytechnic University and an independent non-executive director of HKCG, was invited to speak and engage with the employees. Hundreds of staff members attended and benefitted from the learning opportunity.

The theme of the first session was "Life of Wisdom, Coupling Strength and Gentleness". Rooted in China's wonderful traditional culture, Professor Poon used a large number of detailed cases to introduce to the employees the methods of acquiring sustainable development and happiness in their lives, enhancing their soft skills.

The second session was focused on "Adversity and Beyond - the Wisdom of Chinese Traditional Culture".

Participating staff members learnt that as the state of mind can determine the state of the body, they can get a clear picture of their situation when faced with difficulties by using the wisdom of traditional culture such as Confucianism, Taoism, Buddhism etc. By continuously cultivating one's mind, behaviour and virtue, one can become his or her own architect of life, eventually obtaining self-perfection and success.



Scholarship for Employees' Children



The Group continued its Scholarship Scheme for Employee's Children during the year to motivate children of our employees to study hard and develop their talent. In 2019, the Group received a total of 13 eligible applications from eight project companies. Upon comprehensive evaluation, two applicants were selected as recipients of the annual scholarship, along with 11 recipients of special prizes.



Giving Back to Society





With years of experience in community services, the idea that Towngas China has consistently promoted, "Benefitting Society, Contributing to the Community", has gradually come into effect. In collaboration with its project companies, the Group has supported various

public welfare activities, thereby fulfilling its CSR and thus contributing to sustainable development while drawing social attention to public welfare projects and voluntary services.

The number of Towngas China volunteers has reached **6,780**

Social service exceeded **124,000** hours

Serving over **104,500** people

Donated more than RMB **4.55** million

Philanthropic Education Aid

In 2013, the Group started its flagship charity programme, the Towngas China Gentle Breeze Movement. Under the programme, charity and environmentally friendly activities were organised on a much larger scale and at greater frequency. Today, the Towngas China Gentle Breeze Movement has donated more than RMB 2.85 million to 28 schools in aiding educational efforts in rural areas.

On 12 November 2019, the 15th China Corporate Citizens Exchange Summary Conference hosted by the Corporate

Citizenship Committee of the China Association of Social Workers was held in Beijing. At the meeting, Towngas China was awarded the highest honour, the "Five-star Chinese Corporate Citizen 2019" award, while Towngas China Gentle Breeze Movement was awarded the "Chinese Corporate Citizen Public Welfare Project 2019" award. The Group will further consolidate public welfare resources and contribute to the causes of education and poverty alleviation.

Towngas China Gentle Breeze Movement



On 22 May, the Towngas China Gentle Breeze Movement was carried out at Jianshan Primary School and the Pingchang County School for the Deaf in Sichuan province. Jianshan Primary School is located in a remote area and the conditions under which it operates are poor. The Group built a "Towngas China Charity Library" and shelters, renovated the dining hall walls, donated air-conditioners, school uniforms, sports shoes, sports equipment etc. to improve the teaching environment. To meet the special requirements of the school for the deaf and mute, the Group also donated a batch of art, sewing and hairdressing teaching supplies to support the combined mode of special education and vocational training, so that students can build up vocational skills in addition to theoretical knowledge.



On September 25, the Towngas China Gentle Breeze Movement reached the Qiankule Primary School at Fularji district, Qiqihar city, Heilongjiang province. The Group donated school supplies and daily necessities worth over RMB 200,000 built a "Towngas China Charity Library", and renovated the flag-raising platform. In order to strengthen security, a guard room equipped with heating was built for the school. The laboratory was also repaired, and the walls were renovated to ensure that the teachers and students can teach and study in a safe environment.

Supporting Community Public Welfare

Towngas China continued with its annual Rice Dumplings for the Community event. Every year, volunteers from all over the country come together to help orphans, the elderly, cleaners, charity organisations and others in need by wrapping and donating rice dumplings to promote traditional Chinese culture and foster harmonious ties within the community. In 2019, on the day before the Dragon Boat Festival, over 70 project companies lent their

support to this event and worked with the communities, schools and charity organisations to host the annual Rice Dumplings for the Community activities. Close to 1,400 Towngas China volunteers participated, benefitting about 12,900 people. Over 36,700 dumplings were wrapped and delivered, and more than RMB 300,000 worth of gifts were given during the festive season.

Rice Dumplings for the Community



The Tongxiang Towngas China Volunteers Team, together with the Tongxiang Charity Association, went to the Wutong Street Pension Service Centre in Tongxiang city to wrap rice dumplings with the elderly, give them haircuts and deliver wonderful performances. During the event, more than 300 charity rice dumplings were wrapped in total, and rice and dry goods were donated. The volunteers also made TQM "Three Courtesies" artisan fans to present warmth and kindness to the elderly.



At Gongzhuling city, Towngas China gave out charity rice dumplings to underprivileged families and cleaners in front of the customer centre, conveying the warmth of Towngas China. A total of 3,000 rice dumplings were distributed. Made of low-fat, low-calorie, low-carbon and healthy ingredients, the dumplings promoted traditional culture as well as the concept of green life on behalf of Towngas China.



In collaboration with Minjiang community, Dengshuangtown, Xinjin county, Towngas China volunteers from Xinjin county held a public welfare event themed "Rice Dumplings for the Community, Building a Safe and Harmonious Community Together", to actively promote harmonious and mutually supportive neighbourhood relations through the wrapping of rice dumplings. The event also featured a quiz session on gas safety to further enhance the community's awareness on the safe use of gas.



Towngas China volunteers from Qingyuan city visited the Qingyuan Huiling Community Service Centre for the Mentally Handicapped and wrapped rice dumplings with the mentally challenged. Afterwards, the volunteers, together with the students and teachers of the Community Service Centre, brought and delivered the charity rice dumplings and festival gifts to show appreciation to the cleaners working at the Municipal Environmental Hygiene Management Office in Qingcheng district. Prior to this, the company held a "Rice Dumplings for the Community • Charity Sale" pre-ordering event, and sold over 1,000 rice dumplings. The money raised was later donated to the Qingyuan Huiling Community Service Centre for the Mentally Handicapped.

Warmth Comes from Home

The fifth "Cooking for Mom - Bauhinia National Little Chefs Cooking Contest" continues to be held nationwide, promoting the Chinese culture of filial piety in addition to striving to build a warm and inclusive community. On 24 August 2019, the final contest was held in Guangzhou, and

21 little chefs from all over the country fought for the championship. The children experienced the hard work of their parents through cooking, which instilled in them a sense of gratitude and responsibility to society.



Public Welfare Community Tour

With customer safety constantly in mind, the Towngas China team from Weifang city and participants from the "Cooking for Mom" event came together to Kuiwenmen community in Weifang city to carry out the Towngas China Bauhinia "Public Welfare Community Tour", donating Towngas China appliances to 60 underprivileged families.

Village and Enterprises Collaborate on a Targeted Approach to Poverty Alleviation

Enterprises are an indispensable and important force in poverty alleviation. Towngas China is highly responsive to the state's strategic requirement of "targeted poverty alleviation", with all project companies sparing no effort

in exercising their own strengths, promoting local poverty alleviation projects, and striving to help rural families improve their living conditions. The results were remarkable.

Targeted Poverty Alleviation

On 22 March 2019, Towngas China's village-based poverty alleviation volunteer team in Cangxi county donated over 1,600 high-quality fruit tree seedlings to Lizi Village and Jinfeng Village of Baiyi town, which could be planted to help more than 100 underprivileged villagers. The Company invited agricultural technicians to provide training on agricultural development to the villagers, helping them implement scientifically based planting and management methods and thereby encouraging them to expand the scale of rural industries, break out of the cycle of poverty, and lay a foundation for local economic development.



On 3 September 2019, the Towngas China team in Qiqihar donated RMB 300,000 to the Cooperative Village of Shizhong township, Baiquan county to help the poor and support rural construction. The poverty alleviation funds will be used to build infrastructure in the Cooperative Village and improve the living environment of the villagers. Exercising its strengths, the Company helped to sell the agricultural by-products of the Cooperative Village on the "Towngas Lifestyle" platform to aid economic development and contribute to the poverty alleviation work in Qiqihar city.



On 12 August 2019, all party members of Towngas China in Lezhi county visited Xinqiao Village in Tonglu town, Lezhi county to help farmers expand the market for agricultural products. They actively practised the effective poverty alleviation principle of "teaching someone to fish rather than giving him fish". The Company regularly hosts "Helping One to One" activities to help villagers sell their handicraft and agricultural products, with the aim of lifting them out of poverty and improving their lives.



On 23 September 2019, the Tieling City Towngas China Charity Plaza was completed in Changzhaizi Village of Jiguanshan township, covering nearly 1,400 square metres and costing a total of more than RMB 400,000. The project aims to bring about a colourful cultural life for the villagers as well as change the appearance of the rural area and eradicate economic and spiritual poverty.



Outlook

The year 2020 marks the conclusion of the country's efforts to establish a relatively affluent society and the 13th Five-Year Plan. It is a crucial year of opportunities and challenges. Towngas China shall continue to innovate its management strategies and enrich its business diversity while focusing on the core areas of competitiveness, namely environmental protection, safety and service, with a view to expand its potential for growth and realise sustainable development.

The Company's sustainable development features environmental friendliness. With the continuous deepening of the reforms of China's oil and gas market and natural gas industry structure, environmental protection principles have become one of the key directions to the country's future economic development. The weightage of natural gas in primary energy consumption continues to rise, and has become an important power source in the country's energy

revolution. Committed to its core operation of natural gas, an environmentally friendly energy source, Towngas China shall continue to align with the country's policy and strive to promote the replacement of coal-fired boilers, industrial kilns and civilian-use bulk coal with natural gas through coal-to-gas and "Connect Every Village" projects. In addition, the Company shall proactively develop distributed-energy projects to provide customers with comprehensive energy services, reduce costs and increase efficiency in order to instil green momentum into the development of the society.

The Company's sustainable development also features safety. Safety is of the utmost importance to the operational management of a city-gas enterprise. In the past year, Towngas China has achieved stellar performance in various safety KPIs thanks to its comprehensive safety and risk management structure

and effective safety management measures, thereby maintaining its role as an industry leader. Going forward, we shall continue to implement Total Quality Management and continual improvement, and instil safety awareness into our design, construction, installation, operations, maintenance and promotions through innovative technology and management strategy. We shall incorporate our various stakeholders, including our gas customers, into the safety management system in order to work together to safeguard against risks and ensure safety.

The Company's sustainable development features service reinforcement as well. Towngas China's quality service culture dates back a long time. As the Group's business continues to expand, the close collaboration between its business units and client groups to fully satisfy the needs of customers from different regions, groups and stages to provide direction and momentum

for our efforts. Going forward, the Group will continue to provide reliable service for our clients and enhance the content of our service, innovate new service platforms, and explore new service areas to provide thoughtful and people-oriented service to our customers that embody integrity, attention to detail, and unrelenting improvements so that they can enjoy a smart and comfortable lifestyle with our gas services.

Corporate social responsibility is a long-term mission. Looking ahead, Towngas China shall strive to promote the use of clean energy and provide quality service that is both safe and environmentally friendly, while continuing to invest resources to help those in need through our charity brands such as Towngas China Gentle Breeze Movement in order to care for the community and give back to the society, in pursuit of realising sustainable development.


Peter Wong Wai-yee

Executive Director and Chief Executive Officer

Towngas China Company Limited

Executive Director and Chief Operating Officer - Utilities Business

The Hong Kong and China Gas Company Limited



16 March 2020

Appendix

Appendix 27 “Environmental, Social and Governance Reporting Guide” by The Stock Exchange of Hong Kong Limited

■ full disclosure; ■ partial disclosure; — very low relevance with the business or not applicable

Contents of Indicators			Location in the Report or Explanation	Level of Disclosure
Subject Area	Aspect	Disclosure Indicator		
A Environmental	A1 Emissions	General Disclosure Information on: (a) the policies; and (b) compliance with relevant laws and regulations that have a significant impact on the issuer relating to air and greenhouse gas emissions, discharges into water and land, and generation of hazardous and non-hazardous waste. Note: Air emissions include NO _x , SO _x , and other pollutants regulated under national laws and regulations. Greenhouse gases include carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons and sulphur hexafluoride. Hazardous wastes are those defined by national regulations.	P25-26	■
		A1.1 The types of emissions and respective emissions data.	P31	■
		A1.2 Greenhouse gas emissions in total (in tonnes) and, where appropriate, intensity (e.g. per unit of production volume, per facility).	P31	■
		A1.3 Total hazardous waste produced (in tonnes) and, where appropriate, intensity (e.g. per unit of production volume, per facility).	P31	■
		A1.4 Total non-hazardous waste produced (in tonnes) and, where appropriate, intensity (e.g. per unit of production volume, per facility).	P31	■
		A1.5 Description of measures to mitigate emissions and results achieved.	P25-30	■
		A1.6 Description of how hazardous and non-hazardous wastes are handled, reduction initiatives and results achieved.	P25-27	■
	A2 Use of Resources	General Disclosure Policies on the efficient use of resources, including energy, water and other raw materials. Note: Resources may be used in production, in storage, transportation, in buildings, electronic equipment, etc.	P25-27	■

Contents of Indicators				Location in the Report or Explanation	Level of Disclosure
Subject Area	Aspect	Disclosure Indicator			
A Environmental	A2 Use of Resources	Key Performance Indicator	A2.1 Direct and/or indirect energy consumption by type (e.g. electricity, gas or oil) in total (kWh in '000s) and intensity (e.g. per unit of production volume, per facility).	P32	■
			A2.2 Water consumption in total and intensity (e.g. per unit of production volume, per facility).	P32	■
			A2.3 Description of energy use efficiency initiatives and results achieved.	P25-30	■
			A2.4 Description of whether there is any issue in sourcing water that is fit for purpose, water efficiency initiatives and results achieved.	Towngas China is a gas transmission and distribution enterprise which does not require a large amount of water.	—
			A2.5 Total packaging material used for finished products (in tonnes) and, if applicable, with reference to per unit produced.	P28	■
	A3 The Environment and Natural Resources	General Disclosure	Policies on minimising the issuer's significant impact on the environment and natural resources.	P23-30	■
		Key Performance Indicator	A3.1 Description of the significant impacts of activities on the environment and natural resources and the actions taken to manage them.	P23-30	■
B Social Employment and Labour Practices	B1 Employment	General Disclosure	Information on: (a) the policies; and (b) compliance with relevant laws and regulations that have a significant impact on the issuer relating to compensation and dismissal, recruitment and promotion, working hours, rest periods, equal opportunity, diversity, anti-discrimination, and other benefits and welfare.	P66-74	■

Contents of Indicators				Location in the Report or Explanation	Level of Disclosure
Subject Area	Aspect	Disclosure Indicator			
B Social Employment and Labour Practices	B1 Employment	Key Performance Indicator	B1.1Total workforce by gender, employment type, age group and geographical region.	P65	■
			B1.2 Employee turnover rate by gender, age group and geographical region.	P65	■
	B2 Health and Safety	General Disclosure	Information on: (a)the policies; and (b)compliance with relevant laws and regulations that have a significant impact on the issuer relating to providing a safe working environment and protecting employees from occupational hazards.	P71	■
			Key Performance Indicator	B2.1 Number and rate of work-related fatalities.	P71
		B2.2 Lost days due to work injury.		P71	■
		B2.3 Description of occupational health and safety measures adopted, how they are implemented and monitored.		P71	■
	B3 Development and Training	General Disclosure	Policies on improving employees' knowledge and skills for discharging duties at work. Description of training activities. Note: Training refers to vocational training. It may include internal and external courses paid by the employer.	P67-70	■
			Key Performance Indicator	B3.1 The percentage of employees trained by gender and employee category (e.g. senior management, middle management).	P70
		B3.2 The average training hours completed per employee by gender and employee category.		P70	■
	B4 Labour Standards	General Disclosure	Information on: (a)the policies; and (b)compliance with relevant laws and regulations that have a significant impact on the issuer relating to preventing child and forced labour.	P72	■

Contents of Indicators				Location in the Report or Explanation	Level of Disclosure
Subject Area	Aspect	Disclosure Indicator			
B Social Employment and Labour Practices	B4 Labour Standards	Key Performance Indicator	B4.1 Description of measures to review employment practices to avoid child and forced labour.	P72	■
			B4.2 Description of steps taken to eliminate such practices when discovered.	P72	■
B Social Operation Practices	B5 Supply Chain Management	General Disclosure	Policies on managing environmental and social risks of the supply chain.	P18-20	■
		Key Performance Indicator	B5.1 Number of suppliers by geographical region.	P19	■
			B5.2 Description of practices relating to engaging suppliers, number of suppliers where the practices are being implemented, how they are implemented and monitored.	P18-19	■
	B6 Product Responsibility	General Disclosure	Information on: (a)the policies; and (b)compliance with relevant laws and regulations that have a significant impact on the issuer relating to health and safety, advertising, labelling and privacy matters relating to products and services provided and methods of redress.	P28,P57	■
		Key Performance Indicator	B6.1 Percentage of total products sold or shipped subject to recalls for safety and health reasons.	P57	■
			B6.2 Number of products and service related complaints received and how they are dealt with.	P55	■
			B6.3 Description of practices relating to observing and protecting intellectual property rights.	P20	■
			B6.4 Description of quality assurance process and recall procedures.	P57-58	■
			B6.5 Description of consumer data protection and privacy policies, how they are implemented and monitored.	P52	■
	B7 Anti- corruption	General Disclosure	Information on: (a)the policies; and (b)compliance with relevant laws and regulations that have a significant impact on the issuer relating to bribery, extortion, fraud and money laundering.	P16-18	■

Contents of Indicators				Location in the Report or Explanation	Level of Disclosure
Subject Area	Aspect	Disclosure Indicator			
B Social Operation Practices	B7 Anti- corruption	Key Performance Indicator	B7.1 Number of concluded legal cases regarding corrupt practices brought against the issuer or its employees during the reporting period and the outcomes of the cases.	P18	■
			B7.2 Description of preventive measures and whistle-blowing procedures, how they are implemented and monitored.	P18	■
B Social Community	B8 Community Investment	General Disclosure	Policies on community engagement to understand the needs of the communities where the issuer operates and to ensure its activities take into consideration the communities' interests.	P29-30 P78-82	■
		Key Performance Indicator	B8.1 Focus areas of contribution (e.g. education, environmental concerns, labour needs, health, culture, sport).	P29-30 P78-82	■
			B8.2 Resources contributed (e.g. money or time) to the focus area.	P78	■

VERIFICATION STATEMENT

Scope of Verification

Hong Kong Quality Assurance Agency ("HKQAA") has been commissioned by Towngas China Company Limited ("Towngas China") to undertake an independent verification for its Environmental, Social and Governance Report 2019 ("the Report"). The scope of HKQAA's verification covers the data and information regarding the sustainability performance of Towngas China for the period of 1st January 2019 to 31st December 2019. The Report portrays Towngas China's commitment, strategies and progress towards sustainability.

The Report was prepared in accordance with the Environmental, Social and Governance Reporting Guide ("ESG Guide") of The Stock Exchange of Hong Kong Limited and referencing the "Core Option" of the Global Reporting Initiative Sustainability Reporting Standards ("GRI Standards"), ISO 26000 Guidance on Social Responsibility Guidance ("ISO 26000") and the Guidelines on Corporate Social Responsibility Reporting for Chinese Enterprises 4.0 ("CASS-CSR4.0").

Level of Assurance and Methodology

The process applied in this verification was referring to the International Standard on Assurance Engagements 3000 (Revised), Assurance Engagements Other Than Audits or Reviews of Historical Financial Information issued by the International Auditing and Assurance Standards Board. Our evidence gathering process was designed to obtain a reasonable level of assurance for devising the verification conclusion. In order to understand the process that Towngas China adopted to ascertain the key sustainability issues and impacts, the Report compilation process was discussed including stakeholder engagement and materiality assessment processes. Also, system and process for collecting, collating and reporting sustainability performance data were verified. Our verification procedure covered reviewing relevant documentation, interviewing responsible personnel with accountability for preparing the Report and verifying the selected representative sample of data and information used for preparing the Report. Raw data and supporting evidence of the

selected samples were also thoroughly examined during the verification process.

Independence

Towngas China is responsible for the collection and presentation of the information presented. HKQAA does not involve in calculating, compiling, or in the development of the Report. Our verification activities are independent from Towngas China.

Conclusion

On the basis of our verification results and in accordance with the verification procedures undertaken, it is the opinion of the HKQAA's verification team that:

- The Report has been prepared in accordance with the ESG Guide and making reference to the Core Option of the GRI Standards, ISO 26000 and CASS-CSR4.0 for disclosure;
- The Report illustrates Towngas China's sustainability performance, covering all material and relevant aspects in a balanced, comparable, clear and timely manner; and

—The data and information disclosed in the Report are reliable and complete.

The Report reflects Towngas China's sustainability context and materiality. Also, it allows stakeholders to understand the commitments and stewardship of Towngas China towards sustainability.

Signed on behalf of Hong Kong Quality Assurance Agency



Connie Sham
Head of Audit
March 2020

Feedback

Dear readers,

Greetings! Thank you for your interest in the Towngas China Company Limited Environmental, Social and Governance Report 2019. To help us enhance our communication with stakeholders and continuously improve on our corporate social responsibility performance and future reporting, we would like to invite you to share your valuable opinion and suggestions.

Environmental, Social and Governance Report Committee

Towngas China Company Limited

March 2020

1. Your overall comments on this Report:

☐ Excellent ☐ Good ☐ Fair

2. Do you think this Report objectively reflects the actual corporate social responsibility performance of the Company?

☐ Yes ☐ Fair ☐ No

3. What do you think about the clarity, accuracy and completeness of the disclosed information, data and indicators in this Report?

☐ Very high ☐ High ☐ Fair ☐ Low ☐ Very low

4. What do you think about the design and layout of this Report?

☐ Excellent ☐ Good ☐ Fair ☐ Poor

5. Which part of this Report interests you most?

☐ Governance ☐ Environment ☐ Safety ☐ Services ☐ Staff ☐ Charity

6. Which parts of the content of this Report do you think need improvement?

☐ Governance ☐ Environment ☐ Safety ☐ Services ☐ Staff ☐ Charity

7. Content that you wish to know about but is not disclosed in this Report: _____

8. Your opinion and suggestions in respect of the corporate social responsibility performance of the Company and the reporting: _____



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Towngas China Company Limited

Head Office and Principal Place of Business:

23rd Floor, 363 Java Road, North Point, Hong Kong

Telephone: (852) 2963 3298

Facsimile: (852) 2561 6618

Website: www.towngaschina.com

