

(incorporated in the Cayman Islands with limited liability) (Stock Code: 1083)



# **Quality Creates Value**

# Environmental, Social and Governance Report 2020





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

# **About This Report**

As an industry-leading provider of city gas, Towngas China Company Limited deeply understands the importance of sustainable development and proactively incorporates environmental, social and governance (ESG) systems of the highest standards in its strategic planning and business operations. The Company regularly evaluates these measures in a continual effort to enhance existing practices. Since 2013, Towngas China has released annual ESG reports (previously sustainability reports) based on the principles of objectivity, standardisation, transparency and comprehensiveness. Focusing on its corporate social responsibility (CSR) performance by way of an all-round 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 as well as shouldering its responsibility towards stakeholders and members of the public.

### **Reporting Period**

This Report covers the period from 1 January 2020 to 31 December 2020 and any prior period where applicable.

### **Publication Schedule**

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

### **Scope of Report**

This Report covers data from Towngas China Company Limited and its project companies in mainland China. For presentation purposes, terms including "Towngas China Company Limited", "Towngas China", "TCCL", "the Group", "the Company", "we", "us", "our", "it" etc. 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

•Sustainability Reporting Guidelines by Global Reporting Initiative (Core Items)

 Guidelines on Corporate Social Responsibility Reporting in China (CASS-CSR 4.0) by Chinese Academy of Social Sciences

●ISO 26000 Guidance on Social Responsibility by the International Organisation for Standardisation

### Information Clarification

Information for the year of 2020 quoted in this Report shall be the final statistical information. For financial information, please refer to the Annual Report 2020 of Towngas China Company Limited concurrently issued by the Group. All monetary amounts mentioned in this Report are denominated in Renminbi (RMB) unless otherwise specified.

# Head Office and Principal Place of Business

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#### **Access to Report**

This Report is available in three formats: print, electronic and mobile. For a printed copy of the report, please call (86) 0755-2151 5056. Please log on to the official website of Towngas China at www.towngaschina.com for the digital version or scan the QR code for the mobile version.



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# Chairman' s Statement

Towngas China has always integrated its environmental, social and governance (ESG) responsibilities with its daily business operations, establishing a solid foundation for the creation of long-term corporate and social values through committed efforts to step up its ability to realise sustainable development. Since 2011, the Group has been selected as a constituent of the Hang Seng Corporate Sustainability Benchmark Index Series for 10 consecutive years. Its excellent ESG ratings also reflect the Group's embodiment of the values of stable operations and compliant governance, while developing its sustainable business and creating significant return for stakeholders.

As a result of economic, political and social factors, the construction of a clean, low-carbon, safe and efficient energy system has become a consensual development direction among countries across the world. With China's announcement of its goals to peak carbon emissions and achieve carbon neutrality, the transformation of energy structure is set to speed up, which in turn ushers in greater

development for the natural gas industry. During the year, the Group continued to deepen its green enterprise strategy through building an LNG plant in Weiyuan, Sichuan, signing an agreement for capital increase and equity cooperation with Shanghai Gas Company Limited, exploring green smart energy integrated services, promoting the implementation of heat-supply, combined heat and power, commercial hot water, and clean space-heating projects as well as development of new energy business such as electricity sales, distributed photovoltaics, energy storage and battery charging and swapping. Together with Tsinghua University Energy Internet Research Institute, the Group has also researched and developed integrated energy management platforms that are applicable to power, heat and gas enterprises, thereby constructing a green, efficient, smart and energy-saving Energy Internet ecology and contributing towards the nation's energy structure transformation and pledge to reduce emissions.







Towngas China regards it as its responsibility and continuous pursuit to ensure gas safety and quality lifestyle enjoyment of our customers. The Group adheres to its principle of Total Quality Management (TQM) by comprehensively strengthening its safety management system and strictly implementing its safety accountability framework as well as launching risk management audits and revolutionising its craftsmanship, technology and equipment, thereby augmenting overall gas transmission, emergency response and supply maintenance capabilities and promoting the elevation of safety management work. As a result of the country's policy on deepening supply-side structural reforms, the consumption market has continued to expand. In response, the Group has precisely catered for customer needs and continued to optimise its service system. It has expanded the scope of its Virtual Customer Centre (VCC) services on the basis of "Towngas Lifestyle", following up on its e-commerce, insurance and kitchen cabinet businesses with the launch of Towngas China home lifestyle services that cover cleaning, cooking, appliance cleaning and more. Under the brand of "Towngas Cosy Home", the Company is providing diverse quality lifestyle services such as cooking, heating supply and water purification, thereby effectively enhancing customer experience and satisfaction while promoting its culture of courtesy, craftsmanship and integrity to every sector of society.

Throughout the years, Towngas China's public welfare ethos of "benefitting society, contributing to the community" has borne fruit among its project companies. Relevant activities launched by various regions have created sustainable organic connections between the corporate brand and public welfare, bringing about greater awareness of public service among society. During the year, "Gentle Breeze Movement" has donated school and living supplies and built a Towngas China Charity Library for impoverished schoolchildren in Qijiang, Chongqing and Liannan, Qingyuan, in a bid to offer them better conditions for development. During Dragon Boat Festival, the "Rice Dumplings for the Community" event also called upon volunteers from across the Towngas China group to work together and prepare rice dumplings for those in need, with a total of over 20,000 rice dumplings distributed.

In 2020, the COVID-19 Pandemic ravaged the globe. During



these difficult times, project companies of Towngas China remained steadfast to their promise to provide stable gas supply. Through scientific allocation of gas sources as well as effective planning and management, the companies balanced the safety of their staff and customers with the priority of offering safe and stable gas supply in their pursuit to work in support of the country's anti-Pandemic efforts. The Group also invested manpower and resources to distribute monetary and in kind donations to communities and organisations in need, as well as organising volunteers to help provide for the daily necessities of local residents. Focusing on impoverished families impacted by the Pandemic, the Group also launched the nation-wide "Bauhinia Movement" to share the warmth by donating gas appliances and supplies with a view to taking concrete action to shoulder its contemporary corporate social responsibility.

The Board of Directors of Towngas China proactively promotes ESG efforts and regularly reviews the relevant key material issues. An ESG Committee has been established, comprising the Group's Chief Executive Officer and senior management. Tasked with integrating ESG principles with the Group's business and operations as well as promoting relevant programmes, the Committee regularly reports the related progress and matters to the Board. In this publication, the eighth ESG Report published by Towngas China, the Group systematically discloses its ESG policies, measures and performance throughout 2020. In 2021, deemed by the Group as the "Year of Smart Corporate Innovation", Towngas China will carefully consider stakeholders' suggestions, shape an innovative culture to enhance the Group's competitiveness and continue to elevate its capabilities and standards to carry out its duties. In addition to demonstrating leadership and setting an example for the industry, the Group will also strive to further its contributions towards sustainable social and environmental development.

Chairman and Executive Director, Towngas China Company Limited Managing Director, The Hong Kong and China Gas Company Limited Alfred Chan Wing-kin

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18 March 2021

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# About Us Company Profile

Towngas China Company Limited (Stock Code: 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 (Stock Code: 0003, "HKCG"). As a public utility enterprise in mainland China, Towngas China primarily engages in the 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 gas fuel automobile refilling stations and sale of gas appliances.

With innovation and environmental friendliness as its cornerstones, Towngas China endeavours to be the leading supplier of clean energy and provider of quality service in Asia. The Company is committed to formulating overarching management directives rooted in the public interest while maximising value for stakeholders and the community. 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 staff's development and community services.

As at 31 December 2020, Towngas China operated a total of 197 project companies spanning 21 provinces/autonomous regions/municipalities in mainland China, including Anhui, Fujian, Guangdong, Guangxi, Guizhou, Hebei, Henan, Heilongjiang, Hubei, Hunan, Jilin, Jiangsu, Jiangxi, Liaoning, Inner Mongolia, Shandong, Sichuan, Shanghai, Yunnan, Zhejiang and Chongqing. The Group totalled 58,081 kilometres in gas pipeline network length, 12.003 billion cubic metres in gas sales volume, and HK\$12.826 billion in turnover.

### **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.



### Total Quality Management Culture

Courtesy, craftsmanship and integrity



### **Financial Performance**

In 2020, China's economy came under increased downward pressure due to factors including the COVID-19 Pandemic and the shrinking global economy. Facing the challenges of the complex environment at home and abroad, the Chinese government has adopted a proactive fiscal policy and a prudent monetary policy to ensure employment and the livelihood of its people while continuing to deepen supply-side structural reforms to promote a positive economic cycle. In view of the country's adherence to the strategic direction of clean and low-carbon energy and the need for energy support for new infrastructure and urbanisation, natural gas will continue to play an important role and bring new development opportunities whether to ensure energy safety or to respond to climate change. Against the backdrop of the long-term positive trend of the national economy and the industry, Towngas China has succeeded in maintaining steady growth in its business with its flexible operating policy.

In 2020, Towngas China has achieved a turnover of HK\$12,826 million with basic earnings of HK49.56 cents per share and a final dividend of HK15 cents per share. Profit after taxation attributable to shareholders amounted to HK\$1,447 million. During the year, the Group sold a total of 12,003 million cubic metres of piped gas, a year-on-year increase of 8%.



Revenue Unit: HK\$ million





### Gas Sales Volume Unit: million cubic metres





### Accolades and Awards

### Selected key awards bestowed upon Towngas China in 2020:

### Best Investment Value Award for **Listed Companies**

Awarded by: Hong Kong Ta Kung Wen Wei Media Group, The Listed Companies Association of Beijing, The Hong Kong Institute of Chartered Secretaries, the Hong Kong Chinese Enterprises Association, the Chinese Securities Association of Hong Kong



Young Enterprise in **Energy Innovation** Awarded by:

Energy Magazine



2020 China Five-star Corporate Citizen 2020 Corporate Citizen as Pandemic Prevention and Anti-pandemic Pioneer 2020 Chinese Corporate Citizen's Outstanding Charity Project (Gentle Breeze Movement)

Awarded by: Organising Committee on China Committee of Corporate Citizen's Exchange Summary Conference







Technological Innovation Award for China Distributed Integrated Energy 2020 (Natural gas Distribution-based Multi-energy Complementary Micro-grid Control System)

Excellent Operation and Maintenance Management Award for China Distributed Integrated Energy 2020 (Towngas China Energy Investment Limited, "TCEI")

Awarded by: Organising Committee for the China Distributed Energy Global Forum & Integrated Energy Expo, China Energy Network



Top Ten Best Operation and Maintenance Companies (TCEI) The Best Case for Replication and Popularisation (Shenzhen Gas Building project, Shenzhen, Guangdong; Natural gas distributed heating supply project at Liuhe Zhongyuan Daguan District, TCEI Tangshan, Hebei)

Awarded by: China City Energy Development Industrial Alliance, China Gas Association **Distributed Energy Committee** 





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# Environmental, Social and Governance Philosophy Philosophy

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

#### **Management Model** Sound Operations -Community Contributions Operations Safety First Society Safety Management Responsible Communication Enhancement Benefitting Society, Contributing to the Community Promoting Responsible Accountability Governance Staff Service Staff Care Environment Customer-centric $\cap$ Environmental Protection

# Environmental, Social and Governance Policies

As the country comprehensively advances governance according to law, it has further strengthened regulations and controls in the area of environment, social and governance. Laws and regulations, such as the "Law on the Prevention and Control of Atmospheric Pollution", "Regulation on Administration of Pollutant Discharge Permits", "Labour Law", "Labour Contract Law" and "Product Quality Law", put forward more stringent requirements on the operation and management of companies. Towngas China has always prioritised compliant operations, adopting state-of-the-art technology as well as clean production techniques to enhance resource and energy utilisation efficiency while reducing emissions. In addition, it regulates labour relations and protects the legitimate rights and interests of Through improving product quality employees. management systems, the Company strictly controls product quality. In order to proactively tackle potential issues, it has also established solid anti-corruption mechanisms and put in place proper channels for complaints and whistleblowing as preventive measures.

Under the premise of compliant operations, Towngas China has formulated a diversified sustainable development strategy in the context of an ever-changing economic environment. Before making business decisions, the Company strives to balance the environmental, social and economic impacts so as to fully cater for the needs of stakeholders and spearhead industry development.

The Group is determined to maintain a high standard of corporate governance with prudent strategic planning and adherence to ethical principles as our core tenets to ensure fair and just business operations. Its policies, procedures and governance structure have performed effectively for many years. As the most senior unit of the corporate governance structure, the Board of Directors assumes ultimate responsibility for the Group's strategy and financial performance. business, Comprising seven members, including four executive directors and three independent non-executive directors, the Board of Directors of Towngas China oversees strategic developments through three specialised committees: the Remuneration Committee, the Board Audit and Risk Committee and the Nomination Committee. These committees strive to creating long-term value for shareholders with integrity, transparency and accountability.





### TCCL Corporate Governance Framework

### **Board Members**



#### Front Row (From left to right)

Mr James Kwan Yuk-choi Independent Non-executive Director Mr Alfred Chan Wing-kin Chairman and Executive Director

### Back Row (From left to right)

Mr Martin Kee Wai-ngai Executive Director and Chief Operating Officer Mr Peter Wong Wai-yee Executive Director and Chief Executive Officer Dr Moses Cheng Mo-chi Independent Non-executive Director Mr Brian David Li Man-bun Independent Non-executive Director

Mr John Ho Hon-ming Executive Director and Company Secretary



In order to supervise the Group's ESG policies and measures, the Towngas China Board of Directors has authorised the establishment of an ESG Committee comprising a group of senior management executives. Its scope of work includes identifying, supervising and reviewing the Group's ESG issues, risks and opportunities, including but not limited to health and safety, environmental protection, operating procedures, relations with employees, customers and suppliers as well as community involvement. It is also reporting the tasked with regularly relevant performance to the Board and providing recommendations for improvement strategies, as well as reviewing the ESG Report for the year up until 31 December 2020. In 2020, the Group's Board of Directors held regular meetings to evaluate and review the progress of its ESG work.

### Environmental, Social and Governance Committee

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

### **Responding to Sustainable Development Goals**



Under the leadership of the ESG Committee, Towngas China has taken action in support of United Nations' Sustainable Development Goals (SDGs), aligning the Group's business strategies and disclosures with global sustainability trends. Taking into consideration its strategic planning and operational management, the Group has selected three SDGs most pertinent to its business, on which it has based its long-term business strategies and relevant actions.

Focused on access to clean energy, the Group has accelerated the transformation of gas pipeline networks and promoted "coal-to-gas" initiatives and urban village pipe reconstruction as well as expanded rural gas utilisation, among others. It provides environmentally friendly natural gas for residents and urban development in various regions. Through the provision of integrated green energy services such as distributed energy systems ("DES") and central heating as well as the exploring areas including micro grid, incremental distribution network, electricity sale and energy storage, the Company has built a safe, stable, energy-efficient and smart energy internet ecology to meet the diverse energy needs of customers and drive the sustainable development of cities and communities. The advocation of clean energy utilisation helps effectively reduce carbon emissions and improve the ecological environment in response to climate change.

# **Stakeholder Communication**

The active involvement of stakeholders helps enterprises focus on critical areas of sustainable business development and formulate future development strategies. Towngas China places great importance on maintaining effective communication with its stakeholders. Through various channels, the Group acquires an understanding of stakeholder expectations on its ESG performance in order to help identify risks and opportunities that may affect the Group's business operations while creating shared value.

### Investors

- Arranged annual general meeting and investor briefings
- Published annual report and interim financial report
- Conducted internal audit and self-assessment of business risks
- Made strategic investments and developed extended businesses



- Strengthened Pandemic prevention and control while supporting the resumption of work and production across industries
- Maintained environmentally friendly operations and promoted "coal-to-gas" and DES
- Stepped up the construction of gas storage and peak-shaving facilities to ensure stable gas supply
- Participated in the preparation and revision of national and industrial standards





- Implemented a tiered gas pricing system with open and transparent rates
- Conducted regular safety inspections (RSIs) and maintenance visits
- Established online and offline customer centres and launched mobile applications for extended businesses to improve process efficiency of business

**Employees** 

Provided one-stop kitchen solutions and housekeeping services



- Offered training on safety, health and professional skills, set up career development and performance management systems
- Published internal publications and provided communication platforms
- Regularly organised sports and recreational activities as well as outings to facilitate relaxation

# Community

- Provided educational aid to children in remote areas through the "Gentle Breeze Movement"
- Celebrated festive seasons with the disadvantaged through the "Rice Dumplings for the Community" event
- Provided the poor with care and assistance through the "Bauhinia Movement"
- Donated rice to the disabled and underprivileged family beneficiaries under the Minimum Living Standard Guarantee System

# **Materiality Assessment**

In an effort to determine the topics of common concern for the Group and its stakeholders, Towngas China engaged an independent consultant to conduct a materiality assessment in the form of questionnaires to ensure that the relevant disclosure reflects the Group's key impacts on the environment and society.

### **Assessment Process**



### Identify relevant topics

 Referencing international and local reporting standards, a list of 25 topics related to the Group's businesses was drawn up



### **Identify material topics**

• Evaluated and analysed the results of the questionnaire using the materiality matrix to identify the most material topics

### Collect feedback from stakeholders

- Stakeholders were invited to rate each topic on two aspects: the importance of the topic to stakeholders and the extent of the impact stakeholders believe Towngas China has on the environment and society in relation to the topic
- Developed an understanding of the areas that stakeholders believe Towngas China should focus on
- A total of 435 valid responses were received this year



### **Review and verify results**

• The materiality matrix was reviewed and confirmed by the Group's ESG Committee and approved by the Board of Directors. Going forward, the Group will continue to adopt more diversified and effective measures in order to meet the demands of stakeholders







TCCL' s impact on the environment and society

No.	Issue	Impact	
1	Greenhouse gas and air pollutant management		
2	Wastewater management		
3	Waste management		
4	Energy use and efficiency	Adhering to the path of green development	
5	Water use and efficiency		
6	Use and benefits of other resources		
7	Environmental and natural resources management		
8	Responding to climate change		
9	Sustainable development risk management		
10	Seizing opportunities for sustainable development		
11	Anti-corruption	Establishing a system blassely a sharin	
12	Protecting intellectual property	Establishing a sustainable value chain	
13	Supply chain risk management		
14	Promoting green procurement		

No.	Issue	Impact	
15	Improving the employment management system		
16	Promoting diversity and equal opportunities		
17	Ensuring employee health and safety	Supporting staff development	
18	Providing training and development		
19	Preventing child labour and forced labour	-	
20	Product quality management		
21	Ensuring responsible marketing communications	Protecting customer interests	
22	After-sales service management		
23	Protecting customer privacy		
24	Understanding the needs of the community	Building an inclusive community	
25	Supporting community development	building an inclusive community	

The materiality of 25 issues is demonstrated in the matrix diagram. The top right of the matrix shows the most material issues, and the bottom left shows the relatively less material issues. According to the

materiality matrix and the key areas selected by stakeholders for Towngas China to focus on, the Group needs to prioritise and report on 13 material issues. These have been addressed in various sessions herein.

### Consolidated materiality results

No.	Issue	No.	Issue
17	Ensuring employee health and safety	18	Providing training and development
20	Product quality management •	22	After-sales service management
23	Protecting customer privacy	1	Greenhouse gas and air pollutant management 🔺
15	Improving the employment management system	7	Environmental and natural resources management 🔺
19	Preventing child labour and forced labour	4	Energy use and efficiency

Important issues identified from the comprehensive materiality matrix

▲ The first three key material issues selected by stakeholders for Towngas China to focus on

### Materiality results for internal stakeholders

No.	Issue	Remarks
16	Promoting diversity and equal	This issue was rated by internal stakeholders as important when compared
16	opportunities	with the consolidated results of the materiality assessment.
10 Seizing opportunities for sustainable development	This issue was rated by internal stakeholders as a key area of attention when	
	sustainable development	compared with the consolidated results of the materiality assessment.

### Materiality results for external stakeholders

No.	Issue	Remarks
11	Anti-corruption	This issue was rated by external stakeholders as important when compared with the consolidated results of the materiality assessment.





### **Major Material Issues**

- Corporate Governance and Risk Management
- Internal Audit and Anti-corruption
- Supply Chain Management

### •Respecting and Protecting Intellectual Property Rights

Against the backdrop of the current economic globalisation, a good corporate governance model is necessary for attracting resources. Committed to ethics and integrity, Towngas China has built a robust and effective risk assessment and management system as well as internal supervisory mechanisms and check and balances. By guiding employee behaviour through systems and regulations, the Company has created a healthy business environment for sustainable development.



## **Performance Highlights**

Ensured the effective implementation of the Group' s development strategies through the smooth operation of the Boards of Directors at project companies

Built a sound risk management system, monitored the implementation of risk mitigation measures and improved risk prevention capabilities in a comprehensive manner

Strengthened internal audit, fundamentally maintained the healthy operation of the Group, and improved overall operational efficiency

Advocated anti-corruption and a culture of integrity, and organised regular training for employees to learn the code of conduct and anti-fraud policy

Incorporated the philosophy of social responsibility into supply chain management and continuously promoted green procurement



## **Corporate Governance**

As a public utility, Towngas China has always adhered to the principle of managing its business and establishing its core strengths through upholding integrity. In 2020, in accordance with the "Anti-Monopoly Compliance Undertakings" Guidelines for issued by the Anti-Monopoly Committee of the State Council, the Group revised the "Towngas China Group Anti-Monopoly Compliance Management Guide" to establish an anti-monopoly compliance management system and guard against relevant risks while promoting the healthy development of the Group's various businesses. In addition, the Group continued to revise and update the "Handbook of Appointment of Directors and Supervisors of Towngas China Group (2020 Edition)" and "Templates for Board Papers of Towngas China Group (2020 Edition)" to promote a more standardised corporate governance system and greater operation efficiency of the Board.

During the year, the Group coordinated more than 100 of its project companies to convene annual board meetings in accordance with their articles of association. Some of those companies also held interim board meetings. In spite of the Pandemic, the Group communicated with shareholders of its partners in a timely manner and carried out board operations with flexibility through video conferences and written resolutions, among other means, to ensure the normal operation of the Board of Directors. Important resolutions made at the Board meetings have been followed up on by project companies in the respective regions and the corresponding functional departments of the Group in an orderly manner to ensure the smooth flow of the process and the effective implementation of the Group's development strategy as well as the decisions of the Company's Board of Directors.

In terms of investment management, the Group carried out a range of measures to ensure the consistent implementation of the Group's investment strategy, the smooth development of investment projects and the seamless transition and operation of new projects. From the inception of the project, the Group conducted project due diligence and evaluation meetings, reviewed project board reports and legal documents as well as project expense and payment plans. The Group also offered all rounded support not only during the investment period but also pre- and post-investment. In an effort to improve the efficiency of project development, the Group is "Project Investment Management revising the Regulations", which is expected to be officially released in 2021.

# **Risk Management**

In order to effectively identify ESG-related risks, Towngas China and its parent company, HKCG, commissioned a third-party consultant to conduct an assessment on the Group's business. Taking reference from the Task Force on Climate-related Financial Disclosures (TCFD), the Group acquired an understanding of its businesses' transitional risks and opportunities in the face of various climate change scenarios with a view to helping the Group enhance its ability to mitigate the impact of climate change in the context of its assets and operations.

In line with stakeholder expectations, Towngas China is committed to building a robust risk management system to improve risk prevention capabilities in a comprehensive manner. The Group has a multi-level risk management structure in place to establish relevant mechanisms for exercising authority, making decisions and implementing supervision. This enables effective identification, evaluation, mitigation, reporting and monitoring of various major risks faced by the Group and its project companies. Thus, the Group is able to formulate strategies and execute projects in a more prudent manner to achieve better business performance.

The Board Audit and Risk Committee regularly reviews the effectiveness of the Group's risk management measures and reports its findings directly to the Board of Directors to assist the latter in overseeing the overall risk management system of the Group. The Group Executive Risk Management Committee is responsible for formulating the risk management system and ensuring its effective implementation so as to reduce risks to an acceptable level. The Corporate Risk Management Committee assists the Group Executive Risk Management Committee to review major risks and monitor the implementation of risk mitigation measures.

Board of Directors Board Audit and Risk Committee Group Executive Risk Management Committee Corporate Risk Management Committee Business Unit



Risk management is an essential part of the Group's daily operations, consistently performed by personnel from all business units. Each project company has its own risk management procedures and systems. The project companies, regional offices and headquarters regularly communicate the latest risk status and corresponding mitigation measures. They also conduct regular independent reviews to ensure effective management of different types of risks. a stand-alone agenda item at the annual board meeting. The results of the Company's major risk self-assessment and related risk monitoring indicators are also included to guide the project companies to conduct risk analysis and management in order to eliminate hidden issues and malpractices. At the same time, the Group strictly implements the safety and risk management audit system and conducts periodic comprehensive safety and risk management audit of project companies to effectively raise their safety and risk management standard.

Towngas China submits Safety and Risk Work Report as

### Aspects Covered under In-house Corporate Risk Self-Assessment



In order to support the country's strategy to comprehensively govern according to law and to improve the Group's standard of corporate governance in accordance with the law, Towngas China has established a legal risk prevention system that comprises prevention ahead of incidents, controls during incidents and assessment after incidents. Taking into account the characteristics and business processes of public utilities, the Group has established a sound legal risk assessment system and a significant risk reporting mechanism. It has also compiled a checklist for assessing legal risks and quantifiable evaluation standards. The Group deployed legal personnel in respective regions, hired professional compliance legal consultants, and organised compliance training sessions in order to effectively identify, control and resolve legal risks to ensure the Group's business operations meet the national legal requirements. Through "Towngas China Law Lectures", the Group conducted internal sharing on typical legal cases, featured new laws and policies, analysed industry regulations, drew attention to legislative trends and implemented the philosophy of corporate governance in accordance with the law to ensure that the Group operates in a safe, orderly and efficient manner in the face of dynamic policies and market environment.

# **Internal Audit**

In accordance with national and local laws and regulations, national standards, industry norms and accounting standards and the Group's requirements, among others, the Towngas China Internal Audit Division formulated the "Towngas China Internal Audit Division - Project Management Rules", utilising systematic and standardised methods to evaluate and monitor the appropriateness and effectiveness of the operation management and business activities of the

Group and its project companies in a comprehensive manner. It also issued audit reports and followed up on implementation of recommendations the for improvement in order to maintain the healthy and sound operation of the Group and improve the overall operational efficiency. By the end of December 2020, the Group had established audit committees for 33 project companies and internal audit divisions for 11 project companies.

**Due Diligence** 

**Special Project Audit** 

### Primary Scope of Internal Audits

#### **Operational Audit**

Financial & Tax Audit

### Works & Procurement Audit Information Technology Audit

During the year, the Internal Audit Division of the Group established a specialised audit scoring system on fee arrangement to comprehensively score project companies' cost-related internal control measures and accounting matters etc. It also established a procurement bidding document and contract scoring system. The completeness of bidding documents and contracts submitted by project companies for audit are scored to further enhance their management.

Impacted by the Pandemic, the Group's Internal Audit Division mainly implemented project follow-up and information review work through remote means from February to April 2020. Internal staff training sessions and professional thematic seminars were also organised. Field audits gradually resumed from May while the annual audit plan also adjusted. The Division will continue to pay close attention to the development of the Pandemic and respond in a timely and reasonable manner.

### In 2020, the Division:

- launched 30 audits
  - $\bullet$  followed up on the execution of recommendations in 25 audit reports
    - $\bullet$  supported project companies in establishing and optimising 37 regulatory frameworks
- conducted annual reporting to audit committees or boards of directors of / project companies

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# Anti-corruption

Towngas China firmly believes in the importance of governing according to the law, integrity and fair competition in the maintenance of its comparative advantage in development, and strictly and consistently adheres to ethical principles in business operations, in line with its core values. The Group has formulated a rigorous internal code of conduct and anti-fraud policy to provide employees with guidelines on handling ethics-related matters such as bribery and corruption, conflicts of interest, insider trading, acceptance of gifts and entertainment, as well as equal opportunities. It requires staff to refrain from requesting or accepting any advantages and benefits as employees of the Company in the course of performing their duties, with severe punishment prescribed for any breaches. It also expects and encourages employees and anyone in contact with the Group (such as customers, contractors, suppliers, creditors, debtors, other stakeholders etc.) to report any misconduct, fraud and violations within the Group, so as to establish a work environment with integrity where all employees abide by professional ethical standards and remain loyal, upright, fair and just in order to gain the trust of customers and protect the interests of the public. The Group has established a confidential reporting mechanism to provide channels for all stakeholders to report improper behaviour and handle relevant reported information in a timely, objective and prudent manner. Further details on this policy can be found on the Corporate Governance page of the Group's official website at:

https://www.towngaschina.com/en/About-Us/Corporat e-Governance

Other than regular training on the Group's code of conduct and anti-fraud policy, the staff are also required to sign a "Staff Declaration" and "Declaration of Next of Kin Employed by the Company and Conflict of Interests", and disclose any other matters that may contravene any rules 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 2020, the Group did not encounter any litigation relating to staff bribery, extortion, fraudulent acts or corruption.

## Supply Chain Management

The main channels for Towngas China to select suppliers are the authorised agencies or directly affiliated companies of suppliers already approved by its parent company, HKCG, in the mainland, as well as suppliers that are assessed and deemed satisfactory by the Group and have the intention to collaborate. Supplier assessment mainly consists of examination of the company's operating status and development outlook, on-site review of its raw material quality, distribution, use and maintenance of its production equipment, process quality control, storage for raw material and finished products, quality assurance management mechanism, qualifications of quality control staff etc., in order to understand the supplier's quality management system. Where necessary, samples are sent to a third-party agency for testing. Alternatively, 6S applications on aspects such as the supplier's production, warehouse and laboratory are scored. The 6S concept comprises the Japanese 5S principles of Seiri (Sort), Seiton (Set in order), Seiso (Shine), Seiketsu (Standardise), and Shitsuke (Self-discipline), with the addition of "Safety". The Group also manages existing suppliers through methods such as quality inspections, random examinations of products and supplier performance reviews.

In 2020, the Group selected a total of 129 major suppliers that offer engineering components, 124 of them from the mainland and five from overseas. They mainly provide products related to gas engineering as well as pre-sales and after-sales services. These include steel pipes and anti-corrosion products, polyethylene (PE) pipes/fittings, gas appliances, gas metres/flow metres, galvanised and coated pipes/fittings, steel pipe fittings, PE ball valves/pipe network valves/copper valves, stainless steel bellows, heat shrinkable joint materials, regional/building pressure regulators, LNG storage tanks, LNG vapourisers, PE welding equipment etc. The proportion of suppliers implementing the aforementioned supply chain management practices reached 100%. Most of them possess ISO 9000, ISO 14000 and OHSAS 18000 certifications.

Towngas China integrates its social responsibility philosophy into its supply chain management.

Provided that a supplier has relevant certifications, the quality of its product meets requirements and it has passed the on-site review, priority will be given to those with excellent CSR performance. The Group requires suppliers to comply with the "Basic Requirements for Towngas Group Suppliers" and HKCG's "CSR Guide for Suppliers". Suppliers are requested to provide self-assessment reports in accordance with relevant provisions and the principles of voluntariness, equality, fairness and integrity. The Group conducts random checks on the CSR performance of suppliers covering a total of 116 items in the five areas of business ethics, employee relations, market activities, community involvement and environmental protection. Meanwhile, relevant online training courses are prepared for suppliers and project companies. During the year, the Group's 124 major suppliers submitted the "2020 CSR Self Evaluation and Feedback" online, all of which were up to standard. Improvement recommendations were made on deficiencies through official letters. In addition, six suppliers were inspected on site with all passing the reviews.

The Group continues to promote green procurement and encourages project companies to give priority to suppliers with ISO 14000 certification. Where necessary, new factories established or relocated by suppliers are required to either provide an environmental impact assessment report or pass the review by a qualified agency. Pollutant discharge must meet government requirements, otherwise relevant inspection reports are to be obtained.



### "Towngas China Approved Suppliers — Creative Award"

### **Case in Point**

In 2020, Towngas China launched the first "Towngas China Approved Suppliers — Creative Award". Over 30 suppliers sent in 50 proposals, of which eight received the first, second and third prizes as well as "Quality" and "Environmental" awards. Pictuerd below is the first prize winner, a scientific waste treatment system. The contest was initiated by the Group's Joint Procurement Quality Management Committee as part of the fourth Supply Management and Research Topics campaign. It aims to encourage partners of Towngas China to innovate in terms of product quality, design, materials etc., promote product standardisation and engage in environmental protection in order to create greater value for the supply chain. The Joint Procurement Quality Management Committee will be promoting the selected high-value project-related proposals within the Group to help project companies enhance their supply chain management.



# Respecting and Protecting Intellectual Property

Intellectual property protection is of great significance to enhancing innovation and competitiveness of companies. Towngas China has taken active measures to effectively safeguard intellectual property rights and prevent infringements. The Group compiles statistics and conducts reviews of authorised software licenses every year. In 2020, it updated and promulgated version 2.1 of the "Towngas China Group IT Management System". In accordance with the requirements of using licensed software, software that may be used by office computers were grouped into four categories: standard configuration, request-based configuration, to be eliminated and free installation. Corresponding management requirements were formulated.

During the year, the Towngas Management System (TMS) passed rigorous evaluation and was awarded Level 3 Certificate of Information Security Protection Evaluation by a relevant department of the Ministry of Public Security. In accordance with the national requirements of the "Regulations on Cybersecurity Classification Protection", the Group issued the "Towngas China Group Corporate Cybersecurity Classification Protection Work Guidelines" and arranged for the relevant personnel of its project companies to attend video training sessions to publicise and explain the cybersecurity law and classification protection work guidelines with a total of 550 participants. After the training, the majority of the project companies applied for qualification reviews at the local management institution in accordance with the requirements of the relevant regulations and obtained the classification protection evaluation certificate in respect of the relevant systems.

In terms of our collaboration with external supppliers, the Group has also mandated all suppliers to make a declaration in their contract with the Group that products and/or services supplied do not constitute any copyright infringement. Provisions have been made for the protection of intellectual property rights of software and/or integrated systems belonging to business partners. In addition, both parties to the contract must agree to abide by the non-disclosure agreement and permitted scope of licensed use.






## **Major Material Issues**

- •Greenhouse Gas and Air Pollutant Management
- •Environmental and Natural Resources Management
- •Energy Use and Efficiency
- •Seizing Sustainable Development Opportunities

Environmental protection is about the future of mankind. Towngas China has always strived to create shared value for the business sector and the community, focusing on the harmonious integration and coordinated development of the enterprise and the environment. The Group aims to provide green and low-carbon energy services, and continues to promote industrial and technological innovation. Meanwhile, it has also established a dedicated department for environmental protection, and formulated the "Guidelines on Environmental Management", covering identification and evaluation of environment factors, energy conservation (resources) management, solid waste management, noise control, exhaust management, effluent (liquid waste) management etc., in order to guide project companies to raise the standard of their environmental protection management, help society reduce the risk of climate change and create a more desirable living environment.

## **Performance Highlights**

- Strictly controlled the discharge of exhaust, solid waste and effluent to protect the natural ecological environment
- Consistently promoted the development of "coal-to-gas" initiatives and contributed to the country's "Blue Sky Project"
- Actively developed integrated green energy business and created an energy internet ecology
- Researched, developed and produced environmentally friendly and energy-saving products, and consistently reduced pollution caused by packaging
- Consolidated the upstream, midstream and downstream arrangement of the natural gas industry chain to achieve sustainable development



## Greenhouse Gas and Air Pollutant Management

Towngas China complies with national environmental protection laws and regulations, and promotes the use of more environmentally friendly materials and technologies in its daily operations. Statistical surveys are conducted on greenhouse gas (GHG) emissions every year. Project companies are required to strengthen their organisation and management, enhance systems, and keep proper records of various items in order to reduce the emission of GHG and air pollutants, as well as create a clean and healthy environment. The Group requires its project companies to review and update their environmental policies every year and display it in a prominent place at work locations with the general manager's signature to facilitate employee' s understanding and implementation.

In accordance with the "Environmental Management Guidelines", in terms of exhaust emissions, the Group mandates project companies to 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 set out by the administrative department for environmental protection under the State Council. In addition, the Group is obliged to monitor, track statistics and maintain original data and records of exhaust emissions in accordance with state laws and regulations as well as the "Procedures for Identification and Evaluation of Environmental Factors" under the Group's "Environmental Management Guidelines" as a reliable basis for subsequent improvements.

In response to the country's call to "win the blue sky defense battle", Towngas China has vigorously carried out "coal-to-gas" initiatives and worked to "connect every village". Through substituting gas for coal in industrial parks and for space heating projects in the north, as well as energy planning for new parks etc., the Group contributes towards atmospheric environmental governance. In 2020, the Group has transformed boilers with a combined capacity of 2,000 tonnes of steam under its coal-to-gas boiler transformation project, completing its last stage of work to transform coal-fired boilers with a steam generating capacity of less than 35 tonnes per hour in support of the "Three-year Action Plan for the Blue Sky Defense Battle". According to statistics, from 2015 to the first half of 2020, the Group's "coal-to-gas" customers have eliminated the use of around 4.07 million tonnes of coal, thereby effectively reducing pollution on the atmospheric environment and achieving significant environmental benefits.



#### Guangxi Towngas China Smart Energy: Reducing Emissions through Desulphurisation Technology

## **Case in Point**

The Layn Energy Station of Guangxi Towngas China Smart Energy Co., Ltd uses iron complex wet desulphurisation technology on the biogas of Guilin Layn Natural Ingredients Corp. The designed flow rate of the raw material gas treated by the equipment is 833 standard cubic metres per hour. The hydrogen sulphide content of the biogas was reduced to less than 10 parts per million (ppm) after treatment, from around 20,000 ppm before treatment. About 600 kilograms of high-quality sulphur is recycled every day, effectively reducing atmospheric pollution.

## Environmental and Natural Resources Management

In addition to placing particular attention on air quality, Towngas China's "Environmental Management Guidelines" also puts forward strict management requirements for solid waste and effluent discharge. Improved management of solid waste and effluent discharge helps alleviate the pressure of environmental risks and promote green and low-carbon development.

The Group disposes of hazardous wastes in accordance with relevant national and local regulations, commissioning accredited organisations with the relevant professional qualifications to properly dispose of such wastes to prevent pollution transfer. Non-hazardous wastes are transported to the trash bin together with domestic waste, and cleared in accordance with the requirements of the municipal hygiene department. Through techniques such as suppliers' clean production and elimination of outdated production processes, the amount of waste generated is reduced and controlled. 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 disposal issues.

Towngas China has also launched environmental management measures including monitoring and checks to identify and assess environmental factors pertaining to the scope of its activities, products and services across various aspects, such as resource and energy utilisation, exhaust emissions, effluent discharge, discharges on soil, energy releases, generation of waste etc. It 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. At the same time, the Group raises the environmental awareness of customers and business partners through training and communication.



#### 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. Recyclable waste is sent to professional recycling companies while non-recyclable waste is transported to environmental and hygiene management units or landfills in accordance with state requirements. The Group stipulates clear storage requirements and points to note for hazardous (harmful) waste, and recommends that a record and statistics be maintained on waste disposal, categorised by treatment methods, e.g. recycled, landfilled, incinerated.

## Guidelines on Managing Effluent Discharge

Project companies must eliminate equipment that causes serious water pollution and comply with the protocol and requirements imposed by the "General Standards for Discharge of Wastewater". Where project companies need to directly or indirectly discharge liquid pollutants, dedicated discharge outlets must be built in strict compliance with the requirements set out by the administrative department for environmental protection under the State Council, and engage authoritative testing organisations per local environmental department requirements to monitor and ensure that their industrial wastewater meets national standards and to keep records of effluent discharge and monitored information.

**Case in Point** 

#### C-Tech Laundry Plants Equipped with High-Efficiency Sewage Treatment Facilities

C-Tech Laundry, the Group's investment platform for laundry business, is committed to creating a "green and smart centralised laundry park", equipped with "green energy supply" and "centralised wastewater recovery and treatment equipment". It has been gradually replacing traditional stand-alone washing workshops with "intelligent, standardised and large-scale" laundry plants.

In order to protect the environment and conserve resources, the Group has formulated three types of wastewater treatment standard solutions in accordance with the different requirements of various regions. Level 1 Standard Solution: chemical oxygen demand (COD)  $\leq$  100 milligram/litre (mg/L); Level 2



Wastewater Treatment Process Flow

Standard Solution: COD  $\leq$  150mg/L; Level 3 Standard Solution: COD  $\leq$  500mg/L. Among the currently operating C-Tech laundry plants, one is capable of reducing the COD concentration to below 300 mg/L, while the rest of the plants are capable of reducing the COD concentration to below 100 mg/L.

Throughout project construction, Towngas China places particular emphasis on resource conservation and environmental protection. The Group actively collaborates with the planning and construction department of the government to conduct in-depth investigations and feasibility studies in order to formulate a satisfactory location plan to meet the overall urban planning and national regulatory requirements. Throughout the designing stage of projects such as high- and intermediate-pressure pipelines, plants, stations and gas storage facilities, the Group carries out hydrological, geological, and cultural relic surveys in advance as well as preliminary preparations including geological disaster assessment, environmental impact assessment, water and soil protection plan, hazard and operability research and analysis (HAZOP) and safety integrity assessment. It also surveys and optimises pipeline routes, adopts advanced technology, equipment and devices, and enhances construction plans to reduce the impact on the local natural environment and residents. For example, directional drilling and closed sludge management were used in certain parts of the alignment to reduce excavation and environmental pollution. In addition, the Group advocates centralised construction of LNG storage tanks in the region and intensive use of gas storage resources, and seeks shareholding leases or purchasing gas storage services from large gas storage stations to conserve land resources.

#### Strengthening the Protection of Cultivated Land: Liuzhou Hong Kong and China Gas Revises Location of Gate Station

#### **Case in Point**

In order to connect with the gas source of China Petroleum & Chemical Corporation (Sinopec), Liuzhou Hong Kong and China Gas Co., Ltd. originally planned to build a receiving gate station adjacent to the distribution station of Sinopec. It subsequently found that the selected site was basic farmland. In alignment with the principles of protecting high-quality arable land resources and intensive land use, the Company communicated with the natural resources and planning departments of the government and proposed for the gate station site to deviate from the upstream distribution station to an appropriate extent, provided that it meets safe spacing and engineering geological conditions. Subsequent to the revision of the gate station site selection, the workload and costs of the Company's high-pressure pipeline construction have increased. Nevertheless, the new site effectively uses hillside forest land to avoid the requisition of 5.4 mu (0.3 hectares) of basic farmland, thus reducing the impact on local food crop planting. This has received unanimous affirmation from the government and local villagers, and also enabled the smooth implementation of the construction of the gate station, thereby accelerating the assurance of gas sources for urban pipelines.



In order to reduce the impact of construction works on the environment, Towngas China has incorporated civilised construction and environmental protection in the form of a letter of responsibility in the contractor agreement as well as job responsibilities. It has also strengthened the detection and monitoring of dust, noise, waste etc. on construction sites, formulated relevant plans and taken timely measures to eliminate pollution and ensure the cleanliness of the construction site. The Group advocates the selection of low-noise equipment and daily maintenance to ensure that the equipment is in good working condition. It also strengthened noise monitoring production and business activities to ensure that local standards can be met.

## **Energy Use and Efficiency**

Towngas China supports the country's call for going green and environmental protection, and continues to explore clean energy transformation models. It specifically formulated relevant regulations on resources and energy conservation, in accordance with the state's "Law on Conserving Energy" and "Measures for the Administration of Industrial Energy Conservation". These include the separate measurement and statistical analysis of resources and energy, the formulation of energy-saving indicators, and the implementation of energy-saving inspections in order to promote energy-saving management of its project companies in areas such as production and operation, product sales, buildings, offices, transportation and logistics.

Through the brand of Towngas China Energy Investment Limited ("TCEI"), the Group makes use of core technology including energy planning and design as well as management platforms. Through multi-energy complementation, cascade utilisation and other technical means, the Group focuses on the investment, construction and smart operation of projects such as regional space heating and cooling, DES, distributed photovoltaics, energy storage etc., to provide clean integrated energy services of high-efficiency for industrial parks, integrated commercial complexes, data centres etc., in order to build a clean, low-carbon, safe, stable and energy-conserving Smart Energy Internet ecology so as to facilitate the transformation of the country' s energy structure.

The Group has formulated the "source - grid - load - storage" market strategy of synergy and interaction. The "source" aspect focuses on investing in regional space heating, distributed photovoltaic and DES, with an emphasis on gradual expansion to regions for direct electricity trading. It includes the effective utilisation of low-priced steam from thermal power plants, building gas energy stations to supply steam and investing in gas-fired thermal power plants. The "grid" aspect focuses on the incremental distribution network business, especially the pilot projects of complementary cooperation with advantages, to set the stage for the huge potential future market. The "load" aspect focuses on the sales of electricity and energy-conserving business, deep-ploughing the gas market, and expanding the sales of electricity to industrial customers that use gas as well as the electricity conserving business for industrial and commercial customers. The "storage" aspect focuses on the development of energy storage business, investing in customer-side energy storage (electricity storage and cold thermal energy storage) systems, as well as exploration of and participation in the auxiliary power service market.

The green energy integrated projects carried out by the Group can effectively reduce energy consumption and

emissions as well as maximise energy efficiency. For example, the gas-fired steam boiler heating project utilises recycling of steam condensate to maximise the calorific value of the condensate. The return flow of condensate is about 60%, and the average gas consumption per tonne of steam is reduced by about 6%. This has a significant impact on improving energy conservation and economic benefits. In terms of electricity-related business, the Group utilises artificial intelligence ("AI") control systems to optimise the operation strategy of clients' air conditioning systems and improve the energy efficiency of power used. Based on an energy consumption of the air conditioning system of 11.7 million kilowatt hours (kWh) and an electricity price of RMB0.67/kWh, customers can achieve annual electricity savings of around 850,000 kWh to 950,000 kWh and electricity cost savings of approximately RMB570,000 to RMB640,000.





#### TCEI Establishes Integrated Energy Internet Demonstration Project Featuring "Source-Grid-Load-Storage"

## **Case in Point**

The Shenzhen Gas Building integrated energy project was officially connected to the grid in April 2020. This is the first "source-grid-load-storage" Integrated Energy Internet demonstration project of TCEI. Mainly based on a DES, it integrates photovoltaics and energy storage while providing multiple energy sources to ensure stable and safe energy supply. The design team integrated the lithium bromide unit into the electric chiller air-conditioning system without changing the pressure of the original pipeline design. This not only solves the compatibility problem of the cooling system, but also maximises energy conservation. At the same time, the design team adopted an integrated design philosophy, consolidating the equipment into the container in a modular manner, reducing the necessary floor space by over 40%. In the construction stage,

Unreal Engine 4 ("UE4")-based building information modelling ("BIM"), cloud computing, Internet of Things ("IoT") and other technologies were incorporated to build digital three-dimensional models, develop virtual reality ("VR") scenes on the basis of BIM, and form an innovative BIM+VR software platform in order to improve construction efficiency and operations. In the operation stage, the integrated energy management platform jointly researched by Tsinghua University and Towngas China is used to fully realise centralised remote control as well as automatic data collection and analysis, and build a digital operation and maintenance management system to maximise energy efficiency, the safety of equipment operation and economic benefits.



## **Commencement of the Changzhou Tianhe DES**

#### **Case in Point**

TCEI, a subsidiary of the Group, collaborated with Trina Solar Co., Ltd. (Trina Solar), one of the world's largest photovoltaic module suppliers, to build a DES at Changzhou Industrial Park, where Trina Solar's domestic headquarters is located. The project is currently the distributed natural gas project in Jiangsu Province with the largest installed capacity that utilises gas internal combustion engines for power generation and internal energy supply in the plant. Through multiple energy management and dispatch methods such as multi-energy complementation, IoT, smart energy management and dispatch, and direct power trading with local consumption, it realises efficient and reliable use of clean energy. After it is put into operation, the annual integrated thermal efficiency is expected to reach 85%. The annual natural gas consumption is approximated at 10 million cubic metres, power generation capacity at 40 million kWh, cooling capacity at 30 million kWh, heat supply at 4.4 million kWh, standard coal savings at close to 5,000 tonnes, and carbon dioxide emission reduction at about 23,000 tonnes.







In view of the great demand for water at laundry factories and in order to improve the utilisation efficiency of water resources, the Group has adopted environmentally friendly processes and technologies. Among them, the reuse of dryer and ironing machine condensate can reduce system steam consumption by 12%. Water reuse in the production process of the tunnel washer saves 50% of water compared with traditional laundry methods. Reuse of the treated wastewater saves up to 30% of water when compared with direct disposal.

The Group's gas appliance brand "Bauhinia" has always implemented the philosophy of environmental protection and low-carbon emission throughout the business process. It endeavours to create energy-conserving and environmentally friendly products, and strives to reduce pollution resulting from packaging. The brand has developed a series of high-efficiency and energy-conserving burners such as Inner Flame Burner, Taichi Burner, and Anti-Scorch Burner. All embedded gas stoves have reached the Level 1 energy efficiency specified by the China Energy Label Scheme. Various water heating products have obtained energy conservation and environmental certificates and are included in China's high-efficiency product rankings and national government's procurement list of energy-saving products. For instance, the BC-K1802 series of gas-fired heating and hot water combi-boiler adopts a new type of water-cooled low-nitrogen combustion method. By changing the combustion burner structure and air supplement ratio, the combustion flame temperature is effectively reduced, which in turn reduces nitrogen oxide emissions by over 50%. The products have obtained energy-conservation certification and environmental protection certification issued by the China Quality Certification Centre. In terms of product packaging, "Bauhinia" now exclusively uses biodegradable materials.



packaging materials **660.3** tonnes



At the daily operation level, the Group advocates the environmental protection philosophy of cherishing resources, conserving energy, reducing consumption and eliminating wastage. From time to time, it organises and encourages all employees and partners to participate in various environmental protection activities. During the year, the Group issued the "Towngas China Group Guidelines on Low-carbon and Environmental Education" with the theme of "Green Office, Low-carbon Living". It advocates practices such as saving paper and electricity, bringing your own cups, reducing the use of plastic products, and having office plants to create a green and healthy office space. The Group also calls on employees to refrain from eating wild animals and share an "Environmental Protection Pledge" through personal social media channels such as WeChat, Weibo and TikTok to "commit to nature and be a green and low-carbon citizen". In addition, it launched the "Integrity Second-hand Market" where employees can post second-hand items on social media groups to trade with each other, with a view to enhancing recycling of the items and reducing wastage.

## "Green Office, Low-Carbon Living" Events

#### **Case in Point**

In March 2020, Hangzhou Hong Kong and China Gas Company Limited responded to the Group's call for "Green Office, Low-Carbon Living" and launched the "Spring Colours" event. Employees hand-painted spring colours on flower pots, showcasing creative ideas for environmental protection and vigorous vitality during the Pandemic. The resulting works were fun and artistic.



Volunteers from Shenyang Hong Kong & China Gas Company Limited used waste cardboard boxes to make recycling boxes for recycled paper and waste paper. They applied their creativity to decorate the artwork to enhance employees' environmental awareness.





In April 2020, more than 30 volunteers from Weifang Hong Kong and China Gas Company Limited ("Weifang Hong Kong China Gas") arrived at Binhai Natural Gas Gate Station to participate in tree planting activities for public welfare. Over 360 Chinese ash trees were planted. This is the fourth "Towngas China Forest" planted by the Company, adding an abundance of greenery to the spring of Weifang.



During the year, the Group began to build a collaborative office platform to drive its efforts towards a paperless office while speeding up information exchange among staff at all levels and reduce communication costs. At present, the Group headquarters and five pilot companies have gone online. It is expected that the relevant promotion across the Group will be completed in 2021.

## Seizing Sustainable Development Opportunities

Natural gas is a clean and efficient energy source, and plays a significant role in improving the country's energy structure, reducing GHG emissions as well as promoting sustainable economic, social and environmental development. In 2020, the Pandemic had resulted in detrimental effects on the world economy. The government work report emphasised the need to enhance the implementation of macroeconomic policies, focus on stabilising enterprises and ensuring employment, while deploying strategies to expand domestic demand. With this in mind, Towngas China has consistently optimised its allocation of resources, implementing a larger, broader and deeper degree of win-win collaboration and achieving quality development for a new chapter under the ever-changing circumstances.

#### Towngas China and Shanghai Gas Sign Equity Cooperation Agreement

In October 2020, Towngas China and Shanghai Gas Co., Ltd. ("Shanghai Gas") simultaneously held a "cloud signing" ceremony in Hong Kong and Shanghai for their collaboration. Towngas China announced an investment

**Case in Point** 

of RMB4.7 billion in Shanghai Gas, accounting for 25% of the registered capital after the capital injection. The two parties also signed an agreement to deepen cooperation where Shanghai Gas shall acquire 25% of Towngas China's shares within one year. This strategic investment will extend the Group's businesses to Shanghai and its peripheral areas and enhance the comprehensiveness of Group's supply chain as well as layout of the national energy systems. The collaboration is also a successful example of regional integrated development in the Yangtze River Delta, and will help promote the long-term development of the natural gas industry.





China is accelerating the "green and efficient" adjustment of the energy consumption structure and continues to increase the proportion of natural gas in primary energy consumption. It is also paying increasing attention to improving energy efficiency and reducing carbon dioxide emissions per unit of gross domestic production ("GDP"). It is anticipated that over the course of the next few years, Towngas China will continue to register relatively satisfactory growth in its natural gas sale, and positive results will be achieved in the field of integrated green energy services. In response to the latest situation brought about by changes in the economic environment and industry development, the Group will continue to strengthen the upstream, midstream and downstream layout of the natural gas industry chain, further enhance its capacity for supply assurance, and strive to achieve sustainable development.

Towngas China has vigorously developed overseas direct sourcing, increased investments in aspects such

as LNG trading, and achieved promising progress. In order to actively respond to the call for "city gas companies to form a gas storage capacity of not less than 5% of their annual gas consumption" under "Opinions on Accelerating the Construction of Gas Storage Facilities and Improving the Market Mechanism for Ancillary Services for Gas Storage and Peak Regulation" and the relevant requirements for gas storage and peak shaving in the "Code for Design of City Gas Engineering" (2020 Edition), the Group has laid out its plan for gas storage in a comprehensive manner, reasonably controlled investments in gas storage facilities and gradually established a multi-level gas storage and peak-shaving system with the Jintan Gas Storage and LNG receiving station as the major parts supplemented by the LNG facilities built by certain companies. The Group has also established strategic LNG gas storage and peak-shaving projects in the mainland, with the construction of a gas-storage and peak-shaving base in Weiyuan, Sichuan commencing during the year.

## Construction Begins for Gas Storage and Peak-shaving Base and LNG Plant in the Southwest Region

#### **Case in Point**

In November 2020, the groundbreaking ceremony for the gas storage and peak-shaving base and LNG plant project of Towngas China in the Southwest Region was held. This is the Group's first key project for LNG manufactured from shale gas, constructed by Towngas Sichuan United Energy Co., Ltd., and jointly funded by the Group and 12 of its project companies. The project is located in Yanling Industrial Park, Weiyuan Economic Development Zone, covering an area of over 400 mu (26.67 hectares). Total investment amounts to approximately RMB1.7 billion, for the construction of facilities, including a LNG production line with a daily processing capacity of 500,000 cubic metres of gaseous natural gas, a storage tank with storage capacity of 10,000 cubic metres and related gas pipeline network projects. Depending on actual operation and future market demands, production scale and reserve capacity will be increased. The project will play a positive role in facilitating the development of the natural gas industry and environmental protection in Weiyuan and surrounding areas as well as promoting sustainable development of the local economy.





## **Emissions and Use of Resources in 2020**

## Emissions Data (From burning fuel and vehicle emissions)











Respirable suspended particulates(PM10) 1,344.9 kg

## Total Greenhouse Gas Emissions & Intensity



Greenhouse gas 34,578.3 tonnes

## **Total Volume & Intensity of Hazardous Waste Generated**



Harmful/hazardous waste (solids) 15.3 tonnes





## Total Volume & Intensity of Non-hazardous Waste Generated





## **Energy Consumption & Intensity**







## **Major Material Issues**

- •Deepening Safety Management Practices
- Innovating for Quality Engineering
- •Establishing a Sense of Safety and Collaboration

## • Promoting Sustainable Development of the Industry

Safety is the cornerstone of business development. Ever since its foray into the mainland, Towngas China has dedicated itself to introducing international standards for safe operation to the gas industry to create momentum for the development of mainland public utilities. The Group sees production safety as its priority, upholding innovation and implementing the philosophy of "the only way to do it is to do it safely" to maintain its industry-leading safety indicators while pursuing ever-greater excellence in safety performance.



**Performance Highlights** 



## Emergency Repairs (Indoor)

Unit: Case/1,000 households



#### Safety Enhancement Costs



Potential Risks (Class 1) Rectification Rate





## Deepening Safety Management Practices

Towngas China has always set "zero accidents" as its safety management goal. The Group continuously improves its production safety performance by establishing a sound safety responsibility structure and deepening safety management practices. In 2020, the Group invested over RMB420 million in the improvement of technical safety measures, the renovation of dangerous and old facilities, the rectification of safety hazards, safety promotion and training as well as the purchase of protective equipment.

## **General Manager Monthly Safety Inspections**

In 2020, Towngas China has put forward higher requirements for General Manager Monthly Safety Inspections of the project companies. The general manager of the project company is the primary person in charge of the company's production safety and is required to strictly implement the duties for the primary person in charge of the production and operation unit as specified in the "Production Safety Law". Since the inception of this system in 2008, it has been regularly updated and fine-tuned according to the safety management situation in order to realise the management principle of "preventing risks and assuring safety".

In view of the severity of Pandemic prevention measures, in addition to the routine General Manager Monthly Safety

Inspections, the Group added the "Special Inspection for the Prevention and Control of COVID-19" in February 2020 to ensure the implementation of health and Pandemic prevention measures at project companies. The Group has also added public health items to the monthly general manager inspection checklist to incorporate prevention and control work into regular management.

In addition, the Group's Safety Committee increased the frequency of General Manager Monthly Safety Inspections from once a month to twice a month. On top of the items to be inspected monthly, an unplanned general manager safety inspection is added, to be arranged by each project company and recorded and filed properly.

## **Overview of the General Manager Monthly Safety Inspections**

Time	General Manager Inspection Items
January 2020	Customer gas safety inspection
February 2020	Special inspection of office buildings, warehouses and Pandemic prevention
March 2020	Safety management at production facilities
April 2020	Inspection of pipeline networks and testing for gas leakage
May 2020	Environmental management
June 2020	Corporate risk assessment
July 2020	Construction safety management
August 2020	Occupational safety and health
September 2020	Suspension and resumption of gas supply management
October 2020	Contractors' safety management
November 2020	Fire safety management
December 2020	Transport safety management

## Safety and Risk Management Audit

Towngas China has put in place its current Safety and Risk Management Audit regime since 2006. Covering close to 1,000 audit items across 10 categories, namely occupational safety, fire safety, pipeline network safety, customer safety, production facility safety, crisis management, security management, transport safety and environmental protection, a comprehensive audit is done for all project companies every two years. In 2020, the Group has commenced its seventh round of Safety and Risk Management Audit, which is expected to be completed in June 2021.

In order to more objectively evaluate the safety and risk management standard of project companies, the Group enhanced the safety and risk audit mechanism during the year by introducing unplanned safety inspection results into the audit findings. Through the combination of planned and unplanned inspections, the daily management of safety risks is strengthened, effectively improving the safety management



standard of project companies. In 2020, the Group conducted planned inspections on 27 project

companies and unplanned inspections on 47 project companies.



## **Innovating for Quality Engineering**

Underground pipeline networks are critical arteries for city gas operations, crucial to the safe transmission of natural gas. During the year, Towngas China acted in accordance with the national gas storage and peak shaving policy to promote interconnection of gas pipelines. The Group continued to carry out underground pipe network transformation, replacing grey cast-iron pipes with anti-corrosion steel pipes and PE pipes with superior mechanical performance and corrosion resistance. Pipes not meeting the requirements of current standards in terms of aspects such as material quality, burial depth and spacing as well as those that are old or with potential risks were modified on a timely basis. Modification work was also carried out on regional pipe networks where pipe diameters and gas transmission volumes could no longer meet the current urban development needs in order to improve gas transmission capacity and ensure that it meets the standards to provide fundamental assurance for stable and safe gas supply. To address potential risks in the underground pipeline network related to elements such as moisture, corrosion and external damage, the Group made use of advanced equipment and monitoring technology to conduct regular pipeline inspections for timely elimination of potential threats in the pipeline network and effectively improve the reliability of pipeline network operation.

In order to further implement management measures and enhance the emphasis on and control of safety objectives, the Group continuously intensified the application of its project site management and data acquisition system, TMS mobile engineering application, making use of the "Construction Management Evaluation System" to carry out project quality control of the entire process as part of the normal procedure. As at the end of 2020, the Group had conducted remote evaluation of system data for over 70 project companies. The number of photos of on-site proceduralised construction work collected by TMS exceeded 7.8 million, while engineering construction and supervision record documents exceeded 1.5 million copies, and grew steadily at a rate of 13,000 copies and 2,600 copies per day respectively. Various engineering construction supervision quality standards are also issued to frontline construction and supervisory staff through the updates of TMS mobile engineering application to ensure that these standards are directly delivered to the frontline for implementation.

The Group also began work on the digitisation of the project completion data system. Procedures such as online approval, automated filing, standardised format and batch printing can be completed through the system, which effectively reduced the workload on construction and supervision units processing the completion data, allowing them to focus more on the quality control of the on-site construction process and real-time data collection to make good use of system data.

In terms of ensuring safe operation of the plant network, the Group selected 20 LNG plant stations during the year for key inspections and also inspected the pipeline network operation of 10 project companies. Based on the successful experience of regional joint maintenance of plant station control systems in South China, Jiangsu and Zhejiang, as well as Southwest China, the Group commenced regional joint maintenance work on plant station control systems in Northeast and North China in 2020. In addition, the Group has made significant investments in promoting the application of new technologies such as BeiDou Navigation Satellite System and gyroscope measurement to improve the accuracy of pipe network positioning. To further improve operational safety, it also actively explored the integrated application of sniffer dogs with leak detection vehicles as well as AI automatic assessment of PE and steel pipe welding quality to further enhance operational safety.



## Promoting Technical Consulting Services while Exploring ///Case in Point **Project Cost Reduction and Efficiency Enhancement**

Towngas China began work on its key engineering technical consulting services in 2016. It aims to leverage the technical strength of the Group to manage and control the major projects of project companies, tackle their technical weaknesses, help implement the Group's standards and improve project quality. In 2020, the Group continued to deliver engineering technical consulting services and participated in the construction of three projects including Baotou Gangyilong Jinshan Industrial Park LNG Refilling Station, High and Medium Pressure Offtake Stations with Tongshan Hong Kong and China Gas Co. Ltd., and Auto Parts City LNG Integrated Station with Qingdao Zhongji Hong Kong and China Gas Co. Ltd. Among them, the project of Qingdao Zhongji Hong Kong and China Gas Co. Ltd. achieved intensive use of land through appropriate arrangements for LNG refilling and storage stations to be jointly constructed. In an innovative move, the project also adopted water bath and air temperature stepped gasification processes to successfully pilot mist suppression energy-saving technology with satisfactory results.



## **Undertaking Subject Research** to Take the Lead in Technological Innovation

## **Case in Point**

Committed to technological innovation and building on the concept of "Growth = innovation  $\times$  implementation" ("G =  $i \times i$ "), Towngas China establishes research topics every year to resolve practical engineering problems and promote technological development. In 2020, riding on the fruitful outcome of the 2019 research topic "discussion on application of radiographic imaging digitisation for

defect detection", the Group carried out research on the "similarity analysis of digitisation radiographic testing films for steel pipe girth welding". The research examines the digitisation of radiographic testing ("RT") film by combining the quality of film image conversion with manual comparison reinspection to ensure the completeness and accuracy of the information on the

digitised film. In addition, the quality of the weld seam can be checked from different perspectives. The research completed reinspection on the digitisation of a total of 2,968 weld seam films. Same-seam film analysis was also carried out with the aid of the "Intelligent System for Weld Seam Image Similarity Comparison", providing inspiration for the standardised management and continuous improvement of future projects.

## "Vehicle-Canine Partnership" to Detect Leaks and Prevent Risks

#### **Case in Point**

Leak detection through "vehicle-canine partnership" is a new safety risk prevention measure taken by the Group after it introduced the country's first gas sniffer dog. It pairs a laser gas leak detection vehicle with a gas sniffer dog to carry out rapid leak detection. The laser gas leak detection vehicle system utilises the world's most advanced fourth-generation laser analysis technology, which is 1,000 times more sensitive than traditional detection equipment. It is capable of detecting a one part per billion (ppb) change in the concentration of gas. Combined with Beidou precise positioning and secure cloud storage technology, it can accurately identify the source, nature and concentration of gas, as well as determine the area involved and perform smart evaluation. After analysis on the big data in the cloud storage, a report can be generated to facilitate subsequent assessment of the leak in a more accurate manner. After that, the gas sniffer dog will determine whether there is a natural gas leak within the area identified by the laser gas leak detection vehicle by sensing any odourant in the air, thereby accurately locating the leak.

Currently, the Group has carried out "vehicle-canine partnership" leak detection on approximately 320 kilometres (km) of pipelines in Jiangsu, Zhejiang, Anhui, Jiangxi, Southwest and South China. Compared with the traditional manual leak detection rate of three to five km per day, this method brings about a ten-fold increase in speed. This greatly improves the efficiency of leak detection while yielding more accurate detection results. It also covers a wider area and effectively improves the safety of the gas pipeline network operation.





# Establishing a Sense of Safety and Collaboration

As gas has become a significant source of energy for production and living, collaboration to achieve gas safety has become ever more important. For this purpose, Towngas China has continuously made use of innovative channels and methods to promote the philosophy of collaborating for safety to the public in order to ensure the safety of their lives and properties.

After the Pandemic eased, the Group's project companies took the initiative to contact industrial and commercial customers, carry out gas safety inspections, investigate and rectify hidden dangers in a timely manner and ensure gas safety after the resumption of work and production.

In April, the Group launched the "Gas Safety Tips Everyone Should Know" creative application competition to further promote the application of the outstanding creations from the relevant creative promotion competition in 2019 and deepen customers' understanding of gas safety. The competition included the "Special Award for Safe Gas Publicity during the COVID-19 Pandemic" to evaluate and reward project companies for their ability to cope with safety publicity needs during the Pandemic. The Group's own gas appliance brand, "Bauhinia", also used TikTok Live, Taobao Live and other platforms to comprehensively introduce product functions, usage precautions and general knowledge of gas safety to customers, further enhancing customers' safety awareness in daily operations.

In June, in line with the theme of the national Safe Production Month, "eliminate hidden dangers and strengthen the line of defence for safety", the Group issued memorandum HSE-2020-067 "Notice on Launching 2020 'Safe Production Month' Activities". The notice requested project companies to carry out various forms of safety promotion activities such as safety inspections, hidden danger investigation and management, emergency drills, safety education and safety promotion. During the year, the Group carried out 5,124 safety inspections, 810 emergency drills, 2,251 safety trainings, 1,167 safety promotions, 187 safety competitions and 138 safety promotion activities of other types.

## Innovative Means to Carry out Promotion of Safety

#### **Case in Point**

In June 2020, 38 young reporters arrived at the Nanzhuangmen Station of Foran Energy Group to participate in the "Guangfo Young Reporters' Environmental Protection Tour" organised by Guangzhou Daily to see natural gas facilities up close. Through simulated experiences and mini scientific experiments, they learned about different aspects of safe production of gas such as gas storage, distribution, equipment maintenance and emergency repairs. Also on display were gas knowledge exhibition panels, ethane analysers, underwater gas pipeline measuring vessels, drones and emergency vehicles from the Company's star project, Labs of Tomorrow. Wearing

work uniforms and holding ethane analysers, the young reporters acted as safety inspectors in an outdoor setting simulating a gas pipeline. The young reporters also used a remote control to manipulate a newly developed underwater gas pipeline measuring vessel nearby to simulate underwater reconnaissance and explore the "arteries" of clean energy transmission.



In August, staff of Shandong Jihua Gas Co., Ltd explained the operation of shared gas leak detectors in the Shun' anyuan community. Residents can rent the portable equipment for free by scanning the QR code on it to register. The gas leak detection process can be completed in one to two minutes. The Company had also set up a "Home Gas Leakage Management VR Experience" in the Shun' anyuan community to educate residents about the correct way to handle gas leaks through VR. This is an innovative implementation of the Company's safety management and is also a pioneering initiative in national gas safety promotion. At the same time, the Company continued to build on the promotion and application of VR technology



equipment at security inspection sites, service sites and other places in order to collaborate for safety. During the year, the Company was awarded the "Second Prize for Safety Innovative Achievement" by the China Gas Association for its "VR-based Home Gas Leakage Management Experience Platform" project.





Capitalising on the revival of street stall economy, Xin Jin Hong Kong and China Gas Co. Ltd. transformed a mobile service truck into a beverage store called "Towngas Flame" to carry out innovative safety promotion activities and spread the knowledge of safe gas usage while selling drinks. "Towngas Flame" offered three kinds of drinks, namely "Blue Flame", "Bauhinia Blooming" and "Warm Family". Each cup was labelled with a Towngas China logo and a gas safety slogan. During the event, "Towngas Flame" visited not only lively night markets but also large remote township communities such as Yuedian and Chunyang, receiving unanimous affirmation from customers. In addition, the Company also collaborated with the Fujiang community to contribute all sales proceeds from "Towngas Flame" towards helping households in need carry out safety rectifications and replacing stoves without flameout protection devices to further improve gas safety.



## Promoting Sustainable Development of the Industry

Towngas China actively promotes the development of industry technology and participates in the formulation of relevant national and industry standards. In 2020, the Group participated in the compilation of 14 national, industry and group standards, provided suggestions for amendments to multiple national and industry standards as well as shared project and safety management experience with the industry, thus contributing to the improvement of national gas standards. With its outstanding safety management performance, the Group's "Durable Gas Riser installation" innovation was awarded the "Craftsmanship Silver Award" in the first "Gas Design Aesthetics Contest" held by China Gas Association. The Group also actively participated in the preparation and discussion of relevant standards for gas appliances, including national standards such as "Gas-fired Heating and Hot Water Combi-boilers", "General Safety Technique Conditions of Gas Burning Appliances", "Corrugated Steel Hose Assemblies for the Connection of Domestic Appliances Using Gaseous Fuels" and more. The Group put forward a number of revision suggestions for the draft standards to help promote the healthy development of the gas appliance industry.

#### Joint Editing of Standards in 2020:

1	"Code for Design of City Gas Engineering"
2	"Standards for Construction and Acceptance of City and Town Gas Distribution Works"
3	"City Gas Pressure Regulator"
4	"City Gas Pressure Regulating Installation"
5	"LNG Fueling Stations"
6	"City Gas Security Inspection Standard for Trial Operations and Pre-operations"
7	"Standard of Steel Pipeline and Tank Corrosion Assessment—Part 6: Steel Pipeline Alternative Current Corrosion Assessment"
8	"Equipment for Intelligent Acquisition and Data Processing of Cathodic Protection Parameters"
9	"Specifications for City Gas Service"
10	"Code for Design of City Gas User Engineering"
11	"Standards for Indoor City Gas Construction Works and Quality Inspections"
12	"Technical Standards for Stainless Steel Pipe with Ring Compression Connection Applications"
13	"Hot-dipped Galvanised Stainless Steel Gas Pipe"
14	"Diaphragm Gas Meter with Electromechanical Valve"





## **Major Material Issues**

- Protecting Customer Privacy
- Product Quality Management
- •After-sales Service Management
- Enhancing Platform Development
- Proactively Addressing Demands

At Towngas China, we are committed to providing customers with courteous, professional and efficient services. We will continue to create value for customers on the basis of ensuring safe gas supply. With the rise of mobile internet technology, customers' demand for convenience of services and comfort of products continues to rise. The Group is keeping abreast of the times and developing a series of extended businesses such as an online operation platform, e-commerce services, home lifestyle services, insurance services, kitchen cabinets, gas appliances etc. to provide modern families with smart, safe, comfortable and healthy lifestyle experiences through smart technology and professional services.

## **Performance Highlights**

- Established an information security management system to protect customer privacy
- Built an efficient digital service platform so that customers can "run zero errands"
- Expanded product categories and service scope to create value for customers
- Effectively handled customer demands and improved customer satisfaction



## **Protecting Customer Privacy**

Towngas China attaches great importance to the protection of customer privacy, and does so through establishing a secure information management process and enhancing customer service staff's awareness of information security protection. In 2020, the Group's Virtual Customer Centre (VCC) platform has obtained the Multi-Level Protection Of Information Security Scheme (MLPS) Level 3 Certification and the ISO 20000 Information technology — Service management certification. Renewal of the certification under ISO 27001 Information Security Management System (ISMS) has also been completed.

The "Towngas China Guidelines for Customer Information Security" compiled by the Group covers customer information classification, information procedures, information confidentiality transfer supervision mechanism, information leak crisis handling mechanism etc., and provides guidance for project companies to improve their information security management in a comprehensive manner. The Group also issued the "VCC Data Security Management Regulations", "VCC Third Party Management "VCC Procedures", System Development and Acceptance Security Management Procedures" and other regulatory documents to implement solid protection of customer information security.

## **Product Quality Management**

Towngas China prioritises Total Quality Management (TQM), implemented in all aspects of its production and operation, product development and quality control.

The Group remains committed to providing customers with professional, safe and high-quality products and services.

## "Bauhinia" Promotes a Cosy Lifestyle

The Group's own gas appliance brand, "Bauhinia", develops its products with the belief that every safe and reliable gas appliance sold helps reduce the likelihood of gas incidents at customers' homes, thereby further ensuring gas usage safety. Throughout the years, the range of the Group's product categories continued to broaden, spanning gas stoves, range hoods, dish sterilisers, dishwashers, water heaters, combi boilers, gas clothes dryers, whole-house water purification systems etc. The entire line of products has received dual checks by the national quality supervision and inspection authorities, laboratories under China National Accreditation Service for Conformity Assessment as well as the Group's relevant quality control department. A total of 38 random batch inspections were organised in 2020, with samples covering all products and production plants. Among them, 22 batches of entire machines and 16 batches of key parts were randomly checked, and the number of samples totalled 139 pieces/sets. During the year, the product sales volume of "Bauhinia" exceeded 370,000 units with the defect rate maintained at one in 10,000, upholding the Company's status as industry quality leader.

In accordance with the Group's regulations, project companies selling "Bauhinia" products are required to feedback information to a quality control unit should they discover substandard products. The unit will analyse reasons for the non-conformities and determine whether it is a problem with an individual case or a batch. It will then work with the supplier to formulate improvement measures. Where it is a batch problem, the unit will notify the project companies to return the entire batch of substandard products to the supplier who shall then reissue qualified products of the same model in the same quantity. In 2020, among the products sold or shipped by "Bauhinia", there were no cases requiring recall due to safety or health reasons.

"Bauhinia" was named as a "Hong Kong Top Brand 2020" and "Advanced Company Implementing High-quality (Grade A) Product Standards 2020" for its excellent product quality.





In 2020, "Bauhinia" enhanced its efforts to create a system for a comfortable home. With advanced modern technology and energy-saving and environmentally friendly equipment, it realised its plan for integrated whole-house living system installation. Its coverage meets all the daily household needs such as food, water and room temperature, with products covering kitchen appliances, space heating, whole-house water purification etc. During the year, the brand launched two series of products for smart kitchen and whole-house water purification to meet families' needs for a convenient and comfortable home.



## Smart Kitchen Products for a Smart and Comfortable Home

## **Case in Point**

The design philosophy of "Bauhinia" Smart Kitchen is centred around the perspectives of safety, environmental protection and humanisation. Through learning to "think", the products can cooperate with the user to efficiently handle kitchen tasks and save energy under different scenarios. All products are equipped with mobile phone cloud computing, thus allowing customers to monitor the usage status of kitchen equipment with ease.

The gas stoves and range hoods of the smart series have a inter-linkage function, with air circulation functions responding to flame adjustments. The automatic cruise function of the range hood can sense and adjust circulation power. The remaining fumes can be removed through automatic timed ventilation to ensure that the kitchen remains smoke- and odour-free. In addition to maintaining the fine-tune feature for high flame, the gas stove also has a new smart timing function. The energy efficiency of the brand's entire line of embedded gas stoves has



reached Level 1 on the national energy efficiency index. Smart series water heaters are equipped with intelligent modules for functions such as smart pressure booster, built-in circulation for instant hot water and water volume server, which sets the ideal water temperature for a specific time. In addition to increasing hot water efficiency, it also maintains high energy conservation. The ECO mode, energy-saving mode and circulation mode can all be activated with one tap on the mobile phone, attaining energy savings of up to 50%.







#### Whole-house Water Purification System for a Healthy and Comfortable Home

## Case in Point

In June 2020, "Bauhinia" launched its whole-house water purification product series. This is a water treatment system capable of separately treating drinking water and the rest of the household water. It includes pre-filters, centralised water purifiers/softeners, decentralised reverse osmosis/ultrafiltration water treatment products and more. Not only does the series comprehensively cater for family water needs including drinking, eating, washing and bathing to ensure better health, it also extends the lifespan of the water-related appliances in the entire home by avoiding fouling and blockage of water-related equipment caused by hard water.



## Home Gas Alarm for a Safe and Comfortable Home

### **Case in Point**

Safety has always been the basic principle at "Bauhinia". The "Bauhinia" home gas alarm monitors air quality. Upon detecting molecules from natural gas, it sends out audio and visual reminders for customers

to check whether there is any gas leak. Together with electro-magnetic emergency shut-off valve for gas, it can automatically cut off gas supply.

#### **One-stop Kitchen Solutions**

In response to consumers' heightened demand for kitchens of upscale apartments, Towngas China entered the modular kitchen business in 2016, introducing the Mia Cucina cabinet brand to offer a total kitchen solution. By consolidating its own strengths, the Group has integrated gas ventilation, pipeline embedding, cabinet design, kitchen appliances and kitchen products, eliminating from the source the
relevant home-improvement difficulties commonly encountered by property developers and consumers. The Group has also resolved the problems in kitchen renovation in the past such as unreasonable gas pipe locations, exposed pipes undermining aesthetics and lack of product integration.

The overall design of Mia Cucina cabinets conforms to ergonomic principles. The brand offers tailor-made solutions for customers to ensure the most efficient use of space. In terms of quality assurance, the business chain is composed of professional teams including product development and design, technical quality management, supply chain integration, project management etc., operating through division of labour and collaboration as well as upholding stringent quality control. Raw materials and world-renowned hardware accessories are imported with strict selection. Precise control is exercised over the techniques, production, materials and other processes, with a focus on regulating cabinet structure to ensure robustness and stability. With a reasonable design, the cabinets are convenient to disassemble and reassemble, install and maintain, providing high-quality, convenient, modern and comfortable kitchens for customers.





# **After-sales Service Management**

Premium service is the competitive advantage of Towngas China. All products of "Bauhinia" enjoy complimentary three-year warranty and regular safety inspection services. "Bauhinia Cosy Home" provides customers with thoughtful services such as home visits to install the full set of equipment, regular safety inspections and lifetime maintenance. Through its 24-hour service hotline, special service outlets and professional engineers across the country, the Group has built a professional service network that closely focuses on customer needs and ready to resolve problems promptly. In addition, "Bauhinia" is setting up a comprehensive interactive customer platform to establish a customer information database, enable tracking of the sales and installation process, evaluating service, collecting customer feedback and performing other relevant functions to further improve its after-sales service.

Building upon onsite gas security inspection, Mia Cucina provides customers with proactive after-sales service. All cabinets come with two-year onsite maintenance service. Mia Cucina has set up a 24/7 after-sales response system, with an accessories warehouse established to shorten the after-sales service cycle. Customers can speedily make an appointment for maintenance visits and report meter reading through the customer call centre and VCC platform. The brand also regularly collaborates with property developers to organise cabinet after-sales service week activities, where staff patiently answer questions from customers on cabinet maintenance and promote related knowledge so as to render considerate after-sales services to real estate developers and property owners.

# Promoting Learning through Competition and Advocating the "MasterCraft" Spirit

In September 2020, the Third "Bauhinia" After-sales Service Skills Competition Finals was held in Changzhou. The purpose of the competition is to pass on the Group's "MasterCraft" spirit and create a culture of promoting "learning and training through motivational competitions" in order to improve the skills of the after-sales service teams and achieve higher standards of after-sales services. There were two parts to the finals: written test and practical operation. The practical operation simulated real-life scenarios where the problems encountered in daily services were recreated at the competition site. The finals covered the entire process of repairing gas appliances and conducting onsite security inspections. After three annual competitions, the after-sales service skills of project companies have continued to strengthen year by year, while theoretical mastery and practical ability of the participants have also seen remarkable improvement.

**Case in Point** 

# **Enhancing Platform Development**

In 2020, Towngas China continued to enhance the development of its service platform. On top of existing services such as online top up and payment, bill inquiries, integrated circuit card loading, account opening and scheduling installation, commencement of gas supply, maintenance, modification, safety inspection appointment etc., new functions were added to the VCC such as transfer of resident account and data modification, online electronic contract signing, meter-reporting through photo taking, electronic invoice optimisation, appointment making for special buildings, dispatch algorithm-offline map docking etc. The goal is to move as many offline services online as possible to make it more convenient for customers. In an effort to keep abreast of the development of 5G and Narrowband IoT technology, the Group launched the VCC IoT Meters Management Platform, characterised by data security, user-friendly management and supplier support service. During the year, the seven meter factories shortlisted in the Group's IoT meter procurement catalogue have all completed testing with more than 200,000 units in trial run of connecting with the platform for data transfer.

In June 2020, the Group launched the Towngas Lifestyle App and the "Home Lifestyle" business. Towngas Lifestyle App integrates gas payment, e-commerce and home lifestyle services to provide customers with high-quality, distinctive products and services for greater convenience. During the year, the VCC platform



covered 9.56 million customers with platform members reaching 6.18 million, while online gas payments amounted to RMB1.15 billion.



"Moment+" Towngas China Home Lifestyle Centres will be opened in our many areas of operation throughout the country to further improve the services of Towngas China Home Lifestyle. Going forward, the plan is to provide a full range of domestic services such as elderly care to create synergy with our existing gas services.



## Establishment of Regional Extended Business Platform Company

## Case in Point

In order to consolidate regional resources, expand business boundaries as well as create innovative management mechanisms and new business models, the Group established a company for its southwestern regional extended business, Towngas Cosy Home (Chengdu) Technological Services Co., Ltd., ("Towngas Cosy Home") during the year. The Company and various project companies in the southwestern region jointly funded the "Towngas Cosy Home" joint venture company, transforming the existing customer centre into an offline "Towngas Cosy Home" experience centre. It promotes synergy among marketing platforms, service systems, supply chain and channels among project companies, bringing about more efficient services and diverse products to the 1.8 million customers in the region.



## Tailoring for Local Conditions and Providing Customers with Convenient Services

# Case in Point

In January 2020, the "Bauhinia" Self-Service Clothes Dryer Company set up by Mianyang Hong Kong & China Gas Co., Ltd. landed in the Boya Hairun community in Mianyang to provide nearby residents with 24-hour clothes-drying services. This is the first self-service clothes-drying store in Mianyang. Customers simply need to put the clothes into the dryer, scan the QR code to select the service and pay the fee to enjoy the clothes-drying service.

In July, Da Yi Hong Kong and China Gas Co. Ltd. (Da Yi Hong

Kong and China Gas) took the lead in launching 24-hour self-service all-in-one kiosks in the five communities of Hengchang Gelanjun, Qinghe Mingdu, Financial Centre, Champagne Avenue, and Jintian New City. Through the all-in-one kiosks, customers can deposit and withdraw gas quota, conduct immediate recharge and deposits and experience self-service clothes-drying service. They can also enjoy the convenience of self-service in purchasing gas accessories and daily necessities such as drinking water, rice, noodles, oil, table salt and instant food.





# **Proactively Addressing Demands**

Towngas China prioritises the opinions and demands of every customer. The Group has established multiple feedback channels such as official websites, WeChat official accounts, Weibo, TikTok social network etc. to collect customer comments and ensure all feedback is properly followed-up on.

In 2020, the Group continued to monitor public opinion and telephone complaints, issuing prompt warning to project companies to ensure that they would follow up and handle the public opinion properly. The response rate was 100% in 2020. The Group also conducted summary analysis of the collected complaints and provided feedback with the relevant analysis results to each region to facilitate regional improvement and ensure that the Group's service standards were upheld. In response to major customer complaints, the Group urged relevant project companies to carry out rectification. For example, through analysing customer complaints, the Group realised that "connection lead time is too long" and "application procedure is complicated" accounted for a relatively high proportion of complaints. It thus required multiple project companies to set up special project groups to jointly study and resolve problems. In order to further improve service efficiency and reduce the number of visits to customers' premises, the Group formulated the business process of "one-stop service covering residential account opening, installation and official commencement of gas supply" and relevant business guidelines to encourage project companies simplify procedures and improve customer satisfaction.

The Group handles each and every customer complaint in a serious manner. During the year, the Group received 42 customer complaints.

During the year, the Group also led the formulation and implementation of service quality improvement measures based on the service quality survey results of various regional project companies in 2019. It showcased and promoted outstanding service improvement cases. Due to the Pandemic, centralised face-to-face training under the "Dandelion Scheme" was suspended during the year. The Group utilised "Towngas China Mobile Academy" to offer online service standard training whereby respective project companies would guide employees to engage in online learning.

# Simplifying Procedures and Improving Service Efficiency

## **Case in Point**

In order to further improve project efficiency, Weifang Hong Kong and China Gas has formed its own gas engineering team in March, named Shengke Pipeline Engineering Company ("Shengke"). Since its establishment, Shengke has adopted various innovative methods such as on-site confirmation of construction plans, change of material storage plans, self-inspection and gas supply commencement, which have resulted in significantly shortened installation cycles and provision of better services to the citizens of Weifang. In August 2020, gas supply officially commenced at Huibin Hotel in Weifang High-Tech Zone. This was the first customer of Weifang Hong Kong and China Gas to be supplied after the implementation of optimisation measures for the gas installation process of small to medium catering outlets.

Since August, Da Yi Hong Kong and China Gas has implemented "one-stop" gas supply commencement service in residential installation projects, where certified staff commenced the gas supply right after the pipeline installation is completed. Through a three-level random inspection management system, the company also effectively ensured the quality of the gas supply commencement process. In order to improve service efficiency and customer satisfaction, the company optimised the service process by taking into consideration the actual situation and compiling the "One-Stop Gas



Supply Commencement Management System for Da Yi Hong Kong and China Gas". The average waiting time for customers from application for installation to gas supply commencement was remarkably shortened from eight working days to four.

Another example is Maanshan Hong Kong and China Gas Co., Ltd. As a client needed to host a large scale conference in short notice, a dedicated special project service team was established, which visited the construction site at Masteel Smart Park numerous times to coordinate the natural gas inbound connection work. Throughout the process of gas pipeline construction, all relevant departments of the company strengthened their collaboration, simplified procedures, and strived to ensure smooth progress of the project.





# **Major Material Issues**

Improving Employment Management System

- Preventing Child Labour and Forced Labour
- •Ensuring the Health and Safety of Employees
- Providing Training and DevelopmentPromoting Diversity and Equal Opportunities

Human resources is the foundation of prosperity, development and vitality for a company. Since its establishment, Towngas China has always been people-oriented and valued harmonious labour relations. It has continued to maintain a proper learning and development platform and work environment for employees and encourage enthusiasm and creativity in order to realise the mutual growth of employees and the Group.

# **Performance Highlights**

- Upheld the principle of equal employment and built a safe and harmonious work environment
- Launched "Towngas China Mobile Academy" to provide a platform for employees to learn online
- Expanded training channels to facilitate long-term development of talent
- Created a series of online "cloud activities" to enrich employees' lives



# Improving the Employment Management System

Towngas China is committed to protecting the legitimate rights and interests of employees. In accordance with the provisions of the "Towngas China Employee Handbook", employees enjoy fair and equal treatment. Policies regarding recruitment, remuneration, benefits, promotion, transfer, training, dismissal etc., all comply with relevant national regulations and the requirements of The Stock Exchange of Hong Kong. The Group conducts a salary review at the end of each year, and determines the salary level for the coming year based on the work performance of employees, the operating efficiency of the Group, and the market situation to ensure fair and reasonable wages which are also competitive in the market. Employees of the Group enjoy national holidays in accordance with the law, and the number of annual leave days offered by the Group is above the legal standard.

The Group insisted on regular recruitment during the 2020 Pandemic, and carried out recruitment in an orderly manner. It also actively developed an array of online interview channels and organised remote interviews. Candidates' health status are filed in a timely manner upon hiring, effectively ensuring recruitment continuation and the safety of its employees.

As of the end of 2020, Towngas China had a total of 22,506 employees, all of whom were full-time, and the proportion of new hires was 3.61%. For the years between 2018 and 2020, staff turnover rate was 3.34%, 3.31% and 2.22% respectively.

Social Security	Pensions, medical, unemployment, maternity, work injury insurance and housing provident fund		
Commercial Insurance	Accidental death/disability, accidental medical treatment, hospitalisation allowance, critical illness, female diseases, maternity insurance		
Leave and Holidays	Statutory public holidays, paid annual leave, fully paid sick leave, work injury leave, medical leave, fully paid examination leave, special leave (marriage leave, maternity leave, paternity leave, compassionate leave)		
Other Benefits	Subsidies for telecommunication expenses, festive benefits, recreational activities and company training		

### **Staff Welfare Provisions**

# Scholarship Scheme for Employees' Children

## **Case in Point**

In 2020, Towngas China continued to carry out the "Towngas China Scholarship Scheme for Employees' Children" to encourage employees to care for their family and their children's education to advocate a positive and harmonious lifestyle and corporate culture while caring for staff well-being to enhance employees' sense of belonging. During the year, the Group received 18 qualified applications from 10 companies. After a comprehensive assessment, five applicants were awarded the year's scholarship sponsorship, while 13 applicants received encouragement awards.





#### Staff Ratio by Age Groups





# Staff Ratio by Region Group Head Office Northern China Region Jiangsu-Zhejiang Region Southern China Region Southern China Region

#### Staff Ratio by Rank

Senior Management Middle Management Junior Staff



#### Gender Breakdown of New Employees

19%

🔵 Male 🛛 🛑 Female

8%

4%



### Regional Breakdown of New Employees



## Age Breakdown of New Employees



### Gender Breakdown of Employee Turnover

🔵 Male 🛛 🛑 Female





#### Coverage of Labour Contracts Unit:%



### Ratio of Female Management Unit:%



#### Regional Breakdown of Employee Turnover



#### Coverage of Social Insurance Unit:%



Proportion of Employees Receiving Regular Performance and Career Development Review Unit:%





# Preventing Child Labour and Forced Labour

Towngas China strictly implements the requirements of the State Council's "The Provisions on the Prohibition of Using Child Labor" and the "Law on the Protection of Minors of the People's Republic of China", clearly stipulating that it is strictly forbidden to recruit people under the age of 16 in a bid to prevent forced labour. The Group pledges not to force employees to work overtime through administrative systems, threats, violence or illegal restrictions on personal freedom, as well as to respect and protect employees' rights in accordance with the laws.

According to the Group's regulations, applicants are to fill in the "Job Application Form" issued by the Group as required, including but not limited to the applicant's name, gender, hometown, date of birth and other information, and ensure that the relevant information provided is true. The human resources and administration departments conduct strict review and information verification on the certificates and related information provided by the candidates to prevent applicants who are under the legal age of employment from providing false information and fraudulent identity. The probation period can only be commenced after the relevant information is confirmed. The Group is determined to prevent child labour and forced labour. Such employment shall be immediately terminated upon discovery, in accordance with relevant laws and regulations. In 2020, no incident of child labour or forced labour took place in the Group.

# Ensuring the Health and Safety of Employees

Towngas China cares about the health and safety of its employees. In order to create a safe work environment, the Group has formulated the "Health, Safety and Environmental Protection (HSE) Policy", "Towngas China Group Employee Safety Handbook", and "Guidelines on Occupational Disease Hazard Detection, Evaluation and Monitoring". Employees working at construction sites and project sites are required to wear helmets and safety shoes. When carrying toxic, irritating or corrosive chemicals, and extremely cold or fragile objects, employees are required to wear protective gloves. They are also requested to implement the "Permit-to-Work System" when carrying out dangerous work at sites, such as the Company's factory areas, gate stations, high-pressure offtake stations and construction sites, as well as gas pipeline project sites that may affect gas supply or cause danger.

In 2020, the COVID-19 Pandemic impacted the entire country, posing challenges to the health and safety of the Group's employees. In order to effectively deal with the impact of the Pandemic, the Group, regional offices, and project companies established Pandemic prevention and control groups at all levels as well as a daily Pandemic information reporting system. Latest national developments, Pandemic related information and the Pandemic situation of project companies were reported to the Group's senior management on a daily basis and project companies adjusted the prevention and control measures in real time to ensure the occupational safety and health of employees. As the Pandemic has gradually come under control, the frequency of Pandemic information reporting has been adjusted to once a week since May and is still currently being applied.

During the Pandemic, the Group, regional offices and project companies strived to ensure daily sanitisation of office premises as well as sufficient anti-Pandemic supplies and their distribution to employees. The Group has successively issued a number of memorandums and compiled information such as "Handbook on Public Hygiene and Personal Protective Gear", "Recommendation for the Procurement of Emergency Pandemic Supplies", "Public Hygiene Promotion - Anti-COVID-19 Measures upon Returning to Work", "Guidelines for Work Travel Management during the Pandemic" etc. All departments, regions, and project companies are required to effective manage Pandemic prevention and control efforts during and after resumption of work, such as strengthening the control of office entrances and exits, setting up emergency management rooms etc., to create effective and safe conditions for employees to resume work and ensure safe production. During the summer of 2020, in order to prevent the spread of the virus arising from improper use of central air-conditioning and ventilation systems, the Group compiled "Safety Tips on the Use of Central Air-conditioning and Ventilation Systems in Offices" to ensure satisfactory indoor ventilation and provide employees with a healthy and safe office environment.

In 2020, Towngas China carried out in-depth safety campaigns through various channels, such as WeChat official accounts, e-learning platforms, workshops, HSE Toolbox, HSE Newsletter etc. There were no work-related fatalities within the Group, and no employees were penalised by the government for occupational safety and health violations from 1 January 2018 to the end of 2020.





Work Days Lost Due to Work Injuries Unit:Day(s)



Ratio of Work Injury Unit:%



Accident rate per 1,000 employees



The Group also organises various types of cultural activities to enrich employees' leisure time and cultivate their interests and hobbies to ensure their physical and mental health.

At the onset of the Pandemic, per government regulations, the public restricted their movement. In February, the Group launched the "Heartwarming WeChat Cooking Show" event to provide employees with a platform to present their superb cooking skills. The event received 26 submissions from 10 functional departments, business sectors and regions. Based on the four criteria of impact, creativity, shooting skills and representativeness, nine pieces of outstanding work were ultimately selected.

In addition, the Group established the "Towngas China Employee Care Activity Check-in Circle" using WeChat Mini Programmes to create a cross-regional communication and interactive platform, covering the Group's headquarters, regional and corporate employees. A series of courses on "Towngas China Employees' Mobile Photography Basic Online Tutorial" was launched in July, which employees could participate in online. After the courses, employees could publish their photographic works for the tutor to comment on and interact with course participants online. During the year, the number of published works totalled 287. Based on the quality and popularity of the work submitted, three Outstanding Awards and 10 Popularity Awards were presented.

Following the announcement of restoration of intra-provincial tourism issued by the provincial Administrations of Culture, Radio and Television, Tourism and Sports, the staff travel activities of the Group headquarters as well as regional offices were launched in October 2020. In order to enrich the diverse experience of employees, the travel planning units have introduced a new travel agency to provide services on top of the existing service platform. Employees were able to choose between team-building and leisure-style experiences according to their personal preferences. During the year, six relevant routes were successfully set up, with groups formed to participate.





# **Providing Training and Development**

Towngas China values the growth of its employees, formulating and publishing the "Towngas China Group Companies' Guidelines and Operation Manual on Implementation of Dual-Track Career Development" and "Towngas China Group Operation Guidelines on Corporate Performance Management". Through multi-channel training programmes, dual-track career development and competence quality models, the Group optimised performance management and special skills training to help employees obtain the work skills needed to cope with the development of the Group and the industry as well as to strengthen their sense of innovation and expand their career development.

To provide employees with more options in their career development, the Group has implemented a model that incorporates vertical promotion in ranks, lateral career track changes and movements between key positions. It also explores the combination of job requirements and skills, establishing job qualifications while gradually building an employee capability evaluation system (competency quality model). The Group regularly organises special project exchange meetings to provide human resources staff of project companies with a systematic project implementation sharing opportunity so as to help improve human resource management, promote the overall quality enhancement of professional talent, and facilitate the long-term development of corporate personnel.

The Group provides guidelines for project companies to gradually establish performance management specifications and standardised processes according to their own situation, combining scientific assessment with the Company's strategic development objectives. Managers are encouraged to pay greater attention to employee performance guidance and improvement, thus laying the foundation for the optimisation of position matching in order to align the development goals of key positions with corporate strategic targets to facilitate sustainable corporate development.

#### Per Capita Training Hours by Staff Gender Unit: Hours



#### Training Ratio by Staff Gender Unit:%



#### Per Capita Training Hours by Staff Type Unit: Hours



# **Online Learning and Training**

In 2020, Towngas China's online learning platform continued to provide its staff with online courses to meet their various learning needs. In order to further enhance the ability of employees to properly implement the Group's business standards, the Group launched the "Towngas China Mobile Academy" mobile learning platform in March 2020 to ensure normal training and learning during the Pandemic. With the support of multiple professional functional departments of the Group, the platform currently covers a total of 143 courses on standard guidelines and standard interpretation of topics such as engineering, customer service, safety risk and human resources. In 2020, about 11,000 people participated in the learning.



In view of the scattered outbreaks of the Pandemic in the mainland in the second half of the year, in order to ensure personal safety of frontline employees and enhance business performance, the Group made full use of "Towngas China Mobile Academy" to carry out an online learning event named "Braving the Pandemic to Forge New Opportunities" for all employees. The event lasted for one month. In the first-stage, "Braving the Pandemic", staff across all levels were encouraged to acquire Pandemic prevention knowledge and ensure work safety. The second-stage, "Forging New Opportunities", focused on business training courses in a bid to strive towards annual performance goals.





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#### Training Ratio by Staff Type Unit:%

## Multi-level Training Channels

The Group launched the "Corporate Executive Talent Training Programme" in 2020 for senior management in accordance with established corporate executive training channels. Each session lasts 18 months and a new session is launched every year, with 41 students attending the first session. Based on the corporate executive's role, positioning and responsibilities, the training sessions promote the improvement of participants' abilities and adaptation to position changes through rotation exercises, the Group's management thematic sharing, group management topic research, company visits and exchanges. Meanwhile, the general manager of each region led the course in person, and tailor-made training plans for staff through interpreting management evaluations to precisely achieve training goals. The plan played an important role in training a group of back-up general managers with integrated experiences.

For middle managers, the Group provides various forms of training to help improve their management capabilities. The "Towngas Management Programme" ("TMP") has been launched in "Towngas China Mobile Academy" with 10 general manager management experience sharing courses and corporate manager management practice courses to help participants learn from real-life examples of positive management behaviours and enhance management standards. A total of 7,908 course completions and 4,455 hours of study were recorded during the year.

For junior staff, the Group has carried out Superior Quality Service Programme ("SQS") training in various forms, allowing employees to deploy scientific processes and tools to solve problems and help project companies improve real-life work problems while systematically enhancing employees' problem solving abilities and creative thinking. During the year, the Group held a total of 71,690 hours of regional training as well as knowledge and experience sharing. At the same time, the Group uploaded SQS basic knowledge and best application case studies to "Towngas China Mobile Academy", thereby enhancing learning efficiency and convenience.

## Towngas China Won Multiple Accolades in the National QC Achievement Presentation Competition

## **Case in Point**

In the National Quality Control ("QC") Achievement Presentation Competition held in September 2020, 21 participating projects of 19 companies of the Group stood out from more than 2,000 QC projects of more than 500 companies and won seven Demonstration Level Awards, 12 Professional Level Awards and two Improvement Level Awards. This is the year that Towngas China has won the most awards since it began participating in the National QC Competition in 2008.

Name of Award	Name of Company	Name of Topic
Demonstration Level (Equivalent to First Grade Award)	Foran Energy Group	Development of a fast-switching uninterrupted emergency pressure regulating air supply device
	Foran Energy Group	Research and development of a new measuring device for underwater gas pipelines
	Shaoguan Hong Kong & China Gas	Development of pumping tools for buried pipelines
	Shandong Jihua Gas	Development of X-ray pipeline crawler elbow passage device
	Shandong Jihua Gas	Reduction of the number of complaints about low gas pressure during winter transportation
	Shandong Jihua Gas	Reduction of the daily evaporation rate of LNG storage tanks
	Mianyang Hong Kong & China Gas	Improvement of the success rate of official gas supply commencement for new users
Professional Level (Equivalent to Second Grade Award)	Hangzhou Hong Kong and China Gas	Reduction of indoor leakage rate for household users
	Hangzhou Hong Kong and China Gas	Improvement of the qualification rate of coated pipe thread
	Shandong Jihua Gas	Shortening the maintenance shutdown time of regional pressure regulating facilities
	Longkou Hongkong and China Gas	Research and development of elbow positioner
	Weifang Towngas China	Improvement of commercial and industrial customer service satisfaction level
	Mianyang Hong Kong & China Gas	Shortening of the pipe network positioning time for emergency repair work in special areas of Mianyang
	Mianyang Hong Kong & China Gas	Improvement of the on-time completion rate of commercial gas customers' application projects
	Mianzhu Hong Kong and China Gas	Development of grid line tool for PE pipe welding construction
	Mianzhu Hong Kong and China Gas	Development of multifunctional opening and closing device for buried valve
	Mianzhu Hong Kong and China Gas	Development of PE pipe correction device
	Jianyang Hong Kong & China Gas	Reduction of the effective call loss rate of the hotline
	Jiajiang Hong Kong & China Gas	Development of adjustable gas riser pipe support
Improvement Level (Equivalent to Third Grade Award)	Shandong Jihua Gas	Reduction of the abnormal cut-off rate of the voltage regulator for commercial and industrial users
	Lezhi Hong Kong and China Gas	Improvement of the efficiency of out-of-roundness detection device



## Professional Skills Training

In 2020, the Shandong Hong Kong and China Gas Training Institute ("the Institute") under the Group commenced a series of training courses across four main categories for frontline staff, internal trainers, professional technicians and profession enhancement. The training is conducted in small groups with 12 to 16 participants in each class, and carried out in a form of teaching that combines practical operation with theory explanations. During the Pandemic, in order to maintain social distancing and minimise staff movement, training was conducted through video conferencing. Face-to-face assessments were subsequently resumed after the Pandemic came under control. The Institute also tried out new training models, offering online channels such as TMS, Dingding Towngas China Academy, WeChat Group etc. for self-learning, followed by practical exercises with the guidance of the Company's internal trainers before online theory tests and face-to-face assessments.

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 offer the "Training on Demand for Frontline Staff" programme. The programme offered a total of 40 internships, out of which 25 were employed by the Group or its project companies at the end of their internships. The three institutes aforementioned held assessment for the relevant Towngas China skills accreditation in areas such as indoor safety inspections, gas pressure regulating, installations and gas leak detection inspections.

Dedicated to driving developments in the gas industry, the Institute is also unremitting in its efforts to nurture and provide professional talents for the industry. During the year, Shandong Province held new certification training courses for gas practitioners, with a total of five batches, 35 classes and 1,386 trainees, of which 1,300 passed the assessment and obtained certificates with a pass rate of 93.8%. During the Pandemic, when the government postponed the relevant training, a mini-programme platform was used to help staff review training and assessment content to ensure satisfactory results.

# Promoting Diversity and Equal Opportunities

Towngas China applies the principle of equal opportunity employment by formulating strict recruitment process guidelines and implementing recruitment policies such as eliminating gender discrimination or the elevation of requirements for applicants of a certain gender, thus ensuring that all applicants enjoy equal opportunities. Employees, regardless of gender, age, ethnicity and other personal characteristics protected by the law, are treated equally. The Group and its employees join hands to build a safe, harmonious and inclusive working environment based on mutual trust. In 2020, no incident of discrimination was recorded on the grounds of gender, ethnicity, age, health etc. in the recruitment process of the Group.

The Group respects employees' freedom of association and right to participate in collective negotiation, in accordance with national laws and regulations. It respects employees' right of

expressing opinions, and actively establishes platforms for employee communication. The Group has developed the "Employee Relations and Communication Management System", which is a mechanism for employee appeals and requests with clear and prompt responses. When employees become aware of any inequality at work or have any requests, they can refer to the established appeal procedure: Step one, employees should raise and discuss relevant requests with their direct supervisors; step two, where employees are dissatisfied with the handling methods suggested by their direct supervisors, they can appeal to a higher-level supervisor; step three, if the request remains unresolved, the employee can seek assistance from the head of the department; step four, the employee can file a request with the top management through the human resources department, which will then arrange staff to assist and mediate.





# **Major Material Issues**

- •Battling the Pandemic
- •Supporting the Community
- Subsidising Education
- •Targeted Poverty Alleviation

As a public utility, Towngas China is dedicated to providing customers with safe and reliable energy, as well as courteous, professional and efficient services. The Group is also committed to investing in various public welfare areas such as education, community and poverty alleviation, as well as leading its project companies to fulfil their social responsibilities in different aspects. Going forward, the Group will formulate relevant policy guidelines in order to better realise its corporate value in serving the society and bringing benefits to the people.

# **Performance Highlights**

- The number of Towngas China volunteers exceeded 6,700
- Hours of social service exceeded 570,000
- Served over **80,000** beneficiaries
- Donated more than RMB**5.7** million



# **Battling the Pandemic**

In 2020, the outbreak of COVID-19 had a serious impact on social development and people's lives. Facing the severe challenges, Towngas China positioned itself amidst the overall situation and focused on people's livelihood. Employees across the country upheld their responsibilities and responded quickly to ensure stable and safe gas supply so as to maintain the normal operation of the cities.

## Highly-secured Safety Network with Uninterrupted Services

Throughout the critical Pandemic prevention and control period, the project companies of the Group ensured uninterrupted safe gas supply while upholding the usual standard of thoughtful and

professional service. With perseverance and concrete action, they have demonstrated their commitment to the society and customers as well as contributed to the national Pandemic prevention battle.

## Benxi Hong Kong and China Gas Strictly Ensured Safety to Build a Strong Defense Line for People's Livelihood

In February, a gas supply failure occurred in a residential building in Benxi, affecting nearly 80 customer accounts in the building. Upon receiving the repair request, Benxi Hong Kong and China Gas Co., Ltd. took immediate action to start emergency procedures during the Pandemic period and sent professional staff onsite for repairs. After a morning of hard work, the emergency repairs for a total of eight in-house pipelines in four units of the building were all completed. Gas supply was resumed as soon as possible in accordance

with the procedures to ensure that the residents' day-to-day routines were not affected. Separately, in the period from late January to late February while the city's public transportation was out of service, the company carried out six emergency repairs to outdoor pipe network, 71 repairs for customer-reported gas leaks, 410 maintenance repairs and appliance after-sales service for 181 households, and thus ensured the residents' safe use of gas.

## Qiqihar Hong Kong and China Gas Optimised Storage Services to Satisfy Residents' Recharge Needs

## **Case in Point**

**Case in Point** 

In an attempt to ensure customers' quality of life during the extraordinary period, through multi-party communication, Qiqihar Hong Kong and China Gas Co., Ltd. collaborated with various property companies and communities to set up 20 gas meter recharging machines for IC cards at various service outlets which was promoted through radio and TV stations. Their availability brought added convenience to customers nearby. Since the onset of the Pandemic, each service outlet has processed a daily average of nearly 500 recharging and gas-related service transactions using IC cards, mitigating the impact of travel bans on residents' lives. To serve neighbourhoods where COVID-19 confirmed cases were identified, the company has overcome enormous difficulties and added professional staff and dedicated vehicles. Customers in these communities simply needed to call and make an

appointment. Two dedicated mobile loading machines and vehicles would then be driven over to provide recharging services. As of mid-March, the company has processed a total of 2,821 mobile recharging and gas-related service transactions at these communities, drawing wide praises from customers.

## Take Responsibility to Help Resume Work and Production

The Group's project companies have continued to strengthen coordination and proactively contacted commercial and industrial customers to ensure early coordination of gas sources, timely investigation of hidden dangers and preferential gas prices to provide stable energy supply for companies to resume work and production.

## Weihai Hong Kong and China Gas Strengthened Gas Supply and Utilisation to Ensure Safe Resumption of Work

#### **Case in Point**

As work gradually resumed, Weihai Hong Kong and China Gas Co., Ltd. launched various effective measures with regards to gas supply protection, safe operation and tariff reduction. It took the initiative to maintain close contact with customers to understand their work resumption arrangements, thereby devising supply protection and gas utilisation plans. It procured 1.08 million cubic metres of LNG in advance as an emergency backup gas reserve and negotiated with upstream partners to enable ad-hoc requests for incremental supply so as to ensure stable gas supply. At the same time, it strengthened the inspection of equipment, centralised maintenance of valves and pressure regulators at emergency gas source stations, and conducted a dragnet investigation to detect any hidden risks in the pipe network and auxiliary facilities. It also rectified issues found during the inspection in a timely manner, such as warning signs that have gone

missing, fallen or become damaged and illegible, to ensure the safe operation of the pipeline.





## Chizhou Hong Kong and China Gas Reduced Gas Fees, Remaining Dedicated to Benefitting the Public

# Case in Point

Throughout the challenging period, Chizhou Hong Kong and China Gas Co., Ltd. ("Chizhou Hong Kong and China Gas") actively responded to the government's call by implementing a series of measures to help companies resume work and production. Starting from February, it had reduced gas fees for small, medium and micro industrial companies by 10% within three months. A client in the aluminimum industry expressed his appreciation: "We need 90 cubic metres of natural gas to produce one tonne of aluminium. With a daily output of 80 tonnes, the gas fee is reduced by about RMB2,000, a significant amount for us." In addition, the company took the initiative to share the burden with companies in difficulty by continuing to provide gas for medium, small and micro companies who were in arrears with their bill payment, upon approval of supervisory departments. These companies were allowed to pay back gas fees within three months after the end of the Pandemic.

## Acting in Unity to Take Action for Love

Throughout the battle against the Pandemic, the Group actively implemented the government's prevention and control requirements and assumed the responsibility of homeland protection. Towngas China staff took turns to head to the frontline to support the community in accordance with Pandemic prevention and control guidelines as well as helped strengthen public hygiene and control measures. Many project companies have strived to make contributions in line with local anti-Pandemic needs.

## Pingchang Hong Kong and China Gas Donated Water Heaters to Hospitals

Upon learning that The People's Hospital of Pingchang was a designated hospital for COVID-19 patients, and that they urgently needed natural gas and domestic hot water equipment installed given that their existing conditions failed to meet the cleaning needs of medical staff, Pingchang Hong Kong and China Gas Co., Ltd. donated 13 water heaters to the hospital in January. It deployed design and construction professionals immediately and set up a dedicated construction team for continuous operation during the Chinese New Year.

**Case in Point** 

The pipeline construction and water heater installation were soon fully completed to ensure that doctors and patients were able to enjoy the warmth and comfort of hot water. This was highly appreciated by the entire medical staff of the hospital.



## Shandong Jihua Gas' s "Blue Hats" Brought Warmth to the Community

# Case in Point

In February, Shandong Jihua Gas established the "Blue Hats" volunteer service frontline team to support the Shuangshan Street community in Zhangqiu. The 36 volunteers worked for 61 days and nights with the community to strengthen the prevention and control of the Pandemic. They effectively reported information on registered personnel, inspected incoming and outgoing vehicles, helped with crowd control and sanitised public areas. For companies resuming work, they established Pandemic prevention working groups, formulated Pandemic prevention work plans and supervised companies in accordance with Pandemic prevention requirements on a daily basis. They also tallied masks and sterilisation items on a daily basis and generated same-day reports for coordination. In April, the Longquan International Party and Mass Service Centre sent a banner to the "Blue Hats" of Shandong Jihua to express its gratitude to the company.





# Supporting the Community

Over the years, Towngas China has adhered to the philosophy of "benefitting society, contributing to the community", leveraging its own professional knowledge and corporate resource platforms to contribute to community construction according to the respective local situation. The Group seeks to bring "convenience, benefits and welfare" to the people, encouraging project companies and employees to participate in various forms of community welfare activities to enhance residents' well-being and facilitate community development.

## Bringing "Bauhinia Movement" into the Community to Warm People's Heartsto Warm People's Hearts

#### **Case in Point**

In 2020, the Pandemic raged and brought detrimental impact on all walks of life. The lives of the underprivileged were even more adversely affected. Thus, under the premise of ensuring staff safety, Towngas China launched the "Bauhinia Movement" community assistance charity activities across the country to help the poor. The campaign offered complimentary stoves and range hood sets, onsite safety rectifications etc. to help underprivileged families meet their daily needs. During the year, "Bauhinia Movement" was launched in 26 cities including Ma'anshan, Qingdao, Longkou, Yuechi, Weifang, Tieling, Hangzhou, Pengxi, Jianyang, Qiqihar, Huzhou, Jinan, Qingyuan, bringing warmth to families in need. More than 500 gas appliances and donation in kind at approximately RMB430,000 were offered.





## Towngas China Donated Rice to Families with Disabled Members on Subsistence Allowances

## **Case in Point**

In order to promote the virtue of "kindness for the people and charity for the world", Towngas China and the Shenzhen Community Chest Walk for Millions visited the Luohu District Service Centre for the Disabled in December to deliver one tonne of rice from the Bauhinia Farm to families with disabled members on subsistence allowance. Taking this opportunity, the Group hoped to bring healthy and safe agricultural products to more people in need while contributing to barrier-free living for the disabled.



In 2020, the Group insisted on holding a series of public welfare activities during traditional festivals such as the Dragon Boat Festival, Mid-Autumn Festival and Chongyang Festival, donating materials to those in need, including the elderly, people suffering from chronic illnesses, the disabled as well as sanitation workers, to promote harmonious development of the society. During the year, around 50 project companies actively responded to the "Rice Dumplings for the Community" charity activity, wrapping and donating more than 20,000 rice dumplings as well as in-kind donations valued at over RMB175,000 to benefit nearly 5,100 people.



# "Rice Dumplings for the Community"

## **Case in Point**

In June, volunteers from Qingyuan Hong Kong and China Gas Co., Ltd. visited 63 underprivileged households across 16 villages in the Henghe community, including Laofu Village, Zhongxin Village, and Ekeng Village, to present holiday greetings together with rice dumplings, rice, noodles, fans and monetary aid. The volunteers enquired about the residents' living and health conditions during the home visits. They also helped clean the homes of the elderly with disabilities.

Volunteers from Weifang Hong Kong and China Gas went to Changle County Elderly Centre to send gifts and blessings for the Dragon Boat Festival to the elderly. In order to ensure freshness of the donated rice dumplings, the company organised a competition for making rice dumplings in the morning of the event. Volunteers made every effort and various types of rice dumplings, in shapes such as triangles, horns and strips, were quickly prepared. Staff also visited the Wolong community to carry out voluntary activities, sending rice dumplings and in-kind donations to those in need as well as underprivileged households, welfare beneficiaries and elderly singletons, on top of conducting safety inspections on gas facilities in the elderly's homes.

Hangzhou Hong Kong and China Gas Co., Ltd. spent the Dragon Boat Festival with residents of Tangqi Ancient Town, where 14 community volunteers and Towngas China volunteers were divided into two teams to prepare rice dumplings in cooperation: folding leaves, filling ingredients, compressing, wrapping and tying





away neatly and swiftly. Nearly 300 rice dumplings were prepared and distributed to residents. The company also donated Bauhinia gas appliances and in-kind donations to six families in need in the Guangji Road community.

Volunteers from Chizhou Hong Kong and China Gas and Chengbei Community Neighbourhood Committee celebrated the Dragon Boat Festival together. The event was kicked off with the "Gas Safety Open Class", during which volunteers used real-life cases to explain to residents the general knowledge of gas use in a simple way. In the rice dumpling session, volunteers were divided into four teams for a competition, wrapping nearly 600 rice dumplings in just 30 minutes.

## Maanshan Hong Kong and China Gas Sent Warmth in Mid-Autumn Festival

## **Case in Point**

Respecting, caring for, helping and supporting the elderly are traditional Chinese virtues. On the eve of Mid-Autumn Festival in September, Maanshan Hong Kong and China Gas launched the annual "Mooncakes for the Elderly, Service for the Community" activities in the communities of Zhongcun, Gelin, Zhonggang and Jinfu, sending gifts and blessings to the elderly and benefitting 150 families in need. The main venue of the event was located in Zhongcun community. Management and staff of the company visited the community's underprivileged families as well as the disabled and elderly, including one-on-one service for a 94-year-old resident in Qianzhong Village.



# "Towngas China Caring Seat" Debuted in Xingyi

#### **Case in Point**

A representative from Xingyi City Activity Centre for the Middle-aged and the Aged sent a pennant to Xingyi Hong Kong & China Gas Co., Ltd. in October to express gratitude to the company for donating a batch of caring seats to urban parks, providing recreational facilities for the elderly and staff. In order to improve the image of the city and provide a comfortable commuting environment for the general public, and with the strong support and coordination of Xingyi City Transportation Bureau and other departments, the company has donated earlier a number of caring seats for 125 bus stations with a high concentration of passengers at Xingyi City's Shenqi West Road Intersection, Jufeng Intersection, Pingdong Square, Jushan Square,



National Customs Street, Beijing Road Intersection, Dongzhengmen, Fumin Road, Xihu Road, along the Wanfenglin Scenic Area. Not only does this meet the needs of passengers, but also makes it more comfortable for the elderly to queue for buses.



# **Subsidising Education**

In order to improve the conditions of rural schools and to encourage students to excel, Towngas China established the "Gentle Breeze Movement" charity brand in 2013 to coordinate the Group's various charitable and educational activities for standardisation and economics of scale. Through investing in school improvement construction, donating learning and sports supplies etc., the Group effectively enhanced the school environment and facilitated the development of rural education. So far, the Group has invested more than RMB3.15 million for this charity project, covering more than 30 schools in regions such as Sichuan, Chongqing, Jiangxi, Anhui, Shandong, Guizhou, Liaoning, Guangdong, Inner Mongolia, Fujian and Heilongjiang, providing educational development support.

In November 2020, the "16th China Committee of Corporate Citizen's Exchange Summary Conference" co-sponsored by the Corporate Citizenship Committee of China Association of Social Workers and Tencent Charity Foundation was held in Beijing. At the meeting, Towngas China was awarded the highest honours, "2020 China Five-star Corporate Citizen" and "2020 Corporate Citizen as Pandemic Prevention and Anti-pandemic Pioneer". "Gentle Breeze Movement" was awarded the "2020 Chinese Corporate Citizen's Outstanding Charity Project". The Group will in future further consolidate its public welfare resources and contribute to educational development.

# "Gentle Breeze Movement" Warmed Children' s Hearts

#### **Case in Point**

The "Gentle Breeze Movement" visited Xinmin Primary School in Qijiang District, Chongqing, in November. The school is located in a remote area with relatively spartan facilities. The Group not only provided awards to teachers and students who won prizes in the "Little Yue Fei" essay competition, but also sent schoolbags, stationery and sports supplies to the children. A brand-new copier-printer was also donated to the teachers. In addition, the Group also donated two tonnes of northeastern rice from Bauhinia Farm to 22 village schools in Qijiang District, expressing care for educational development in the mainland.

The "Gentle Breeze Movement" entered Dongmang Primary School in Liannan County, Qingyuan City, Guangdong Province, in December. The school was founded in 1953 and moved to its current location in 1982. With a history of more than 60 years, the village primary school educates students of the Yao ethnic group and currently has around 200 teachers and students. Knowing that Dongmang Primary School's

conditions needed to be improved and certain teaching facilities needed to be updated, the Group donated over RMB200,000 worth of goods for the learning and daily necessities of teachers and students, including teaching equipment cabinets, campus broadcasting systems, computers, basketball hoops, table tennis tables, desks and chairs, uniforms and sports shoes etc. The volunteers also established a "Towngas China Charity Library" and renovated the school gates, flag-raising stands and outdoor sinks to create an improved education environment for the rural school. The principal of Dongmang Primary School said, "The existing books in the school library were outdated and can no longer meet the students' extracurricular reading needs. Towngas China helped us renovate the library and enriched the collection with over 3,000 books spanning the categories of Chinese and foreign classics, natural sciences, history, geography etc. Students of all grades can now have access to the appropriate book resources. Thank you very much!"





# **Targeted Poverty Alleviation**

Since the 18th National Congress of the Communist Party of China, the strategic idea of "targeted poverty alleviation" has been put forward for the interests of the people. The target is to lifting the rural poor out of poverty, relieving all poor counties from poverty and resolving overall regional poverty by 2020. Towngas China has actively responded to national policies, providing support in poverty alleviation and infrastructure construction to help win the battle against poverty.

Case in Point

## Longkou Hongkong and China Gas Lit Up the Beautiful Countryside and Brightened the Living Environment

In June, Longkou Hongkong and China Gas Co., Ltd. ("Longkou Hong Kong and China Gas"), together with representatives from the Longkou Federation of Overseas Chinese and the Huangshanguan government, attended the groundbreaking ceremony of the "Lighting up the Beautiful Countryside and Brightening the Living Environment" street lighting installation project. Qianxu Village of Huangshanguan is a village designated for assistance by the Longkou Overseas Chinese Federation and Longkou Hongkong and China Gas. The company realised that the street lamps in the village were aging and damaged but the village did not have money to reinstall them, so it invested in the installation of 11 LED energy-saving lamps on the main road of the village to improve the living environment and light the way for the villagers to return home.


#### Lezhi Hong Kong and China Gas Used "Buy instead of Assist" Means to Support Families in Need

#### **Case in Point**

After learning about the slow sales of rice planted by underprivileged households in Xinqiao Village, Tonglu town, Lezhi county, volunteers from Lezhi Hong Kong and China Gas Co., Ltd. ("Lezhi Hong Kong and China Gas") came to the village in September to carry out the



"Buy instead of Assist" campaign, purchasing nearly 3,000 catties of "Bamboo Fragrant Rice" as part of the Company's action to help lift beneficiaries out of poverty. The event not only encouraged the underprivileged to create wealth with their own hands, but also provided a platform for company employees to purchase green and eco-friendly agricultural products. Seeing that all the rice from underprivileged households was sold, the first secretary of Xinqiao Village said with satisfaction, "Lezhi Hong Kong and China Gas has helped poor families solve their practical difficulties and made poverty alleviation more effective and caring."

#### Jianyang Hong Kong and China Gas Sent Fertilisers to Promote Production and Help Alleviate Poverty

#### **Case in Point**

In order to implement the relevant requirements of the targeted poverty alleviation policy, volunteers from Jianyang Hong Kong and China Gas Co., Ltd visited Xiangle Village, Hefeng town, Jianyang city in November to deliver fertiliser. The team delivered 1,600 catties of high-efficiency chemical fertilisers to 40 impoverished households, helping to enhance their agricultural industrialisation efforts and effectively increasing their production and income. The volunteers also visited and communicated with poor households to understand the difficulties they encountered in

production and life in order to improve the effectiveness of poverty alleviation.





### Outlook

The current dynamic state of international affairs and increasingly complex environment has presented challenges as well as opportunities. The blueprint of the 14th Five-Year Plan sees China transforming from high-speed to high-quality growth, while remaining committed to increasing the momentum behind its green circular economy powered by innovation. In line with these key trends, Towngas China will continue to explore its business market by upholding innovation and environmental principles. By increasing the efficiency of its corporate operation management through the application of smart technology, the Company will provide quality safety management as well as products and services to both the industry and society, thereby creating value for its customers.

Effective operation ensures high-quality development. As a key entity of the capital market, the quality of listed companies' governance and operation determines whether the market is able to achieve sustainable growth. Towngas China has established key performance indicators on aspects such as corporate efficiency, market exploration, operating processes and management models. The Group caters to its expansion, fulfilment of contracts and operational needs by maintaining a healthy capital flow and reserving plentiful financial resources while placing an emphasis on enhancing internal processes for better management effectiveness. Although the Group's gas sales in the first half of 2020 fell slightly compared to the same period of 2019 as a result of COVID-19, it was able to deliver subsequent stellar performance through quality and effective corporate governance and business operation strategy with the significant progress of the mainland's Pandemic control efforts. Not only did the total gas sales of 2020 surpass that of 2019, but the Group also signed an equity cooperation agreement with Shanghai Gas Company Limited, further enhancing the Group's supply chain and energy distribution layout. The Group was also recognised as a "Best Investment Value Award for Listed Companies" for the excellent performance it demonstrated in enjoying the fruits of its development with stakeholders and creating shared value.

Green development underlies high-quality development. As an energy enterprise, Towngas China remains committed to its efforts in improving the environment and providing professional, efficient, safe and clean energy to its customers. Throughout the years, the Group has taken the initiative to invest in the establishment of new pipe networks and transformation of old pipe networks, while speeding up the construction of gas storage and peak-shaving facilities as well as network interconnection. It has injected momentum in socioeconomic development through "coal-to-gas" initiatives that make use of the clean energy of natural gas. Going forward, the Group will continue its proactive development of its green energy integrated services business. It will establish energy framework designs and operational management platforms though synergising "source-network-load-storage" strategies and developing a smart Energy Internet ecology, while promoting energy use efficiency among customers through technologies such as multi-energy complimentary systems and cascaded utilisation, thereby contributing towards the transformation of the nation's energy structure and doing its part in achieving the goals of "carbon emission peaking" and "carbon neutrality".

Innovative development enables high-quality development. Towngas China has tightly integrated the culture of innovation with its business development. In terms of safety management, the Group has thoroughly applied technologies such as informatisation and big data to further enhance project and management efficiency. It has also driven the promotion of new technology such as vehicle-canine collaboration on gas leak detection and automated evaluation of welding guality through artificial intelligence, thereby reinforcing safety defences. In terms of service diversity, the Group has continued to build on its Virtual Customer Centre and expand the scope of its household, health foods and digital lifestyle services to offer greater flexibility for customers to select superior, convenient value-adding services and enjoy a comfortable, quality lifestyle.

Corporate social responsibility substantiates high-quality development. In addition to committing to green, innovative development, diversifying its business, improving internal operation management and realising cost-reduction and efficiency enhancement, Towngas China has also helped those in need through public welfare initiatives such as "Gentle Breeze Movement" and "Rice Dumplings for the Community" in order to create a warm, harmonious and inclusive society. During the Pandemic, the Group and its project companies capitalised on their geographical situation to contribute to anti-Pandemic efforts. Frontline workers delivered on their responsibility to ensure gas supply and maintain the normal operation of the city, while volunteers demonstrated their social responsibility and shared their love through a vast array of community service work.

Going forward, Towngas China will continue to steer its efforts according to stakeholder interest and further the construction of smart energy and information platforms. Through capitalising on green development opportunities and consistently enhancing corporate governance, it shall contribute towards the healthy long-term development of the capital market and create value for customers and the rest of society.

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



<sup>18</sup> March 2021



# 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 Level of							
Subject Area	Aspect		the Report or Explanation	Disclosure			
Subject Area	Aspect	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 NOx, SOx, 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.	P33-37			
A Environmental		Key Performance Indicator	A1.1 The types of emissions and respective emissions data.	P47-48			
			A1.2 Direct (Scope 1) and energy indirect (Scope 2) greenhouse gas emissions (in tonnes) and, where appropriate, intensity (e.g. per unit of production volume, per facility).	P47-48	•		
			A1.3 Total hazardous waste produced (in tonnes) and, where appropriate, intensity (e.g. per unit of production volume, per facility).	P47-48			
			A1.4 Total non-hazardous waste produced (in tonnes) and, where appropriate, intensity (e.g. per unit of production volume, per facility).	P47-48			
			A1.5 Description of emissions target(s) set and steps taken to achieve them.	P33-46			
			A1.6 Description of how hazardous and non-hazardous wastes are handled, and a description of reduction target(s) set and steps taken to achieve them.	P33-35			
	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.	P33-35			

Contents of Indicators				Location in	Level of
Subject Area Aspect		Disclosure Indicator		the Report or Explanation	Disclosure
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).	P48	
			A2.2 Water consumption in total and intensity (e.g. per unit of production volume, per facility).	P48	
			A2.3 Description of energy use efficiency target(s) set and steps taken to achieve them.	P33-46	
			A2.4 Description of whether there is any issue in sourcing water that is fit for purpose, water efficiency target(s) set and steps taken to achieve them.	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.	P41	
	A3 Disclo The Environment and Natural Resources Perform	General Disclosure	Policies on minimising the issuer's significant impact on the environment and natural resources.	P31-46	
		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.	P31-46	
	A4 Climate Change	General Disclosure	Policies on identification and mitigation of significant climate-related issues which have impacted, and those which may impact, the issuer.	P15-16, P23-25	•
		Key Performance Indicator	A4.1 Description of the significant climate-related issues which have impacted, and those which may impact, the issuer, and the actions taken to manage them.	P15-16, P23-25	



		Conter	nts of Indicators	Location in	Level of
Subject Area	Aspect	Disclosure Indicator		the Report or Explanation	Disclosure
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.	P75-90	
		Key Performance Indicator	B1.1 Total workforce by gender, employment type (for example, full- or parttime), age group and geographical region.	P78-79	
			B1.2 Employee turnover rate by gender, age group and geographical region.	P79-80	
	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.	P81-84	•
		Key Performance Indicator	B2.1 Number and rate of work-related fatalities occurred in each of the past three years including the reporting year.	P82-83	
			<ul><li>B2.2 Lost days due to work injury.</li><li>B2.3 Description of occupational health and safety measures adopted, how they are implemented and monitored.</li></ul>	P83 P81-82	•
	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.	P85-89	
			B3.1 The percentage of employees trained by gender and employee category (e.g. senior management, middle management).	P85-86	
			B3.2 The average training hours completed per employee by gender and employee category.	P85-86	

	Location in	Level of			
Subject Area	Aspect		Disclosure Indicator	the Report or Explanation	Disclosure
B Social Employment and Labour Practices	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.	P81	
		Key Performance Indicator	B4.1 Description of measures to review employment practices to avoid child and forced labour.	P81	
			B4.2 Description of steps taken to eliminate such practices when discovered.	P81	
		General Disclosure	Policies on managing environmental and social risks of the supply chain.	P27-30	
		Key Performance Indicator	B5.1 Number of suppliers by geographical region.	P27-30	
B Social Operation Practices	B5 Supply Chain Management		B5.2 Description of practices relating to engaging suppliers, number of suppliers where the practices are being implemented, how they are implemented and monitored.	P27-30	
			B5.3 Description of practices used to identify environmental and social risks along the supply chain, and how they are implemented and monitored.	P27-30	
			B5.4 Description of practices used to promote environmentally preferable products and services when selecting suppliers, and how they are implemented and monitored.	P27-30	-
	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.	P30, P63-64	
		Product	B6.1 Percentage of total products sold or shipped subject to recalls for safety and health reasons.	P64	
			B6.2 Number of products and service related complaints received and how they are dealt with.	P63-64	
			B6.3 Description of practices relating to observing and protecting intellectual property rights.	P30	
			B6.4 Description of quality assurance process and recall procedures.	P63-64	



Contents of Indicators				Location in	Level of
Subject Area	Aspect		Disclosure Indicator	the Report or Explanation	Disclosure
B Social Operation Practices	B6 Product Responsibility	Key Performance Indicator	B6.5 Description of consumer data protection and privacy policies, how they are implemented and monitored.	P63-64	
	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.	P23-27	
		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.	P27	
			B7.2 Description of preventive measures and whistle-blowing procedures, how they are implemented and monitored.	P23-27	
			B7.3 Description of anti-corruption training provided to directors and staff.	P27	
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.	P93-104	
		Investment Key Performance	B8.1 Focus areas of contribution (e.g. education, environmental concerns, labour needs, health, culture, sport).	P93-104	
		Indicator	B8.2 Resources contributed (e.g. money or time) to the focus area.	P92	



### VERIFICATION STATEMENT

#### Scope of Verification

Hong Kong Quality Assurance Agency ("HKQAA") conducted an independent verification for the Environmental, Social and Governance Report 2020 ("the Report") of Towngas China Company Limited ("Towngas China"). The scope of HKQAA's verification covered the performance data and information of Towngas China in relation to environmental, social and governance aspects for the period from 1st January 2020 to 31st December 2020. The Report outlines the commitments and efforts of Towngas China towards sustainability.

The Report has been 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"), the Guidelines on Corporate Social Responsibility Reporting for Chinese Enterprises 4.0 ("CASS-CSR4.0") and ISO 26000 Guidance on Social Responsibility Guidance ("ISO 26000").

#### 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.

Our verification procedures covered:

• review of the report compilation, stakeholder engagement and materiality assessment processes;

- examination of the raw data and supporting evidence of the selected samples; and
- evaluation of the mechanism for collecting, collating and reporting of performance data.

#### 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 referencing the GRI Standards: Core option, CASS-CSR4.0 and ISO 26000 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.

Signed on behalf of Hong Kong Quality Assurance Agency

Connie Sham Head of Audit March 2021



## Feedback

#### Dear readers,

Greetings! Thank you for your interest in the Towngas China Company Limited Environmental, Social and Governance Report 2020. 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 2021

1. Your overall comments on this Report:

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\bigcirc Excellent \bigcirc Good \bigcirc Fair \bigcirc No Opinion
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2. Do you think this Report objectively reflects the actual corporate social responsibility performance of

the Company?

 $\bigcirc$  Yes  $\bigcirc$  Fair  $\bigcirc$  No  $\bigcirc$  No Opinion

3. What do you think about the clarity, accuracy and completeness of the disclosed information, data and

indicators in this Report?

 $\bigcirc$  Very high  $\bigcirc$  High  $\bigcirc$  Fair  $\bigcirc$ Low  $\bigcirc$ Very low  $\bigcirc$  No Opinion

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

 $\bigcirc$  Excellent  $\bigcirc$  Good  $\bigcirc$  Fair  $\bigcirc$  No Opinion

5. Which part of this Report interests you most?

○ Governance ○ Management ○ Environment ○ Safety ○ Services ○ Staff ○ Charity ○ No Opinion

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

○ Governance ○ Management ○ Environment ○ Safety ○ Services ○ Staff ○ Charity ○ No Opinion

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:





Scan the QR code for the mobile version

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