



港華智慧能源有限公司 Towngas Smart Energy Company Limited

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



 ENVIRONMENTAL,
SOCIAL AND GOVERNANCE
REPORT
2023

TOWNGAS SMART ENERGY COMPANY LIMITED

Environmental, Social and Governance Report 2023

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01 About This Report

Towngas Smart Energy Company Limited (“the Group”, “Towngas Smart Energy” or “We”) has been committed to becoming a leading clean and smart energy supplier, with a view to creating a sustainable world driven by green energy. We actively incorporate the environmental, social and governance (“ESG”) philosophy into the Group’s strategic planning and business operations. This Environmental, Social and Governance Report (this “Report”, previously known as the “Sustainability Report” or “Corporate Social Responsibility Report”) is the 11th report issued by the Group disclosing its sustainability performance. It focuses on the Group’s strategic policies, management measures and action performance in ESG to address stakeholders’ ongoing interests in our material ESG issues.

I. Important Notes

Time Scope

The reporting period of this Report is in line with that of the Annual Report 2023 of Towngas Smart Energy Company Limited, covering the period from 1 January 2023 to 31 December 2023 (“the year”) and any prior period where applicable for the purposes of the continuity and comparability of some data.

Reporting Scope

This Report covers data from the headquarters of Towngas Smart Energy Company Limited and its project companies on the Chinese mainland, reporting the ESG performance of the utility business and renewable energy business. The reporting scope is the same as that of our Annual Report.

Editorial Guidelines

This Report is prepared in accordance with Appendix C2: Environmental, Social and Governance Reporting Guide under Rules Governing the Listing of Securities on The Stock Exchange of Hong Kong Limited (“ESG Reporting Guide”), and the Global Reporting Initiative (“GRI”) Sustainability Reporting Standards, with reference to the following reporting standards:

- International Financial Reporting Standards (“IFRS”) – Sustainability Disclosure Standards issued by the International Sustainability Standards Board (“ISSB”)
- Sustainability Accounting Standards issued by the Sustainability Accounting Standard Board (“SASB”)
- Recommendations on Climate-related Financial Disclosure Information issued by the Task Force on Climate-related Financial Disclosures (“TCFD”)
- Recommendations on Nature-related Financial Disclosure Information issued by the Taskforce on Nature-related Financial Disclosures (“TNFD”)
- GRI 11: Oil and Gas Sector 2021
- Guidelines on Corporate Social Responsibility Reporting for Chinese Enterprises 4.0 (“CASS-CSR4.0”) of the Chinese Academy of Social Sciences
- ISO 26000 Guidance on Social Responsibility of the International Organisation for Standardisation

Reporting Principles

We complied with the reporting principles of materiality, quantitative, consistency and balance in the ESG Reporting Guide as well as the requirements in the GRI Sustainability Reporting Standards regarding accuracy, clarity, comparability, completeness, timeliness, verifiability and sustainability context. A description of the application of each of these reporting principles is provided in the table below:

Reporting Principle	Response of the Group
Materiality	Based on our communication with stakeholders while taking into account the Group’s strategic development and business operations, we identify and assess material issues related to the operation of the Group and form the foundation upon which this Report is compiled.
Quantitative	We disclose quantitative KPIs in this Report and expound on the quantitative data in words. We also retain performance data and explanations on data calculation from the previous year in this Report to assist readers in evaluating and verifying the effectiveness of ESG policies and management systems.
Consistency	Unless otherwise indicated, this Report adopts the same statistical approaches and calculation methods as the previous years. We also provide explanations for any changes in statistical methods, facilitating an annual comparison of the Group’s ESG performance for our readers.
Balance	This Report is based on objective data and facts, and impartially and comprehensively discloses the Group’s ESG performance. This approach is to avoid any presentation or reporting formats that might influence the readers’ decisions or judgments.
Accuracy	All content in this Report originates from the Group’s official documents, internal statistical materials and relevant public information. All quantitative data have been verified, and the margin of error will not unduly affect the conclusions or assessments of the users.
Clarity	This Report is presented in a format that combines text and graphics, with information presented in a manner that is easy to understand for readers.
Comparability	The selection of information, compilation and reporting style of this Report remain consistent with the previous years, providing annual comparability.
Completeness	The information disclosed in this Report is comprehensive and complete, with all necessary information disclosed as much as possible.
Timeliness	The reporting period for this Report is from 1 January 2023 to 31 December 2023, with any information beyond this timeframe specifically noted.
Verifiability	This Report has been verified by an independent verification agency, with the verification statement available in Page 116.
Sustainability Context	This Report adheres to the disclosure of relevant information within a broad context of sustainability.

Information Clarification

All monetary amounts mentioned in this Report are denominated in Renminbi (“RMB”) unless otherwise specified. This Report is published in Chinese and English. In case of any inconsistency between the Chinese and English versions, the Chinese version shall prevail.

Access to Report

This Report is available in three formats: print, electronic and mobile. To request a printed copy, please call (852) 2963 2590; to request an electronic copy, please visit our official website at <https://www.towngassmartenergy.com/en>; to access the mobile version, please scan the QR code below.



If you have any comments or recommendations for the content or reporting format of this Report, please contact us through:
Address: 23rd Floor, 363 Java Road, North Point, Hong Kong
Telephone: (852) 2963 2590
Facsimile: (852) 2516 7368

02 Chairman's Statement



The year 2023 witnessed significant changes in the energy market. The Russian-Ukrainian and Israeli-Palestinian conflicts have gradually reshaped the geopolitical landscape, causing an unprecedented impact on the energy production and consumption patterns established for decades. In addition, the increasing frequency of extreme weather has exacerbated the crisis of low-carbon transition. In response to the pressing reality of global warming, 198 countries unanimously pledged at the 28th meeting of the Conference of the Parties (COP 28) to the United Nations Framework Convention on Climate Change (UNFCCC) to triple global renewable energy capacity by 2030. Towngas Smart Energy is ready to embrace these challenges and turn its commitments into actions. While steadily developing our city-gas business, we are vigorously expanding our renewable energy business and promoting energy transition, identifying new opportunities amid the changing landscape. Furthermore, the Group proactively improves its performance in other ESG areas and consistently contributes to sustainable development.

Safety management is the cornerstone of corporate operations. The dual prevention mechanism of safety risk assessment and the investigation and management of potential hazards help us establish a comprehensive safety management system. This system includes procedures for classifying and addressing safety incidents to enforce safety production responsibilities; strengthening safety education and training to enhance employees' awareness of safety production; and renovating old city-gas pipelines systematically to ensure the health and safety of our customers and communities.

Low-carbon and environmental protection are the guiding principles for our business advancement. We have set clear environmental targets, implemented a robust management system, and established a hierarchical management structure to enhance the efficiency of resource and energy utilisation. In addition, we actively responded to the national "dual carbon" strategy by conducting climate scenario analysis and formulating response strategies accordingly. We also set short-, medium- and long-term carbon reduction targets to move forward in our carbon neutrality roadmap. Moreover, we rigorously manage the discharge of wastewater, air pollutants and waste in accordance with national ecological and environmental protection requirements.

Talent cultivation is the premise for our business development. We strive to protect the legal rights and interests of our employees by establishing a diverse working environment, creating independent internal complaint channels, and adhering to the principles of equal employment. In addition, we conduct tailored talent development programmes for employees at different levels and positions, expanding their multi-dimensional career growth. We also continuously optimise our performance and compensation management system, embracing the concept of equal pay for equal work and sharing the fruits of the Group's development with our employees.

Quality management is at the core of our corporate growth. While improving our quality control system, we also uphold our "customer-oriented" and "people-first" service principles, making every effort to safeguard information security and customer privacy. In addition, we continuously refine our supplier management system, requiring all suppliers to comply with the Group's ESG requirements. We also strengthen training and communication with suppliers in order to practise sustainable procurement and contribute to green transformation.

Social welfare is a responsibility that enterprises should shoulder. Guided by the philosophy of "benefiting society, contributing to the community", the Group supports environmental protection through initiatives such as tree planting and biodiversity conservation. We also donate educational materials, books, and teaching equipment to primary schools, improving the teaching environment and enhancing the quality of education for teachers and students. Furthermore, we actively engage with the community during major festivities to donate essential supplies and offer support to retired veterans, spreading the warmth of Towngas Smart Energy.

Thanks to the unwavering dedications of our employees, the Group's ESG performance has achieved gratifying results during the year. Together with our parent company, The Hong Kong and China Gas Company Limited, we have been rated by S&P Global as one of the Top 1% of Chinese enterprises within gas utilities. Towngas Smart Energy even ranked first in this category and was named "Industry Mover". Besides, the Group was selected as a constituent stock of the FTSE4Good Index Series for the first time. Our rating in the Hang Seng Corporate Sustainability Index was also upgraded. These recognitions from various external organisations underscore our commitment to sustainability development. In addition, the Group became the first Hong Kong enterprise to issue sustainability-linked Panda Bond on the Chinese mainland, accelerating the implementation of our low-carbon and environmental-friendly projects.

The growth of Towngas Smart Energy is indebted to the care and support of all stakeholders. Remembering its roots with a grateful heart, the Group will continue to prioritise the interests of its stakeholders and strive to maximise its overall corporate value. Looking ahead, we will uphold our vision of "To be a leading clean and smart energy supplier, with a view to creating a sustainable world driven by green energy", seizing the development opportunities presented by the "14th Five-Year Plan" of our country and focusing on quality sustainable growth. Concurrently, we will enhance the quality of our operations, strengthen our research and development capabilities, support energy structure reform, and contribute to the national "dual carbon" strategy.

Dr. Lee Ka-kit
Chairman
Towngas Smart Energy Company Limited
Hong Kong, 19 March 2024

03 CEO's Statement

As time flies, we have navigated through the extraordinary year of 2023 with steadfast dedication. During the year, the post-pandemic era posed challenges to the world economy's recovery, while geopolitical conflicts escalated and energy prices fluctuated at high levels. Consequently, the journey towards carbon reduction and energy transition has been fraught with obstacles, and industry development has struggled to overcome numerous barriers. Amidst the complex external environment, we consistently integrated ESG principles into the strategic planning of our enterprises. By significantly and comprehensively strengthening our ESG governance capabilities, we achieved continuous progress in corporate governance, energy security, green transformation, and social responsibility. We fostered new opportunities in times of crisis and set a new course in a changing landscape.

The Group is committed to its development strategies of "Integration, Decarbonisation and Digitalisation", and continues to advance its "Gas+" integrated energy business model. On the one hand, the Group consolidates its core city-gas business by expediting the expansion of the gas pipeline network and facilitating gas connections to households; on the other hand, the Group vigorously develops its renewable energy business while enriching the portfolio of our smart kitchen products and establishing the gas supply chain business segment. This way, the Group can capitalise on the synergies between gas and LPG and achieve resource optimisation to leverage the advantages of integrated supply chains. By the end of 2023, the Group had 536 projects in 25 provinces, autonomous regions and municipalities, including city-gas and renewable energy developments; the number of projects increased by 173 compared with last year.

The utility business – gas segment has achieved steady growth in overall performance. The total gas sales volume increased by 8% to 16.5 billion cubic metres. We gained 840,000 new customers, bringing our total number of customers to 16.77 million. During the year, the Group actively expanded its "Gas+" integrated energy service offerings, including the heating service projects and the integrated power service projects. In addition, we have explored the technology of hydrogen blending in natural gas to further diversify our business portfolio. Downstream products and services in the gas segment remain another strategic priority for the Group. We have launched various high-energy-efficiency smart products, focusing on smart kitchen solutions. Moreover, the Group is dedicated to building a smart energy ecosystem and has developed high-tech products such as the TGSE CHIP, an Internet of Things security chip. Through the utilisation of technologies, including big data, artificial intelligence, and the Internet of Things, we have achieved intelligent monitoring, optimised scheduling, and refined management of the energy system, allowing us to provide highly efficient, sustainable, and intelligent energy services.

Regarding the renewable energy business, the Group has embraced innovation and pursued transformation. We have made steady progress in investing and constructing energy infrastructure, including photovoltaics, energy storage, and battery charging and swapping facilities. Currently, we have developed 124 zero-carbon smart industrial parks, and laid out more than 1,000 renewable energy projects across 23 provinces, autonomous regions, and municipalities, setting the stage for the national "Energy Internet" plan. Furthermore, the Group has prioritised enhancing its research and development capabilities by setting up the Towngas Energy Academy to facilitate collaborations across the industry, as well as academic and research sectors through partnerships with leading universities. Tera Planet 2.0, our upgraded ecological platform, has been launched, enabling the online management of green big data. Additionally, we are actively expanding our presence in the photovoltaic market and increasing the installed capacity.

Regarding the gas supply chain business segment, the Group adheres to its strategic approach where contracts are signed by project companies following negotiations at the Group level. Leveraging the interconnections of the national pipeline networks, we have expanded and consolidated our collaborations with gas supply chain; while fully utilising our own resources to strengthen coordination along the supply chain from upstream to downstream. We have also implemented cross-regional scheduling to ensure the stability of city-gas supply while minimising procurement costs. Meanwhile, the Group is focusing on enhancing external resources to meet the demands of both the international market and the downstream market on the Chinese mainland. Supported by scalability and liquidity, we are aiming to elevate our gas supply chain business to new heights.

Looking ahead, the Group is committed to strengthening its energy supply and expanding its business reach. We will systematically enhance our corporate governance, technological innovation capabilities and industry influence. Joining hands with key stakeholders such as investors, suppliers, and employees, we will forge ahead with determination and vigour towards a brighter and more sustainable future.

Mr. Peter Wong Wai-yee
Executive Director and Chief Executive Officer
Towngas Smart Energy Company Limited
Hong Kong, 19 March 2024



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ABOUT TOWNGAS SMART ENERGY

Towngas Smart Energy Company Limited (Stock Code: 1083) 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" or "parent company"). We are a public utility with an operation mainly on the Chinese mainland, principally engaged in utility business and renewable energy business.



HK\$ 19,842
MILLION of Revenue

16,458
MILLION M³
of Gas Sales Volume

75,690 KM
of Network Length

04 About Towngas Smart Energy

I. Corporate Culture



VISION

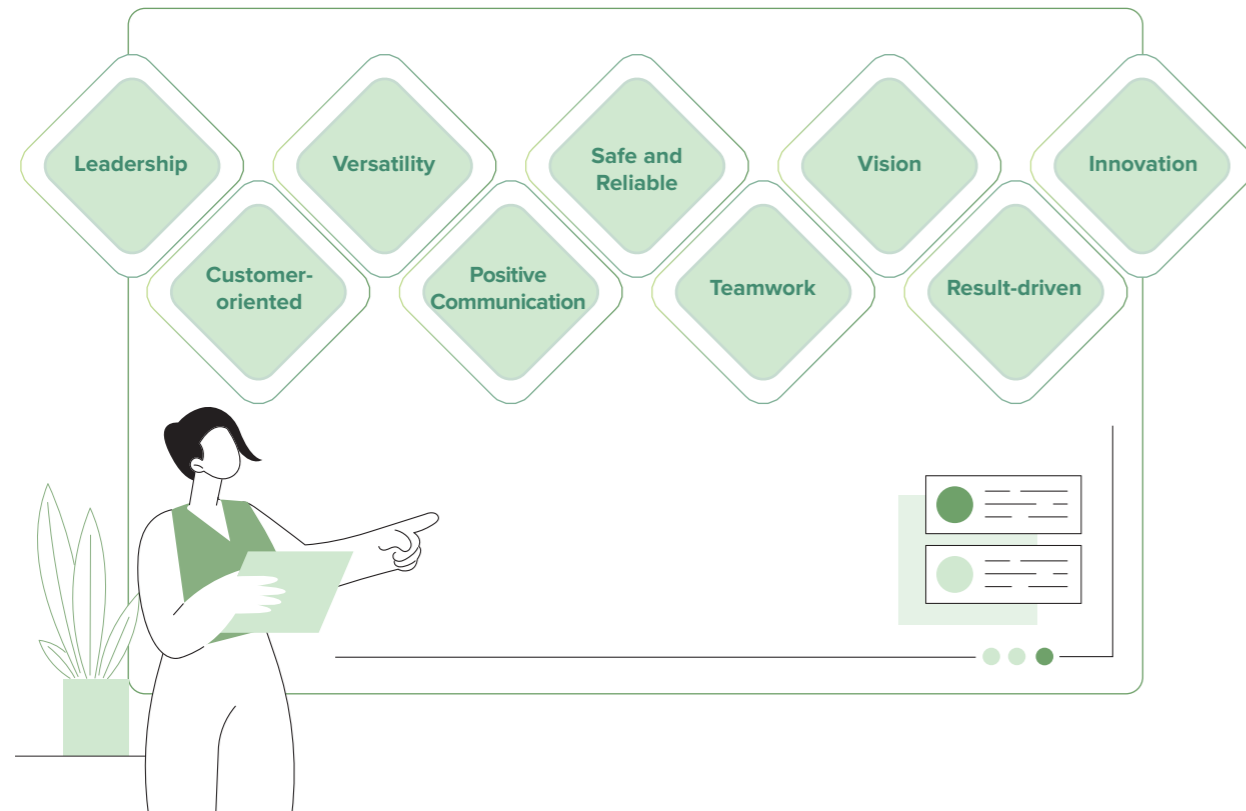
To be a leading clean and smart energy supplier, with a view to creating a sustainable world driven by green energy.



MISSION

To provide our customers with safe, reliable, clean and smart energy along with quality services, while committed to fulfilling our social responsibility, ensuring sustainable business growth, enhancing our shareholders' return on investment, and bringing long-term benefit for our planet, society, and stakeholders.

Core Values



II. Business Overview



Utility Business

We mainly engage in city piped gas and other energy sales, gas pipeline network construction and vehicle gas refilling stations, among others. The Company also provides gas appliances and smart kitchen products to our customers. During the year, we commenced a new gas supply chain business segment, mainly by integrating and optimising the gas supply chain.



Renewable Energy Business

The main operations include photovoltaics, zero-carbon smart industrial parks, energy storage, charging and swapping stations and other renewable energy infrastructures.

III. Sustainable Financing

The Group issued its first 1-year and 3-year Panda Bonds on the Chinese mainland in June 2023, raising a total of RMB1.5 billion. Among them was the first sustainability-linked Panda Bond issued by a Hong Kong enterprise on the Chinese mainland, which received an oversubscription of 1.6 times. The Group actively responds to the demand for green financing products in the market and capitalises on the opportunities of sustainable finance to facilitate the low-carbon transition of our business.



Furthermore, we became the first energy company in Hong Kong to issue a sustainability-linked bond as early as in 2022. The Bond is linked to the sustainability-linked financing framework. The proceeds raised from this bond will be allocated towards accomplishing the following two sustainability performance targets ("SPTs").

	Total photovoltaic installed capacity	Solar energy sales to total energy sales ratio
2020 (Baseline)	0 GW	0%
2023 (Progress)	1.8 GW	1.6%
2025 (SPT)	8 GW	7%
2028 (SPT)	11 GW	8%

05

SUSTAINABILITY PERFORMANCE AT A GLANCE

The Group attaches great importance to ESG management, actively engages in sustainable development, strongly supports green transformation and promotes the development of renewable energy business. During the year, we achieved remarkable results in sustainable development.



05 Sustainability Performance At A Glance

I. ESG Performance Data Highlights for 2023

Safety Performance	Environmental Performance	Value Chain Performance
<p>Work-related injury or loss of life of employees: 0 (2022: 0)</p> <p>Project companies with ISO 45001 certification: 27 (2022: 17)</p> <p>Average safety training hours per capita: 52.8 (2022: 14.1)</p>	<p>Project companies with ISO 14001 certification: 24 (2022: 16)</p> <p>Developed zero-carbon smart industrial parks: 124 (new data reported during the year)</p> <p>Self-generated and self-consumed renewable energy: 262,926.4 kWh (new data reported during the year)</p>	<p>Proportion of employees from ethnic minorities: 4.7% (new data reported during the year)</p> <p>Overall customer satisfaction rate: 96% (new data reported during the year)</p> <p>Proportion of new suppliers screened using ESG standards: 96.6% (new data reported during the year)</p>

II. ESG Indices and Ratings

Index/Rating	2023	2022
MSCI ESG RATINGS	A	A
FTSE4Good	3.0*	2.7
S&P Global	64	64
Hang Seng Corporate Sustainability Index Series	AA	AA-
SUSTAINALYTICS RATED	29.3	29.3
CDP	A-	B

* Selected as a constituent of the FTSE4Good Index Series for the first time during the year

III. Accolades and Awards in 2023

- S&P Global**
 "Top 1% S&P Global ESG Score (China)" and "Industry Mover"
- HK01**
 "2023 Outstanding ESG and Smart Living Enterprise"
- The Hong Kong Management Association**
 "Hong Kong Sustainability Award 2023 – Distinction Award" and "Certificate of Excellence in Environmental, Social and Governance Reporting"
- Hong Kong International ESG Alliance**
 "Best Listed Company at ESG Practices" and "Best Listed Company at ESG Advancement"
- 21st Century Business Herald**
 "2023 Carbon Neutral Pioneer Company"
- Jiemian News**
 "2023 ESG Pioneer 60 Environmental Responsibility Excellence Award"
- Energy Magazine**
 "Energy Transformation and Green Development Special Contribution Award"
- Gelonghui**
 "Annual ESG Pioneer Award (Large Market Cap)"
- Sungang Sub-district Office, Luohu District, Shenzhen**
 "Caring Enterprise"

05 Sustainability Performance At A Glance

IV. Promoting Industry Development

As a pioneer in the energy sector, the Group takes an active role in industry associations and events, and continuously steps up our cooperation with government authorities, in an effort to share our technologies and experiences. The relevant events encompass various aspects such as integrated energy, photovoltaics, energy storage, carbon neutrality and business expansion.



Some of Our Engaged Associations

- Energy Investment Professional Committee of the Investment Association of China
- Energy Internet Research Institute, Tsinghua University
- China Electricity Council
- International Forum for Clean Energy (Macao)
- Energy and Environment Service Industry Alliance

Forms of Cooperation

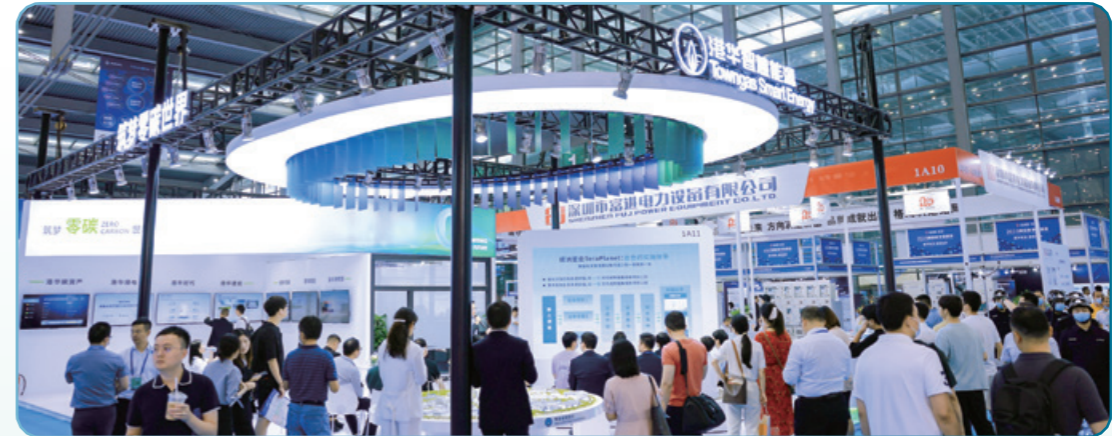
- Standards development for zero-carbon industrial parks
- Virtual power plant technology collaboration
- Regular contact for resources planning
- Regular contact for resources planning
- Regular contact for resources planning and synchronised press release



Participated in **26** industry events related to renewable energy



④ "TERA TOUR – Shenzhen" Event



④ The Latest Zero-Carbon Solutions of Towngas Smart Energy Showcased at the "2023 International Digital Energy Expo"



④ Dr. John Qiu Jian-hang, Executive Director and Chief Operating Officer – Renewable Business, at the "6th Asia Pacific Energy Regulatory Forum"



④ Seminar on Energy Management Services Model Innovation of Public Institutions



④ Towngas Smart Energy at "2023 China International Trade Fair for Heating, Ventilation, Air-Conditioning, Sanitation & Home Comfort System"

06

ENVIRONMENTAL, SOCIAL, AND GOVERNANCE STRATEGY

Towngas Smart Energy continues to strengthen its ESG management, actively implement ESG governance practices, and engage in communication with stakeholders. We adhere to business ethics, rigorously safeguard the confidentiality of whistleblowers, enhance corporate governance capabilities, and help create a lawful business environment.



16 PEACE, JUSTICE AND STRONG INSTITUTIONS

100% of our employees completed anti-corruption and anti-bribery courses

48 audit projects were undertaken by our internal audit department

Environmental Policy was updated during the year

06 Environmental, Social, and Governance Strategy

I. ESG Governance

The Board of Directors of the Group assumes full responsibility for the ESG strategy and reporting, committing that the contents of this report contain no false records, misleading statements, or significant omissions. The Group has established an Board ESG Committee at the Board level, consisting of four Group Board members, with Mr. Peter Wong Wai-ye, the Chief Executive Officer, serving as the chairman. To strengthen the Group's ESG management, the *Terms of Reference of the ESG Committee* specifically mandate the Board ESG Committee to assist the Board of Directors in comprehensively overseeing the ESG-related matters of the Group and its subsidiaries. In addition, in collaboration with our parent company, we have established ESG Working Committee under the ESG Steering Committee, covering areas including "Decarbonisation and Resources Management", "Safety and Health", and "Audit and Risk". They are responsible for developing and implementing specific work plans within different ESG domains. To further enhance the management's responsibility towards ESG, we link the remuneration of relevant executive directors and senior management with ESG management performance, including climate change targets, production safety performance, and various ESG ratings.



Board of Directors of the Group

Board ESG Committee

(Chaired by the Chief Executive Officer of the Group, with some other members of the Board serving as members)

ESG Steering Committee

(Consisting of the senior management of the Group)

ESG Working Committee

(Responsible for 16 ESG-related areas)

The Board ESG Committee holds regular meetings. During the year, it conducted one regular meeting and hosted four presentations on ESG issues. By taking into account changes in the macro environment and the strategic development direction of the Group, during these meetings the Committee reviewed and discussed the management performance of sustainable development in five key areas, thereby assessing and evaluating the effectiveness of the ESG efforts of the Group.



Regular meeting of the Board ESG Committee



To ensure the authenticity and reliability of the Group's ESG disclosures, we engaged the Hong Kong Quality Assurance Agency to conduct independent verification on this Report.

II. Compliance Management



i. ESG Policies

We follow the ESG-related policies of our parent company, HKCG, with a commitment to implementing our ESG philosophy and maintaining good relationships with all stakeholders to achieve sustainable development.

Environmental



Climate Change Policy



Environmental Policy

Social



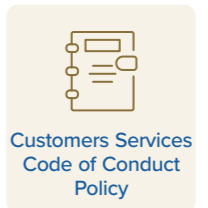
Anti-Discrimination Policy



Code of Conduct



Code of Practice for Suppliers



Customers Services Code of Conduct Policy



Employee Policy



Health and Safety Policy



Human Rights Policy



Social Investment Policy



Sustainable Purchasing Policy

Governance



Anti-Fraud Policy



Board Diversity Policy



Dividend Policy



Information Security Policy



Nomination Policy



Personal Data Privacy Policy



Policy and Procedures on Disclosure of Inside Information



Policy on Shareholders' Communication



Risk Management Framework



Security Policy



Stakeholder Engagement Policy



Whistleblowing Policy

06 Environmental, Social, and Governance Strategy

ii. Risk Management and Internal Control

We have established a multi-tiered risk management structure and a management system capable of effectively identifying, assessing, mitigating, reporting and monitoring the major business risks of the Group and all project companies, enabling us to safeguard the long-term benefit of stakeholders. Through this system, the management can clearly understand the significant risks and formulate more appropriate risk response strategies.

Committees	Composition	Duties
Board Audit and Risk Committee	Board members	To support the Board in overseeing the Group's overall risk management system and annually attest to the effectiveness of the system with the Board
Executive Risk Management Committee	Key management executives	To develop and ensure the effective implementation of the risk management system, keeping risks within an acceptable level
Risk Management Committee	Senior management of various business units	To assist the Executive Risk Management Committee in reviewing major risks and monitoring the implementation of risk mitigation measures

Currently, the ESG risks identified under the risk management structure are as follows:



In 2023, with a focus on compliance in employment, we carried out training sessions under the themes of "ER Compliance Management: Risk Prevention and Control in Labour Relations Management" and "Legal Thinking for Managers and New Perspectives on Employee Relationship Management". A total of **93** senior management members attended these sessions, totalling **279** training hours.



④ Trainees participating in relevant trainings

iii. Business Ethics

We strictly comply with the Anti-Monopoly Law of the People's Republic of China, the Anti-Unfair Competition Law of the People's Republic of China, and other laws and regulations. All employees are required to uphold business ethics. Commercial bribery, unfair competition, and infringement of intellectual property rights in any form are strictly prohibited. During the year, the Group did not encounter any cases in relation to conflicts of interest, money laundering and insider dealing.



In 2023, we transformed the *Towngas Code of Conduct* into video courses, with **100%** of our employees completing the anti-corruption and anti-bribery courses.

As part of its efforts to promote a corporate culture of integrity and honesty, the Group adheres to honest and compliant operations. In 2023, the Group's internal audit department strengthened supervision over conflicts of interest. During the audit process, it obtained declarations of interest to analyse potential conflicts of interest and verified the involvement of the directors, supervisors and senior management of audited enterprises in any interest entanglement.

In 2023, Towngas Smart Energy's internal audit department undertook **48** different audit projects, followed up on the implementation of recommendations from **21** audit reports, assisted project companies in establishing and improving **23** sets of regulations, and reported the audit work of the year to the audit committees or boards of directors of **4** project companies.



06 Environmental, Social, and Governance Strategy

Whistleblowing Mechanism and Whistleblower Protection Policy



We encourage all stakeholders, including employees, suppliers, contractors, partners and customers, to report any instance of misconduct, fraud, or irregularity to the senior management of the Group once identified. The *Whistleblowing Policy* of the Group has clearly established confidential investigation procedures, strictly protecting the confidentiality of the whistleblower's information and identity. Any form of retaliation or threat of retaliation against whistleblowers is strictly prohibited, and appropriate disciplinary measures, including immediate termination of employment in severe cases, will be taken upon discovery.

Our reporting channels are listed below¹:



In writing

Whistleblowers shall lodge the case to the Head of Group Audit & Risk Management Department of HKCG in writing in a sealed envelope clearly marked "To be opened by addressee only", and mail it to:

Hong Kong, China Office

Head of Group Audit & Risk Management of HKCG
The Hong Kong and China Gas Company Limited
21/F, 363 Java Road,
North Point, Hong Kong

Chinese Mainland Office

Head of Group Audit & Risk Management of HKCG
Towngas Smart Energy Company Limited
17/F, Office Building, Tower B, China Merchants Central,
No. 333 Liyuan Road, Luohu District, Shenzhen



By email

Whistleblowers can download a template of the *Whistleblowing Form* from the Group's website, fill in the form and submit it to the Head of Group Audit & Risk Management Department of HKCG at the following email address:

GangHua.whistleblower@towngas.com

¹ If the report involves directors or members of the Executive Committee of Towngas Smart Energy, the whistleblower can directly mail a written report to the Chairman of the Audit and Risk Committee of Towngas Smart Energy, or send an email to BAC.Chairman.1083@towngas.com to submit the report.

III. Stakeholder Engagement

Stakeholder engagement is a crucial pathway for Towngas Smart Energy to practise its ESG philosophy. We have established an effective mechanism, through which we collect, organise, and analyse stakeholders' expectations and demands via various methods and channels. We also invite stakeholders to evaluate ESG material issues that we have identified. Based on their feedback, we take further actions to continuously improve the Group's ESG management capabilities and performance.



i. Channels for Stakeholder Engagement

We continue to collect opinions from stakeholders through the following channels:



Government and regulators

- Government documents
- Day-to-day communication and report(s)
- Government-enterprise cooperation projects



Shareholders and investors

- Annual general meetings
- Annual reports and interim results reports
- Circulars and announcements
- Press conferences
- Social media



Customers and partners

- Customer service centres
- Exhibitions
- Customer service hotline and emails
- Meetings
- Interviews
- Strategic cooperations



Employees

- Job performance appraisals
- Trainings in occupational health and safety
- Regular meetings between the management and staff members
- Suggestion boxes
- Emails
- Bulletin boards



Suppliers

- Annual business review meetings
- Suppliers' assessment meetings
- Strategic cooperation meetings
- Procurement communication



Community/charity bodies

- Community publicity activities
- Charity activities
- Philanthropy activities
- Educational science activities

06 Environmental, Social, and Governance Strategy

ii. Double Materiality Assessment Process

Towngas Smart Energy identified and addressed ESG matters of the greatest concern to stakeholders according to the assessment and prioritisation of material issues carried out through research analysis, interviews and questionnaires. The Group believed that there would be no significant short-term changes in government policies, industry trends or the Group's strategy. Hence, the ESG materiality assessment for the year employed the findings from the previous year, with minor adjustments based on interviews with the senior management during the year. These adjusted findings were also discussed and reviewed by the Board ESG Committee, hence ultimately confirming the priority of material issues for the year. They will serve as effective references for identifying ESG risks and opportunities, and for developing and adjusting the Group's sustainability strategy.

Our materiality assessment mainly covers the following five steps:

- Issue Identification:** Benchmarking against international ESG disclosure standards and industry management practices, we identified material ESG issues pertaining to the Group's five key ESG areas.
- Questionnaire Survey:** Incorporating the double materiality methodology introduced by the European Financial Reporting Advisory Group ("EFRAG"), we comprehensively assessed the significance of each ESG material issue from both impact and financial perspectives.
- Impact Materiality Assessment:** We categorised the potential positive and negative impacts of each ESG material issue on the environment and society, and assessed the impact magnitude of each issue based on the likelihood and severity of occurrence.
- Financial Materiality Assessment:** We analysed the impact of each ESG material issue on the Group's financial performance from the six perspectives developed by the International Integrated Reporting Council ("IIRC"), namely financial capital, manufactured capital, intellectual capital, human capital, social and relationship capital, and natural capital.
- Plotting the Double Materiality Matrix:** Based on the results of the impact and financial materiality assessments, the ESG material issues were divided into three groups: very important, important, and less important. The double materiality matrix was plotted to determine the focus of disclosure in this Report.



Questionnaires

- A total of **463** questionnaires were collected
- The response rate was **100%**
- Both **internal and external** stakeholders were invited to participate



In-depth Interviews

- 4** sessions
- 100%** of the participants were from the Group's senior management

iii. Materiality Assessment Results

During the year, based on the plotting of the double materiality matrix, we further refined the categories of stakeholders primarily affected by each ESG material issue, as well as the corresponding sections of the Report. The specific results are listed as follows:



Environmental

- Improvement in energy efficiency
- Response to climate change
- Biodiversity
- Waste management
- Water resource and wastewater
- Energy affordability

Social

- Occupational health and safety
- Asset integrity and issue management
- Product and service quality
- Protection of employees' rights and interests
- Confidentiality and information security
- Diversity, equal opportunities and anti-discrimination
- Protection of intellectual property rights
- Employment practice
- Community relations management
- Accurate product and service information
- Supply chain management

Business and Governance

- Innovation and digital transformation
- Sound corporate governance
- Business ethics and anticorruption

Materiality Levels	Definitions
Very important	Issues that have a significant impact on the environment, society and the financial performance of the Group, and should be incorporated into business strategy and daily operations and management.
Important	Issues that have a moderate impact on the environment, society and the financial performance of the Group, and should involve the continuous refinement of relevant policies, implementation of management measures and regular review.
Less important	Issues that have a limited impact on the environment, society and the financial performance of the Group, and should be monitored from a compliance perspective.


06 Environmental, Social, and Governance Strategy

Material Issues and Their Impacts in 2023

No.	Material ESG issues	Reference to GRI Standards	Stakeholders concerned					Corresponding sections of the Report
			Government and regulatory authorities	Shareholders and investors	Customers and partners	Employees	Suppliers	
1	Improvement in energy efficiency	302	✓	✓	✓	✓	✓	Lucid Waters and Lush Mountains: Endeavouring for Joint Ecological Prosperity
2	Response to climate change	201 · 305	✓	✓	✓	✓	✓	
3	Biodiversity	304		✓			✓	
4	Waste management	301 · 305 · 306 · 307	✓	✓		✓	✓	
5	Water resource and wastewater	303	✓	✓		✓	✓	
6	Energy affordability	302	✓	✓	✓	✓	✓	
7	Occupational health and safety	403	✓	✓		✓	✓	Laying a Solid Foundation and Maintaining the Bottom Line of Safety
8	Asset integrity and issue management	201 · 203		✓	✓	✓		
9	Product and service quality	416	✓	✓	✓	✓	✓	Unwavering Commitment to Enhancing the Value Chain
10	Protection of employees' rights and interests	407 · 408 · 409	✓	✓		✓	✓	
11	Confidentiality and information security	418	✓	✓	✓	✓		
12	Diversity, equal opportunities and anti-discrimination	202 · 405 · 406	✓	✓		✓		
13	Protection of intellectual property rights	201	✓	✓	✓			
14	Employment practice	2 · 401 · 402 · 404	✓	✓		✓		
15	Community relations management	203 · 413		✓			✓	
16	Accurate product and service information	417	✓	✓	✓			
17	Supply chain management	204 · 308 · 414	✓	✓	✓		✓	
18	Innovation and digital transformation	201	✓	✓	✓		✓	
19	Sound corporate governance	2	✓	✓	✓	✓		Environmental, Social and Governance Strategy
20	Business ethics and anti-corruption	205 · 206	✓	✓	✓	✓		

iv. From Feedback to Action

We are acutely aware that understanding the needs and expectations of stakeholders is an indispensable part of the Group's implementation of its sustainability strategy. During the year, we continued to listen to stakeholders' feedback on various material ESG issues, and analysed the potential impacts of these issues with reference to the Sustainable Development Goals ("SDGs") of the United Nations.


Stakeholders' feedback	Corresponding ESG issues	Impacts ²	Our actions	Corresponding SDGs
"Towngas Smart Energy should leverage its energy management and digital innovation strengths to drive energy efficiency improvements among customers and partners."	<ul style="list-style-type: none"> Improvement in energy efficiency Innovation and digital transformation 	<ul style="list-style-type: none"> ▲ Stricter energy policies increase the demand to save energy and reduce emissions among customers and partners ▲ The social transition to low carbon facilitates the promotion of smart energy projects 	We have introduced customised services such as contracted energy management services, energy trusteeship services, energy centre construction and zero-carbon smart industrial park development, assisting customers and partners in saving energy and reducing emissions. Furthermore, we have established the first public institution's virtual power plant in Shenzhen, and in collaboration with Tencent Cloud, launched the ecological platform "Tera Planet 2.0", promoting intelligent management of energy data through various channels.	 7 AFFORDABLE AND CLEAN ENERGY
<p><i>Feedback from our business partners</i></p> <p>For more details, please refer to "Climate Action" under the chapter titled "Lucid Waters and Lush Mountains: Endeavouring for Joint Ecological Prosperity".</p>				

“Ensure access to affordable, reliable, sustainable and modern energy for all”



² Green arrow: Potential positive impacts of the issue. Red arrow: Potential negative impacts of the issue.

06 Environmental, Social, and Governance Strategy

Stakeholders' feedback	Corresponding ESG issues	Impacts ²	Our actions	Corresponding SDGs
<p>"Towngas Smart Energy should proactively conduct hazard screening to avoid accidents to the greatest extent possible."</p> <p>Feedback from our customers</p>	<ul style="list-style-type: none"> Asset integrity and issue management Product and service quality 	<ul style="list-style-type: none"> ▲ High safety standards are beneficial for improving the quality of corporate products ▼ Potential safety hazards in the gas pipeline network may lead to accidents 	<p>We have established a dual prevention mechanism, put into practice safety risk classification, and conducted hazard screenings along with multiple safety inspections and audits. In addition, we have further strengthened asset integrity management, employing technological methods to enhance quality and safety control in different aspects, including planning, design, construction, operations and maintenance. Regular household safety inspections and random testing of products, such as gas stoves, have been conducted to ensure gas safety.</p> <p>For more details, please refer to "Operational Safety" under the chapter titled "Laying a Solid Foundation and Maintaining the Bottom Line of Safety".</p>	

“ Make cities and human settlements inclusive, safe, resilient and sustainable ”



Stakeholders' feedback	Corresponding ESG issues	Impacts ²	Our actions	Corresponding SDGs
<p>"Towngas Smart Energy should take measures to adapt to and mitigate the risks associated with climate change while seizing new business opportunities."</p> <p>Feedback from our internal staff</p>	<ul style="list-style-type: none"> Response to climate change 	<ul style="list-style-type: none"> ▲ Provide growth opportunities for the clean energy business ▼ Methane leaks from pipelines increase greenhouse gas emissions ▼ Inadequate assessment of and response to climate change and risks may affect the stability of gas supply 	<p>We have established a comprehensive environmental management system, under which we carried out climate scenario analyses. We have also identified climate-related physical and transition risks, as well as opportunities, and formulated response strategies. We have set an interim target of carbon reduction. A series of actions have already been taken to reduce greenhouse gas emissions and develop our clean energy business, with a commitment to enhancing corporate climate resilience.</p> <p>For more details, please refer to "Climate Action" under the chapter titled "Lucid Waters and Lush Mountains: Endeavouring for Joint Ecological Prosperity".</p>	

“ Take urgent action to combat climate change and its impacts ”



07

LAYING A SOLID FOUNDATION AND MAINTAINING THE BOTTOM LINE OF SAFETY

Production safety is not only the cornerstone of the survival and development of a company, but also our commitment to employees, customers, and communities. To ensure safe production and supply, we collaborate with the government and all sectors of society, while continuously strengthening safety education, management, and investment. Our aim is to enhance the overall social awareness and response capabilities, building a new system of collaboration, collective responsibility and shared benefits.



07 Laying a Solid Foundation and Maintaining the Bottom Line of Safety

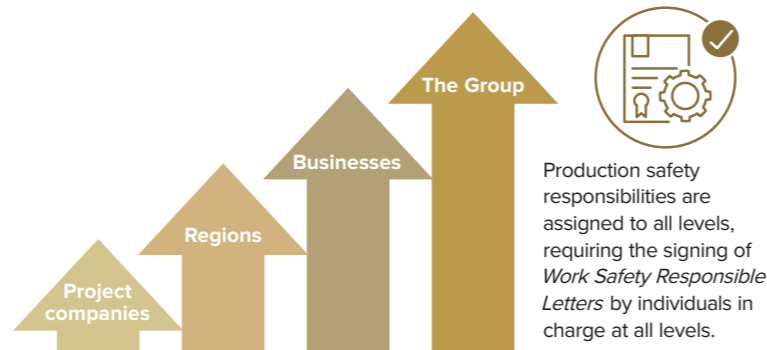
i. Our HSE Management System

The Group adheres to the principles of “safety first, prevention-oriented and comprehensive management” in its approach to production safety, and strictly controls the sources of safety risks in all business operations. We persistently refine and strengthen the Health, Safety, and Environment (“HSE”) management system, committing to safeguard the working and living environment of employees, customers, communities and society.



i. HSE Management Policy

We have designated more specific safety management indicators in all project companies and linked them with their annual key performance indicators, conducted regular assessments, and implemented a one-vote veto system for those responsible for production safety accidents.



We regularly review and amend the Group’s HSE-related policies and procedural documents to regulate the behaviour of all employees and contractors. In addition, our *Health and Safety Policy* has stated that the compensation of our senior management is linked with the Group’s HSE management performance, and all contractors are obliged to take responsibility for HSE management.



To comprehensively standardise and advance the development of the occupational health and safety management system, reduce occupational health and safety risks, and prevent personal injuries, accidental deaths and occupational diseases, the Group actively directs and encourages its project companies to obtain certifications for the occupational health and safety management system, safety production standardisation and more.

27 project companies obtained ISO 45001 certifications

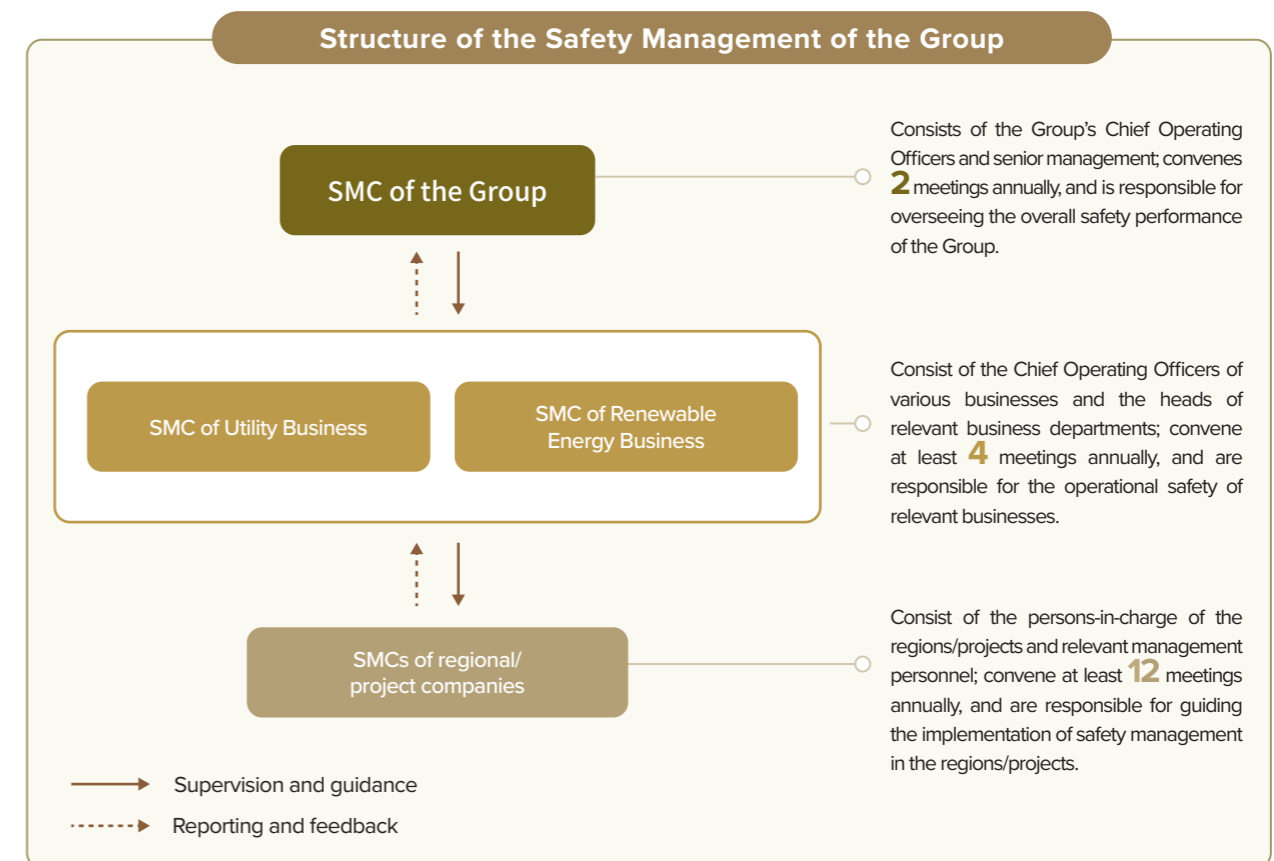
ii. HSE Management Objectives

The Group holds fast to the Plan-Do-Check-Act (PDCA) cycle for safety management to improve the overall safety risk management of the Group.

Business segments	Work-related injury rate target per thousand employees for 2023 (%)	Target achievement status (%)	Work-related injury rate target per thousand employees for 2024 (%)
Utility business	1	0.1 (target met)	1
Renewable energy business	1	0 (target met)	1

iii. HSE Management Structure

The Group has integrated the safety management systems of its two major business segments, and developed a structure with the Safety Management Committee (“SMC”) of the Group as the highest safety management body.



07 Laying a Solid Foundation and Maintaining the Bottom Line of Safety

II. Our HSE Management Measures

The Group creates a safe and stable working environment for employees through safety risk management, technical operation guidelines, emergency response, and supervision and improvement in safety production. We also enhance customer trust and satisfaction, and foster a symbiosis between the Company and communities.



i. Operational Safety

Dual Prevention Mechanism

Safety Risk Management

The Business Risk Assessment Committee, consisting of senior management executives of various departments of the Group, conducts risk assessments twice a year to evaluate and manage the safety risks of the Group. Moreover, the Group supervises and guides regional and project companies in conducting safety risk identification and evaluation to ensure the effectiveness of their respective safety risk management systems.



Safety Hazard Screening and Resolution

The Group identifies and eliminates various safety hazards through multiple methods. In 2023, the Group, together with its parent company, HKCG, conducted:



191
safety audits and inspections (planned and unplanned)



2,664
safety inspections by the general managers of utility business project companies

Safety Inspections



On-site safety inspection by the SMC of the Group



Safety audits and inspections by Group Safety & Environmental Management Department (utility business)

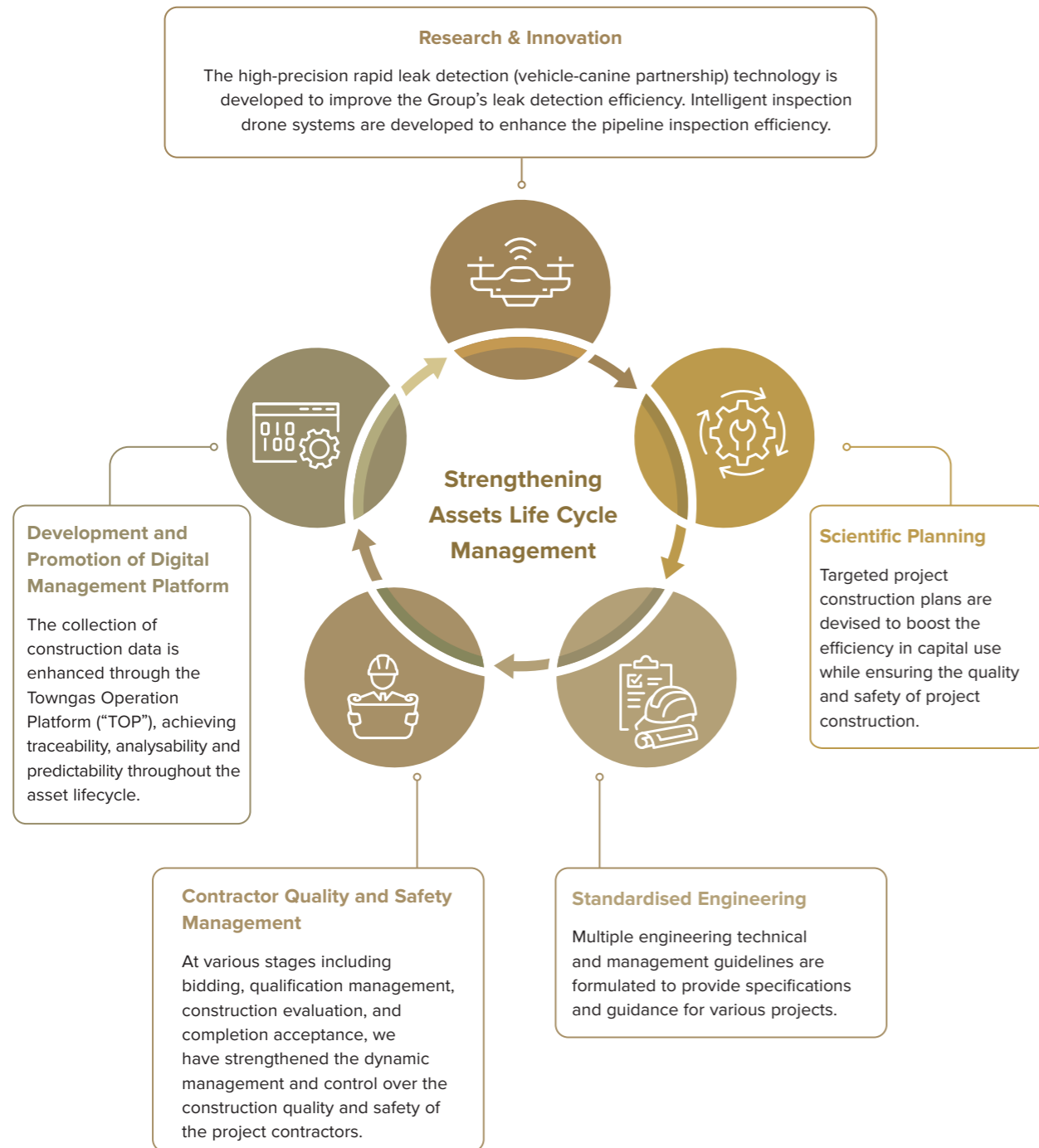


Integrated engineering-operation-safety inspection for projects in construction or operation by the Safety Management Section of the Group Engineering Department (renewable energy business)

07 Laying a Solid Foundation and Maintaining the Bottom Line of Safety

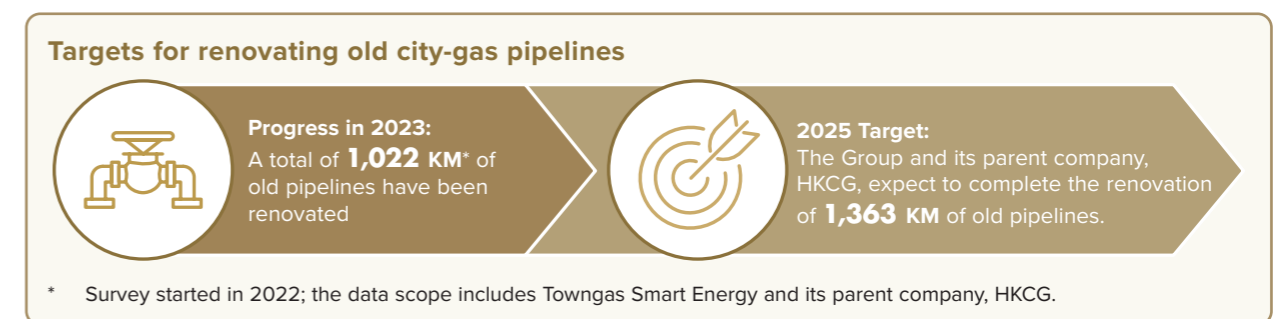
Asset Integrity Management

Leveraging the proficient management system for engineering constructions, operations, and maintenance, we employ various technical methods throughout the planning, design, construction, operation, and maintenance phases of project to enhance the overall management. This approach can extend the service life of the gas pipelines while ensuring cost effectiveness, safeguarding the safety, reliability, and economical operation of assets.



Renovation of Old City-gas Pipelines

Gas pipelines may present safety hazards such as corrosion and wear over prolonged use, which may result in risks of gas leaks or unstable gas supply. To enhance the efficiency and safety of gas transmission, and to ensure the safety of residents and business operations, the Group attaches high importance to and strictly regulates the renovation of old pipelines by project companies. In 2023, the Group issued the *Guidelines for Assessing the Conditions of Old Pipelines* to further strengthen regulations related to the renovation of old pipelines.

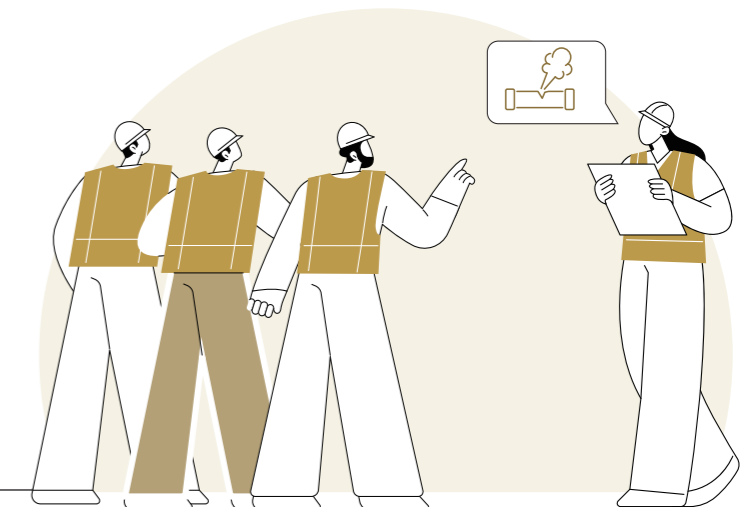


In addition, we have optimised our operational procedures to minimise methane leakage during gas transmission, tank reladling, and pressurisation. During the daily operations and maintenance of the pipeline network, we also conduct regular inspections of pressure pipelines and use video surveillance to monitor third-party contractors in real-time to prevent external damage.

Emergency Management of Major Incidents

The Group has developed a system clearly defining the classification, reporting and management, emergency response, investigation and other procedures in safety incidents. In addition, the Group sets targets for the number of major safety incidents in the *Work Safety Responsible Letter* annually, and evaluates the performance of different regions, business segments and project companies in achieving those targets.

For emergency responses to safety incidents, project companies may implement hierarchical emergency responses based on the magnitude of the hazard, the scope of impact, and their capacity to manage the situation, while reporting to their superiors accordingly. In the case of major safety incidents, project companies shall report directly to the Chief Operating Officer, and the Group Safety and Environmental Management Department shall be responsible for arranging and coordinating incident investigation and analysis, safety issue rectification and implementation of preventive measures.

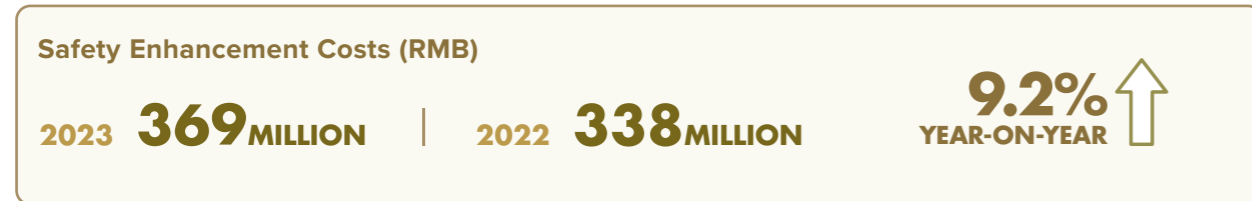


07 Laying a Solid Foundation and Maintaining the Bottom Line of Safety

ii. Occupational Health and Safety

Risk Assessment and Control

In order to prevent, control, and eliminate occupational diseases and hazards in a timely and effective manner, the Group has established a series of work standard protocols to guide project companies in conducting regular occupational disease and hazard detections and evaluations. In addition, we continuously fortify the supervision and management of labour protection gears and actively promote safety awareness.



Safety Management for Employees and Contractors

The Group is committed to minimising the occurrence of workplace safety hazards through various measures.

Key occupational health and safety management measures include:

-  Providing labour protection gears that meets national or industry standards
-  Installing monitoring devices to regularly check for environmental hazards, incident risks, and occupational disease risks
-  Installing noticeable warning signs
-  Purchasing liability insurance for employees to protect their legal rights and interests

In terms of occupational health and safety management of contractors, the Group requires all contractors to comply with the Group's HSE policy, undertake the related responsibilities, implement the safety goals set by the Group, including work-related injury rates and the number of work days lost due to work-related injuries, and purchase production safety liability insurances for their employees.

Safety Education and Training

In 2023, we employed various methods, such as workshops, safety knowledge competitions, emergency drills, and the development of professional courses, to provide safety education and training for employees and contractors on different themes, hence promoting the safety culture and safety philosophy of the Group.



Safety Education and Training



Recently, the Group, partnering with Towngas Shandong Training Institute, initiated the Confined Space Operation Training course. **1,386** employees of the Group and its parent company, HKCG obtained the certificates accordingly.



During the Work Safety Month and Firefighting Publicity Month campaigns, the Group and its parent company conducted a total of **848** comprehensive and specialised emergency drills of various types.




The Group organised a safety knowledge competition in the North China region with the theme of "Management and Accountability".



 **26** participating companies from the North China region

 Over **7,000** online learning participants

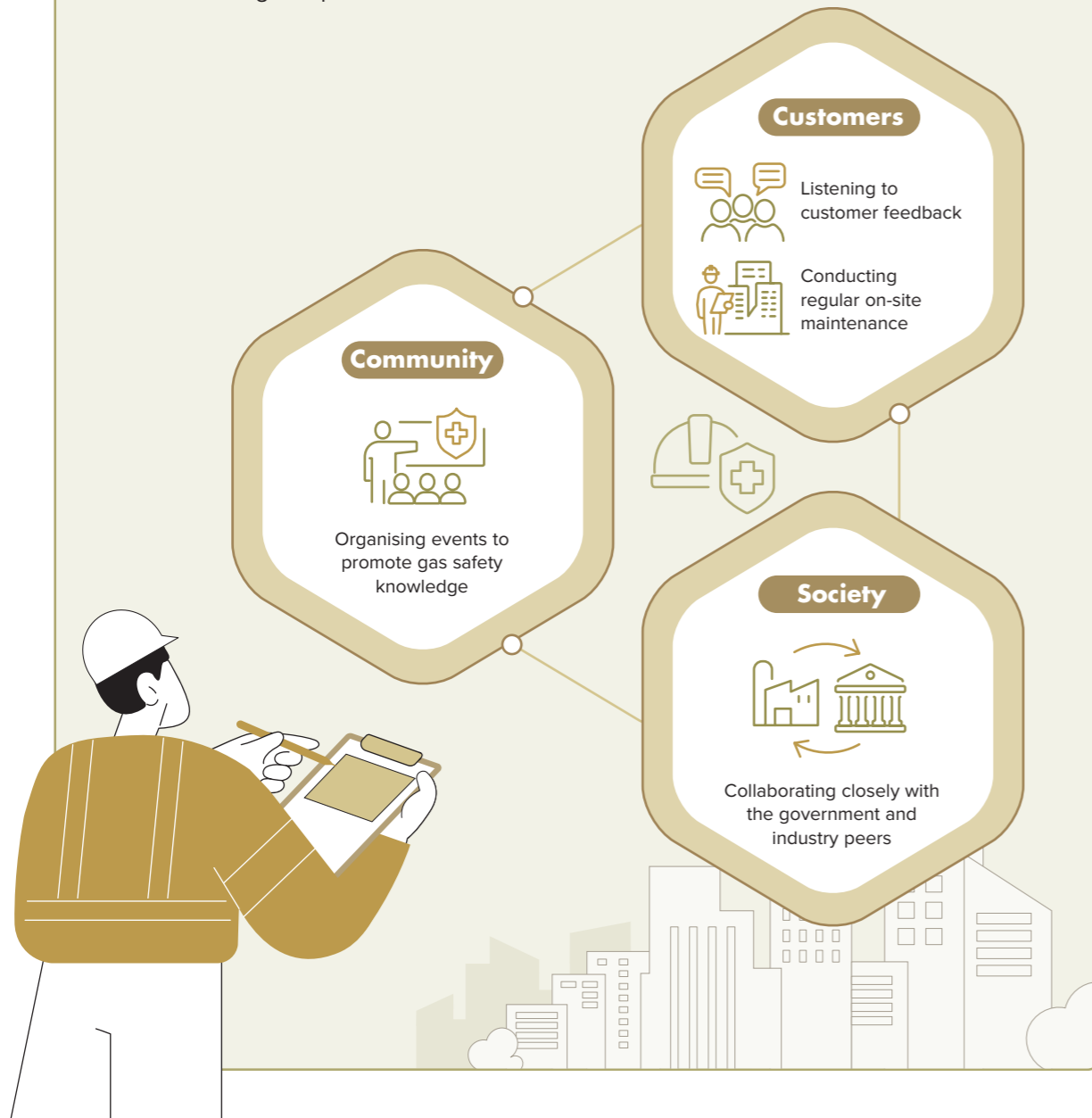
 Over **120,000** live broadcast viewers online

07 Laying a Solid Foundation and Maintaining the Bottom Line of Safety

iii. Customer and Community Safety

The Group prioritises safety and adopts multiple measures to build a solid line of defence for the safety of customers and the public.

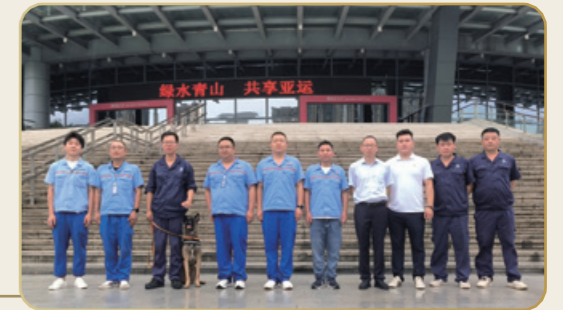
In 2023, the Group conducted more than **7.77 MILLION** household safety inspections
Received over **5,000** emergency incident reports related to safety from customers
Accident handling completion rate of **100%**



Work Together on Social Security

Paw Patrol Achieves Great Success!

On the eve of the 19th Asian Games – Hangzhou 2023, our project company in Hangzhou, in collaboration with U-Tech Engineering, provided leak detection services for the gas pipelines in the vicinity of the event venue by employing the high-precision rapid leak detection (vehicle-canine partnership) technology, ensuring the smooth and safe operation of the Asian Games.



Our sniffer dog "Hagen" worked in the vicinity of the venue of the Hangzhou Asian Games

Launch of Gas Safety Education Video

24,000 participants participating in the National Video Training Session

In December 2023, the Gas Safety Education Video produced by the Group made its debut at the first National Video Training Session for Accountability of Urban Gas Production Safety, jointly organised by the Central Party School of the Chinese Communist Party and five other ministries.

Creating Safe Kitchens through Gas Appliance Replacement

In May 2023, Bauhinia, a brand under our extended businesses, Towngas Lifestyle, launched an appliance trade-in campaign in response to the national call for gas safety, guaranteeing that residents can cook safely in their kitchens.



Over **50,000** households served

Over **100,000** units of gas appliances replaced

07 Laying a Solid Foundation and Maintaining the Bottom Line of Safety



Enhancing Safety with Smart Gas Technology

Through the investment and development of the Towngas Operation Platform ("TOP"), Towngas Smart Energy has achieved refined management of the Group's gas segment operations, thereby enhancing the safety management standards. Furthermore, this initiative contributes to the construction and development of smart cities, embodying the social responsibility and commitment of a utility company.

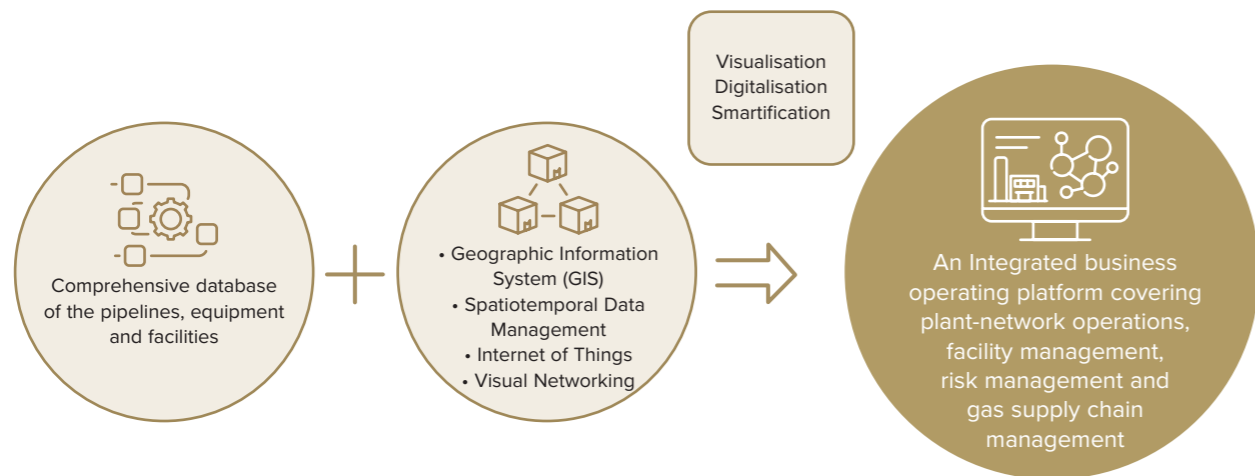
Feature Story

Integrating Technology for Safety Enhancement

To enhance the operational safety of gas pipelines, the Group has collaborated with various renowned energy and information technology companies to develop the TOP. It is the first group-level integrated production system cloud platform in the gas industry on the Chinese mainland.



TOP launch event

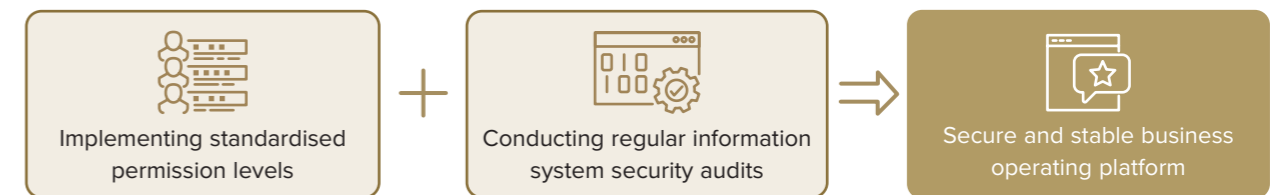


Digital Transformation and Data Security

In order to ensure the data security of the TOP while maintaining efficient operations, we have designed a permission analysis management scheme based on the Group's standardised permission system, allowing project companies to independently manage user data. The Group strictly adheres to the highest standards of the Cyber Security Grade-based Protection Scheme of China, formulating and implementing the information security system, as well as regularly auditing the information security system of the Group.



Grade 3 Certification under the Cyber Security Grade-based Protection

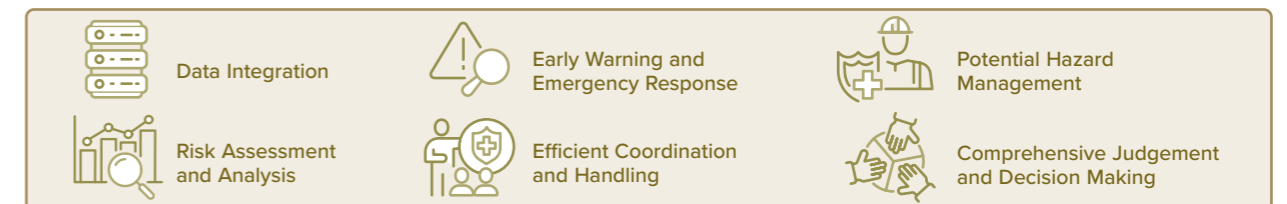


Deployment of TOP across Project Companies

In March 2023, the TOP was successfully piloted in a project company within the Group. In 2024, we will extend the platform's adoption to all project companies and commence the development of Phase II features for the TOP.

42 project companies have adopted the TOP

Services and Functions of the TOP



08

LUCID WATERS AND LUSH MOUNTAINS: ENDEAVOURING FOR JOINT ECOLOGICAL PROSPERITY

Only if lucid waters and lush mountains are well-preserved can invaluable assets be sustainable. Towngas Smart Energy adheres to the principle that green development is the essential path towards achieving corporate sustainable development. We integrate the concept of environmental protection into our project construction and production operations, while striving to steer our own development towards low-carbon transformation and achieving a win-win for environmental and economic benefits.



6 CLEAN WATER AND SANITATION

7 AFFORDABLE AND CLEAN ENERGY

11 SUSTAINABLE CITIES AND COMMUNITIES

12 RESPONSIBLE CONSUMPTION AND PRODUCTION

13 CLIMATE ACTION

14 LIFE BELOW WATER

15 LIFE ON LAND

ISO 24 project companies obtained ISO 14001 certification

ISO 21 project companies obtained ISO 50001 certification

100% waste recycling rate

08 Lucid Waters and Lush Mountains: Endeavouring for Joint Ecological Prosperity

I. Our Environmental Management System

To address escalating environmental challenges, we have set clear environmental management objectives, formulated environmental management policies, established an environmental management structure, and standardised environmental risk management processes. Through these measures, we ensure the practical implementation of our corporate green and environmental protection philosophy.



Environmental Management Objectives

- ▶ **Effectiveness** : Continuously improve environmental management performance, striving to enhance utilisation efficiency of resource and energy
- ▶ **Innovation** : Encourage the adoption of new technologies, processes, materials and equipment to achieve energy conservation and environmental protection
- ▶ **Awareness** : Enhance the environmental awareness of employees and external stakeholders through education and trainings



Environmental Management Policies

Management Guidelines for Environmental Protection; Employees' Handbook for Environmental Protection; Operating Procedures for Wastewater Treatment; Health, Safety and Environment Policy



Environmental Management Structure

We established an environmental management structure that extends from the Board of Directors to all operational aspects:

- Board ESG Committee** ▶ Supervising the Group's work on climate actions and biodiversity
- ESG Steering Committee**
 - ▶ Coordinating and implementing environmental plans based on the guidelines set by the Board ESG Committee
 - ▶ Conducting environmental risk analyses, assessing the relevance of risks and formulating environmental objectives
 - ▶ Reviewing major environmental risks and formulating response measures
- Functional Departments** ▶ Implementing environmental proposals in accordance with respective responsibilities

Furthermore, to ensure the effective implementation of environmental tasks, we have linked the compensation of relevant Executive Directors and senior management to ESG management performance, thereby reinforcing the management's sense of responsibility towards achieving the Group's environmental management objectives.



Environmental Risk Management

We have established an environmental risk management system that includes the identification of environmental risks and formulation of corresponding response measures:

Risk Identification

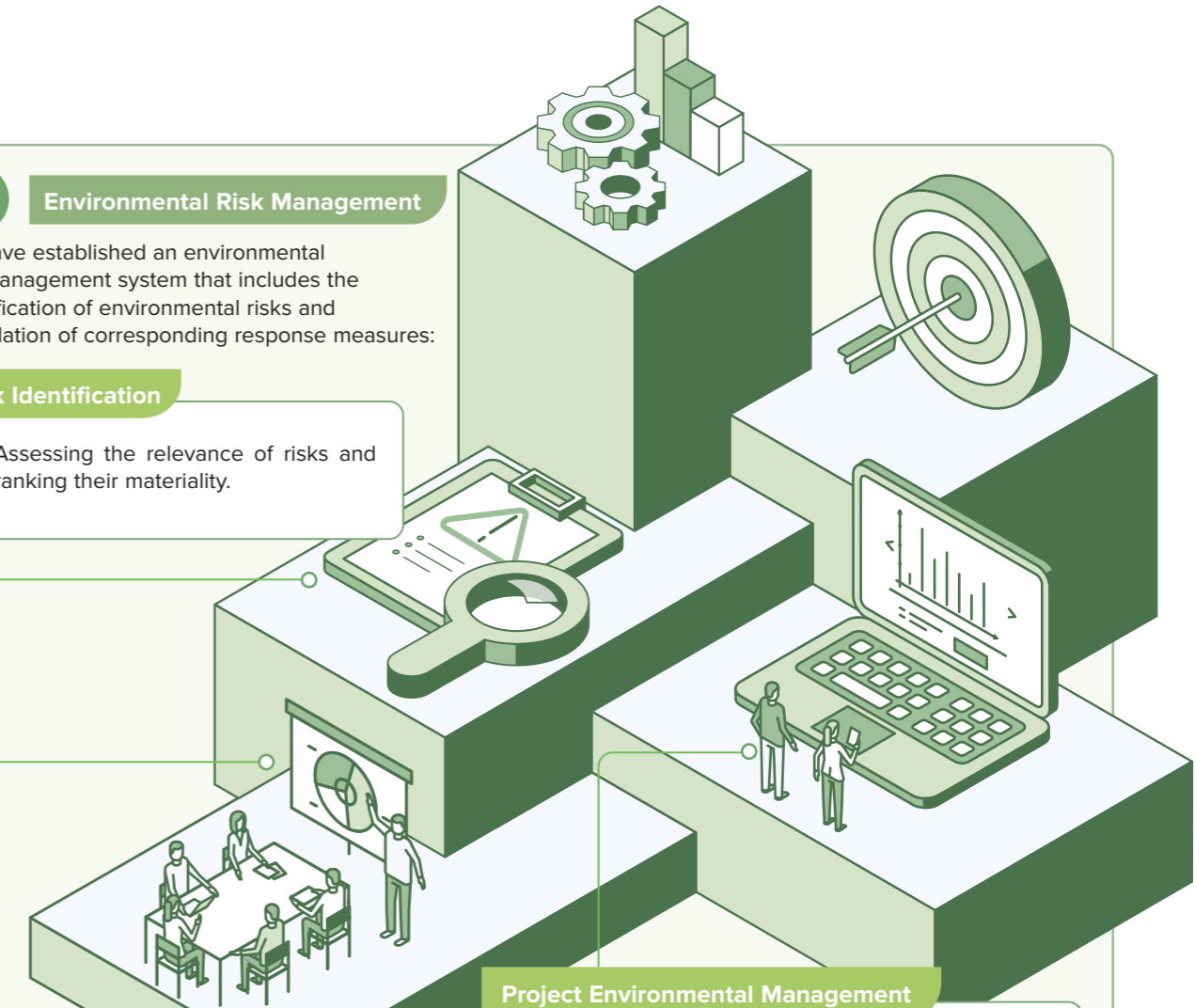
- Assessing the relevance of risks and ranking their materiality.

Risk Management

- **Strengthening environmental monitoring:** Monitor the environmental impacts of each project, and continuously refine production processes to enhance environmental protection effectiveness.
- **Environmental emergency management:** Address the potential safety impacts of extreme weather incidents on business operations, and formulate appropriate countermeasures.

Project Environmental Management

- **Planning stage:** Implement relevant legal requirements, including *Law of the People's Republic of China on Environmental Impact Assessment*.
- **Development stage:** Practise green concepts in water and electricity use, noise control and waste disposal to minimise environmental impact.
- **Operation stage:** Lawfully dispose of waste, strengthen the energy management of production processes, and explore and adopt low-carbon and efficient production techniques.



08 Lucid Waters and Lush Mountains: Endeavouring for Joint Ecological Prosperity

II. Our Environmental Management Measures

Towngas Smart Energy effectively controls various environmental elements involved in its business operations, while fulfilling the Group's environmental responsibilities as we promote business growth.



i. Responding to Climate Change

With the growing severity of global warming, immediate climate action is imperative. We have always considered responding to climate change a key part of our environmental management, continuously reducing our own carbon emissions, providing carbon reduction solutions for our value chain, and collectively building a sustainable future. In addition, with reference to the recommended disclosure framework by TCFD, we continue to share our progress and results in climate actions with various stakeholders.

Governance

The Group has established a comprehensive climate governance structure for climate-related management issues. Please refer to *Our Environmental Management System* for details.

Strategy

By referencing publicly available climate scenario information and combining it with transition and physical risk scenarios applicable to the Group, we analyse the main risks and opportunities each business unit faces under various scenarios. This approach helps us develop more robust strategies for future business development. In 2023, we formulated the following four transition risk scenarios.

Transition Risk Scenarios ³		
Scenarios	IEA Scenarios Referenced	Scenario Descriptions
Current Policies	Current Policies Scenario (CPS)	The global energy structure remains unchanged, and governments across the world no longer promote the implementation of climate change policies or relevant commitments, resulting in rising energy-related emissions and great pressure on energy security.
Stated Policies	Stated Policies Scenario (STEPS)	Governments across the world are committed to implementing existing climate change policies and reaching established goals. Due to the use of renewable energy and the boost in energy efficiency, the growth of global carbon emissions will slow down.
Below 2°C	Sustainable Development Scenario (SDS)	Based on the <i>Paris Agreement</i> , governments across the world will eventually achieve the goal of limiting global temperature rises to less than 2°C by developing new technologies, boosting energy efficiency and formulating policies.
Net Zero by 2050	Net Zero Emissions by 2050 Scenario (NZE)	Based on existing commitments and goals, governments across the world are further tightening energy-related policies to reduce carbon emissions from global energy activities and industrial production by nearly 40% between 2020 and 2030 and to reach net-zero emissions by 2050; while limiting global temperature rises to 1.5°C.

³ Refer to the International Energy Agency (IEA)'s *World Energy Outlook 2021*, in conjunction with changes in the international energy landscape and the latest national policy requirements.

Climate Change Transition Risks

Based on the assumptions under the four transition risk scenarios, we identified the potential transition risks and opportunities faced by our core businesses, and formulated response strategies.

Transition Risks/ Opportunities	Time Horizon	Descriptions	Financial Impacts	Countermeasures
Policy and Legal	Short to medium term	<ul style="list-style-type: none"> Regulatory authorities are tightening their control over the authorisation of products and services, and it is difficult to obtain business licenses that have a negative impact on the environment 	<ul style="list-style-type: none"> Decrease in revenue due to lower demand for natural gas-related products and services Increase in compliance costs (such as carbon price) Increase in insurance costs Increase in revenue from low-carbon products and services 	<ul style="list-style-type: none"> Respond to government calls, actively develop low-carbon products and services, and promote the low-carbon transformation of the value chain
Technology	Medium to long term	<ul style="list-style-type: none"> Unsuccessful investment in the transition to low-emission technologies, incurring additional costs New low-carbon technologies are widely applied, leading to market restructuring 	<ul style="list-style-type: none"> Investments in new technologies lead to higher R&D expenditures Energy efficiency improvements lead to operating costs reduction 	<ul style="list-style-type: none"> Focus on research and development of low-carbon technologies by leveraging patented innovations Promote the development of low-carbon technologies
Market	Medium to long term	<ul style="list-style-type: none"> Fluctuations in operating costs caused by changes in fossil fuel prices Market changes due to changes in consumer behaviour 	<ul style="list-style-type: none"> Decrease in revenue due to lower demand for natural gas-related products and services Changes in raw material prices lead to increased operating costs Increase in revenue generated from low-carbon products and services 	<ul style="list-style-type: none"> Develop new businesses and shift to be a multi-energy supplier Reduce greenhouse gas emissions during operational processes
Reputation	Long term	<ul style="list-style-type: none"> Investors may give up investing in fossil fuels and turn to investing in low-carbon businesses 	<ul style="list-style-type: none"> Increase in financing opportunities Increase in costs of communication activities 	<ul style="list-style-type: none"> Establish open and transparent communication channels, ensure disclosure transparency, and regularly publish the Group's climate action reports


08 Lucid Waters and Lush Mountains: Endeavouring for Joint Ecological Prosperity

Climate Change Physical Risks

For physical risks, we employ the three Representative Concentration Pathways (RCP 2.6, RCP 4.5, and RCP 8.5) proposed by the Intergovernmental Panel on Climate Change (IPCC). These pathways model scenarios ranging from a global temperature rise of 1.5°C or below to a rapid increase of 4°C, identifying significant physical risks to the Group's business and assets. In addition, we assessed the potential impacts of physical risks based on the occurring probability and impact magnitude of risk events, and formulated targeted countermeasures.

Physical Risks	Time Horizon	Descriptions	Financial Impact	Countermeasures
Acute risks	Medium term	<ul style="list-style-type: none"> Rainstorms Increase in the frequency and intensity of river floodings Increase in the frequency and intensity of typhoons 	<ul style="list-style-type: none"> Increase in costs/decrease in revenue due to asset damage Increase in costs of climate resilience measures Threat to employee health and safety Increase in insurance premiums and claims costs 	<ul style="list-style-type: none"> Improve the resilience of infrastructure to withstand climate change risks Strengthen crisis management plans to bolster the Group's emergency response capabilities for extreme climate incidents
Chronic risks	Long term	<ul style="list-style-type: none"> Temperature rise and extremely high temperature 	<ul style="list-style-type: none"> Decrease in revenue due to lower demand for natural gas-related products and services Increase in operating costs due to energy consumption Threat to employee health and safety 	<ul style="list-style-type: none"> Develop new businesses and shift to be a multi-energy supplier


Based on the latest analysis of climate change impacts on the business of our parent company, HKCG, we conducted a stress test of the Group's potential climate impacts. The assessment covered the financial impacts concerning the Group's business development, asset operation, supply chain stability, and revenue growth. These findings help the Group better appraise and manage the potential impacts of climate risks across its businesses, while advancing its renewable energy business to support the low carbon transition. In the future, we will continue to monitor domestic and international forecasts of climate risks, update the Group's climate strategy in a timely manner, and optimise our response measures.




Revenue in renewable energy business accounts for total revenue in 2023 approximately **5%**

Risk Management


The Group has established a climate risk management procedure based on TCFD recommendations to systematically identify, assess and manage climate-related risks.



Risk Identification:
The Group identifies climate risks and opportunities related to its assets and products/services through the application of internationally recognised third-party climate models and discussions with relevant business units. In addition, we review and update climate-related risks at least once a year to ensure the Group's ability to manage climate risks.




Risk Assessment:
The Group identifies climate risks and opportunities that have a significant impact on its business operations based on scenario analysis, computer simulation analysis and other methods, and ranks them by importance.




Risk Response:
The Group develops climate resilience measures (project planning and design stage) and climate risk response measures (operation stage), and conducts regular evaluation and optimisation.

Climate Indicators and Targets

We are advancing the formulation of carbon emission reduction targets, actively responding to the national dual carbon policy, and are committed to achieving carbon neutrality by 2050. In addition, the Group also follows the medium-term carbon reduction targets of its parent company, HKCG, and sets an example in facilitating the low-carbon transformation.



- Reduce operational greenhouse gas emissions (Scope 1 and 2) by 10% by 2025 or earlier, with 2020 as the benchmark year.
- Through initiatives such as coal-to-gas conversion, solar photovoltaic power generation and improvements in energy efficiency, we aim to achieve an annual reduction of 10 million tonnes in greenhouse gas emissions.

 Mid-term carbon reduction targets of our parent company

Our greenhouse gas emissions in 2023 are set out in the table below:

	Greenhouse Gas Emissions (Scope 1)	Greenhouse Gas Emissions (Scope 2)	Greenhouse Gas Emissions (Scope 1 & 2)	Greenhouse Gas Emission Intensity	
	tonnes CO ₂ e	tonnes CO ₂ e	tonnes CO ₂ e	tonnes CO ₂ e per HK\$100 million	tonnes CO ₂ e per company
Utility business – gas segment	10,461.7	31,340.2	41,801.9		
Renewable energy business	61,493.7	1,044.4	62,538.1	525.9	1,185.7
Total greenhouse gas emissions	71,955.4	32,384.6	104,340.0		

Note: During the year, we used the financial control approach to determine our scope of statistics for calculating emissions. Specifically, we incorporated 100% of the relevant data of project companies owned 50% or more by us, while the relevant data of those project companies owned less than 50% by us were excluded; Scope 1 and Scope 2 greenhouse gas emissions were included.

08 Lucid Waters and Lush Mountains: Endeavouring for Joint Ecological Prosperity

In addition to our ongoing disclosure of Scope 1 and Scope 2 carbon emissions, Towngas Smart Energy has also begun reporting Scope 3 carbon emissions⁴ starting from this year. This initiative aims to provide a comprehensive assessment of our operational carbon emissions across different stages of the value chain.

Category	Greenhouse Gas Emissions
1. Purchased Goods and Services	1,561,238 TONNES CO ₂ e
11. Use of Sold Products	10,813,022 TONNES CO ₂ e

Climate Action

We have implemented various measures in our climate action efforts, including strengthening our own energy management, advancing methane emission reductions in the gas segment, developing renewable energy businesses, and assisting customers in carbon reduction through digital technologies, so as to facilitate the low carbon transformation.

Strengthening Energy Management

Regarding energy management, we actively eliminate outdated equipment and craftsmanship, introduce energy-saving and environmentally-friendly technologies, monitor the use of energy-consuming equipment with special statistical records, and regularly review the energy consumption of each process.

Focus on Energy Consumption Transformation

Heating projects using gas sources

Annual total energy sales volume reached **788 MILLION kWh**, reducing carbon dioxide emissions by approximately **227,800 TONNES** compared to traditional coal-fired boilers.

Heating projects using non-gas sources (including air energy and biomass energy)

Annual total energy sales volume reached **948 MILLION kWh**, reducing carbon dioxide emissions by approximately **446,600 TONNES** compared to traditional coal-fired boilers.

Promoting Methane Emission Management

We are committed to reducing greenhouse gas emissions generated in business operations, integrating methane emission management with operational safety, and taking various measures to accurately reduce methane leakage and emissions.

100%
Rate of self-detected leakage in transportation, distribution and storage facilities

0.38
Leakage index for a 100-kilometre pipe network

Key measures to reduce methane emissions:

Production, Transmission and Distribution

- Conduct annual inspections of pipelines to monitor leakage risks in a timely manner
- Accelerate the renovation and upgrade of old pipelines to improve transmission efficiency
- Promote new leak detection technologies such as Vehicle-Canine Partnership and acoustic imaging
- Carry out phased-array ultrasonic testing of PE joints

Customers

- Renovate old and hazardous facilities
- Promote the use of smart gas meters, high-efficiency gas stoves and other new equipment
- Develop health and safety index schemes for indoor and outdoor risers and classify safety hazards of risers

Wei Yuan Project: Research and Practice on Methane Emission Control

In order to realise the Group's carbon reduction strategy, we carried out this project in the gas emergency peak shaving and distribution facility based in Wei Yuan. The Group incorporated methane emission control strategies in advance during the design stage, and studied and designed methane emission control measures in different project stages to put methane emission control into practice.

- Established infrastructure such as multi-functional transmission and distribution centres, large-scale natural gas liquefaction units and storage tanks
- Conducted in-depth studies of methane emission accounting methods in different project stages
- Considered 48 methane emission control measures in the design stage

The project ultimately achieved an annual methane emission reduction of **63.7 TONNES**, equivalent to a reduction of **1,785 TONNES** of carbon dioxide emissions.

⁴ Refer to utility business-gas segment only

08 Lucid Waters and Lush Mountains: Endeavouring for Joint Ecological Prosperity

Developing Renewable Energy

In response to customers' energy-saving needs, we innovate clean energy solutions including hydrogen energy, solar energy and energy storage, to diversify our energy supply and facilitate the transition to low-carbon energy. In addition, the Group uses its own renewable energy technology to reduce the power purchased from external sources and promote its green and low-carbon transformation.

Highlights of Renewable Energy Development



- The self-generated and self-consumed renewable energy power reaching a total of **262,926.4 kWh** during the year
- Laid out more than **1,000** renewable energy projects; signed contracts in an aggregate amount of **2.96 GW** photovoltaic capacity
- Reducing approximately **2,000,000 TONNES** of carbon dioxide emissions upon full operation and at full capacity



- The Group actively develops the renewable energy business that includes photovoltaics, energy storage, battery charging and swapping stations, and integrated energy services for industrial and commercial customers.



Applications of Renewable Energy

Photovoltaic Power Station Driving Energy Saving and Efficiency Improvement

We improve the solar energy utilisation efficiency of photovoltaic power plants through digital means:

- Use self-cleaning technology and intelligent control technology to reduce energy consumption in cleaning and maintenance;
- Develop a photovoltaic cloud system that accurately outputs cleaning requirements and reduces unnecessary energy consumption through intelligent cleaning diagnostic algorithms.

As of the end of 2023, Towngas Smart Energy PV cloud has been connected to **383** photovoltaic power plant projects.



④ Cleaning Robot



④ PV Cloud System

Hydrogen Energy Sensors Supporting the Rapid Growth of the Hydrogen Energy Industry

The hydrogen energy sensor developed by the Towngas Energy Academy, in collaboration with various business partners including the Tsinghua University, is a micro-electromechanical system that provides strong technical support for hydrogen blending in natural gas. The sensor has the ability to:

- Provide leak alarms in traditional hydrogen-related premises;
- Perform real-time monitoring of hydrogen concentration in energy-consuming equipment, such as hydrogen fuel cell vehicles/lithium battery energy storage.



④ Contract signing ceremony of the Hydrogen Energy Sensor Project



④ Hydrogen Energy Sensor

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Digital and Intelligent Service Empowerment

In response to our customers' demand for clean energy development and utilisation, and leveraging our own energy expertise, we have introduced a range of tailored services to empower various industry partners to achieve their carbon neutrality goals.

Highlights of Digital and Intelligent Services

We have invested in construction across **23** provinces, autonomous regions and municipalities:

Developed **124** zero-carbon smart industrial parks



Energy Services Tailored to Achieve Carbon Neutrality Goal

Contracted Energy Management Services: We assist our customers in saving energy and reducing emissions through digital and intelligent energy-saving transformation, power engineering construction and energy supply system maintenance.



Opening Ceremony of Huanggang Central Hospital Intelligent Operation and Maintenance Centre

The overall energy saving rate of this project is approximately **14%**



Reducing carbon emissions by **1,000 TONNES** every year



Energy Trusteeship Services: We optimise and transform customers' original computer rooms to build energy-saving smart platforms.



Energy Trusteeship Service related facilities



The overall energy saving rate of the project is over **10%**

Reducing carbon emissions by more than **200 TONNES** every year



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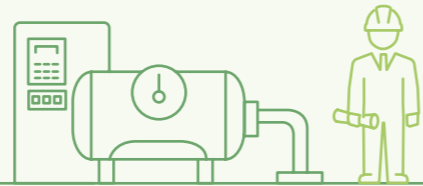
Energy Centre Construction Services: We optimise and integrate resources, such as electricity, natural gas, air energy and steam, to improve energy efficiency.



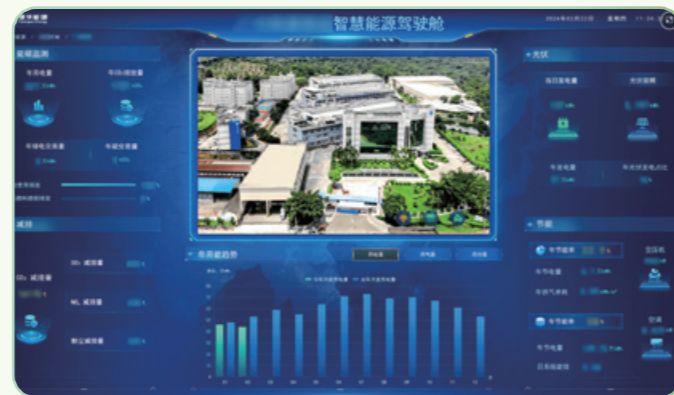
④ Energy centre construction service project



Annual reduction of standard coal: **1,129 TONNES**
Carbon emissions reduction: **2,868 TONNES**



Digital Services for Zero-Carbon Factories: We provide solutions for zero-carbon factories and conduct unified scheduling through smart energy management platforms.



④ Zero-carbon factory digital management platform

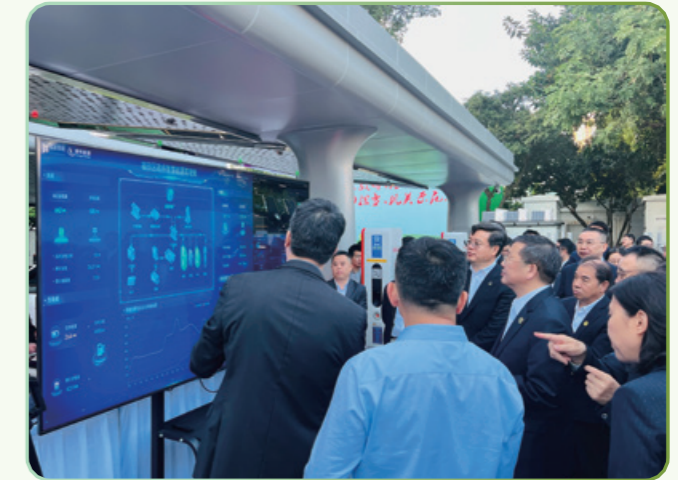
On the basis of digital and intelligent services, we collaborate with the government and other enterprises to further explore cutting-edge technology application scenarios and help build a low-carbon business ecosystem.

Supporting the Establishment of the First Public Institution's Virtual Power Plant in Shenzhen

Towngas Smart Energy has built the first public institution's virtual power plant in Shenzhen, intelligently dispatching power according to terminal demand.

Aggregate load resource of **3.6MW**

Real-time adjustable capacity of **300kW**



④ Government officials visiting the virtual power plant

Tera Planet 2.0



④ Launch of Tera Planet 2.0

In 2023, Towngas Smart Energy and Tencent Cloud jointly launched an ecological platform of Towngas Smart Energy – Tera Planet 2.0. The platform brings together business applications including photovoltaics, energy storage, charging and swapping and controllable load, to support intelligent management of energy data in industrial parks and to facilitate emission reduction plans in green projects.



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ii. Resource and Emissions Management

Water Resource and Wastewater Management

We place great emphasis on water resource management, and are actively promoting innovative water-saving measures to reduce water consumption. The Group accesses water from the municipal network, without encountering any problems in its usage. We also place a high emphasis on wastewater management, requiring each project company to strictly observe the *Management Guidelines for Environmental Protection* of the Group to ensure compliant wastewater discharge. Our wastewater mainly comprises production wastewater and domestic wastewater from operational processes.

Wastewater Treatment Measures



Sorting:

Production and domestic wastewater are processed separately.



Emergency Plans:

Emergency facilities such as sumps and fire water tanks are constructed in accordance with national standards to prevent environmental risks resulting from uncontrolled discharge of wastewater.



Treatment and Recycling:

The wastewater treatment plant processes all wastewater, with the majority of the treated grey water being used for factory landscaping, while the remaining treated grey water discharged into the municipal network.

Waste Management

We manage waste in a responsible manner and encourage all project companies to properly handle different types of waste.



Non-hazardous Waste

Comprehensively utilised as much as possible, progressively increase the proportion of recycling and reuse of waste where possible, and achieve waste detoxification, recovery and reduction.



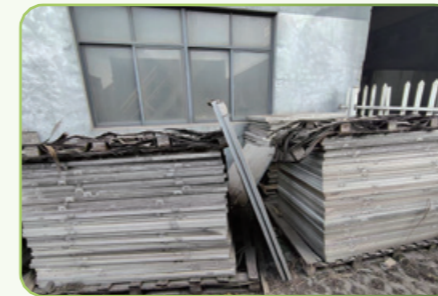
Hazardous Waste

Entrust qualified waste management agencies for detoxification to avoid harm to the environment.

100%
waste
recycling rate



Waste Recycling and Reuse



④ Recycling of waste solar cells



④ "Safety and Environmental Protection Journey with Youth" – Waste Transformation Project



Emissions Management

We stringently implement national ecological and environmental protection requirements, and continually improve our emissions management to minimise the pollution caused by emissions from our business operations. We manage emissions from the source by advocating for project companies to phase out outdated equipment, optimise process flows, replace coal-fired boilers with gas boilers, and adopt energy-saving technologies such as waste heat recovery to reduce emissions. In addition, we treat all emitted gases before release to ensure they meet the local environmental standards of our operating sites.

iii. Green Ecological Development

Green Office

In our daily office operation, we actively practise green concepts by implementing green initiatives to reduce waste and resource consumption. We have practised green office concepts by adopting smart lighting systems, encouraging online meetings and implementing waste sorting. In the future, we will continue to transform our working habits in a green and carbon-efficient manner via the following aspects:



Policy formulation

We compile internal guidelines for employees regarding daily activities such as electricity and water usage, paper consumption and waste sorting.



Reward and penalty measures

We acknowledge and reward individuals or departments with outstanding contributions in green office practices. Conversely, we require individuals or departments with negative impacts to take corrective actions.



Enhanced promotion

We regularly publish various green office measures and advisory posts, and organise team-building activities with environmental focuses to raise employees' awareness of environmental protection.

08 Lucid Waters and Lush Mountains: Endeavouring for Joint Ecological Prosperity

Our Internal Carbon Platform

We independently developed and launched an inclusive carbon platform for employees. The platform covers two major scenarios: low-carbon living and green office. Employees can earn "Green Energy" through environmentally friendly actions such as walking to work and online meetings, which can be used to redeem activities such as tree planting.



Approximately **10,000** employees have joined the platform

Creative Design Competition

We organised a poster design competition to promote the platform and encourage more colleagues to use it.



Promotes a Low-carbon Work Habit

We encouraged more employees to share their achievements of participating in the platform on social media, driving more people to lead a low-carbon lifestyle.



Promoting Golden Ideas Activity

We collected innovative, replicable and implementable ideas from our employees to promote the platform and corporate culture, with the aim of popularising the adoption of a green culture.



Joining Hands for Environmental Protection

In addition to promoting the implementation of its own environmental protection strategy, Towngas Smart Energy is also actively cooperating with various business partners regarding environmental protection, so as to create a sustainable business ecosystem together.

Strategic Partnerships with Other Parties



Industry-University-Research Collaboration

The Towngas Energy Academy and the Shenzhen Institute of Advanced Technology-Chinese Academy of Sciences jointly established the "Joint Innovation Centre for High-Efficiency Energy Storage".



Formulation of Industrial Standards

In 2023, we jointly issued the *Standards of Zero-Carbon Smart Industrial Parks: Energy Intensive Industries* with the Energy Investment Committee of the Investment Association of China. Based on our own experience, we provided recommendations for the sustainable development of zero-carbon smart industrial parks.



Facilitating the Low-Carbon Transformation of the Value Chain



Since 2022, we have been offering various clients carbon consulting services and collaborating with key partners in the value chain to achieve science-based emission reduction targets.

Verified the carbon footprint of **50** suppliers

Formulated science-based carbon reduction targets for **10+** suppliers

Supported **5+** suppliers to initiate energy conservation and emissions reduction activities



© LONGi Green Partner Empowerment Programme

08 **Lucid Waters and Lush Mountains: Endeavouring for Joint Ecological Prosperity**



Moving to a New Phase and Advancing TNFD Assessment

As a member of the TNFD Forum, our parent company, HKCG, and Towngas Smart Energy became the first Group in Hong Kong to adopt the TNFD beta v0.2 framework for biodiversity risk assessment in 2022. In 2023, with reference to the TNFD framework, we further assessed our natural capital to grasp our reliance and potential impact, as well as disclosed our efforts and achievements in managing natural risks and opportunities.

Feature Story

i. Governance

To ensure that the Board of Directors can keep abreast of the latest developments of nature-related issues, we engaged external experts to conduct training on the development of the latest regulatory requirements, TCFD and TNFD during the year. The Board of Directors discussed the possible countermeasures that the Group may take to ensure the effectiveness of its strategies.

ii. Risk Assessment

We have carried out natural risk assessments based on the TNFD framework and the LEAP (Locate, Evaluate, Assess and Prepare) approach, consisting of four steps:

LEAP Risk Assessment Approach



- Locate** business interface with nature
- Evaluate** business dependencies and impacts on nature
- Assess** natural risks and opportunities
- Prepare** responses to nature-related risks and opportunities and relevant reports

In the future, we will continue to update our risk assessment approach based on our actual business circumstances, and evaluate material natural risks and opportunities.

iii. Management Strategies

We strictly follow the *Environmental Policy* updated in August 2023 to strengthen our adaptability to the ecosystem and resilience to natural risks:

- New environmental commitment: Setting targets to reduce environmental impacts;
- New biodiversity commitment: Working towards no net loss and striving to net positive impact;
- Designating CEO of the Group (Managing Director of HKCG) to oversee the implementation of this policy.

To fulfil our latest commitments to nature and biodiversity, we have adopted the “Mitigation Hierarchy” model, which focuses on reducing, restoring and offsetting interference and impact on biodiversity.

- In the planning phase, we actively avoid operating in areas rich in biodiversity;
- We conduct biodiversity impact assessments for projects in ecologically significant sites;
- We commit to not cutting down trees and respecting the rights of indigenous communities within the Group’s operational boundaries.



Next Step:

In 2024, the Group, in collaboration with its parent company, will partner with the Ocean Park Conservation Foundation Hong Kong to sponsor **24** university students for visiting **11** sites recognised for their significant biodiversity value. Guided by local scientific research teams, the students will engage in assessments and studies on endangered species and their population sizes.

Through this project, we strive to instill the value of biodiversity in the younger generation, and enhance the Group’s contributions to biodiversity conservation through practical actions.

08 **Lucid Waters and Lush Mountains: Endeavouring for Joint Ecological Prosperity**



iv. Risk Management

Through our pilot biodiversity assessment, we discovered the significant connection between water use and the Group's dependence on the ecological environment. To enhance our capability in managing risks related to water resources, we have initiated further review of our current water management practices, and pinpointed the Group's material risks in this area.



Pressure on Water Resources

Against the backdrop of global pressure on access to freshwater resources, ineffective water resource management, coupled with employees' lack of awareness and other issues, may lead to a decrease in our water efficiency and a substantial increase in our operating costs.

In order to effectively respond to the Group's water-related risks, we have carried out various water conservation efforts while exploring the possibility of water recycling and reuse.



Water-saving

- Regularly conduct inspection and maintenance of water supply and water use equipment to avoid unnecessary consumption of water resources due to equipment problems;
- Intelligently control the cleaning frequency for photovoltaic power stations to improve water efficiency while maintaining effective cleaning;
- Install water flow control equipment and sensors in necessary business scenarios to monitor water consumption in real time and maintain it within a reasonable range.



Recycling and Reuse

- Where feasible, install rainwater collection tanks in qualified office premises and use rainwater for cleaning and irrigation;
- Introduce closed-loop water circulation systems in certain business scenarios to filter and reuse water resources;
- Encourage employees to explore potential opportunities to reuse water resources and practise the concept of water circularity.



In the future, we will continue to assess our operational dependence, impacts and risks on water resources in greater depth, while setting appropriate targets to manage water use and conservation efforts.



09

UNWAVERING COMMITMENT TO ENHANCING THE VALUE CHAIN

Towngas Smart Energy is committed to being a builder of talent pipeline, a protector of customer rights, a collaborator with business partners, and an exemplary corporate citizen. Adhering to the principles of sustainable development, we listen carefully to the opinions of every stakeholder in our value chain.



3 GOOD HEALTH AND WELL-BEING	4 QUALITY EDUCATION	5 GENDER EQUALITY	8 DECENT WORK AND ECONOMIC GROWTH	10 REDUCED INEQUALITIES	17 PARTNERSHIPS FOR THE GOALS
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RMB 917.6 training costs per capita	96% customer satisfaction rate	96.5% of our suppliers have conducted environmental/social impact assessment
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09 Unwavering Commitment to Enhancing the Value Chain

I. Being a Builder of Talent Pipeline

Towngas Smart Energy is fully committed to safeguarding the legal rights and interests of our employees. We strive to optimise the human resources management system and innovate the human resources management model to comprehensively promote our talent development strategy. Our goal is to motivate our employees, enhance their satisfaction and sense of belonging, and share the fruits of the Group's development with our staff.



i. Compliant Employment

In strict compliance with the labour laws and regulations of the regions where we operate, the Group has formulated the *Towngas Smart Energy Employee Handbook* and other policies, setting out clear guidelines in relation to human resource matters such as employee recruitment, and prohibition of child labour and forced labour. In addition, we further promote the digitalisation of our human resources management. During the year, certain subsidiaries of the Group implemented the human resources management system, enhancing efficiency in human resources management and providing technical support for business development.

During the year, we have diversified our recruitment channels to include campus recruitment and internal recruitment.



Towngas Smart Energy on Campus

Campus Recruitment

Campus recruitment and mutual-selection job fairs in **41** schools

Internal Recruitment

83 employees recruited through the Group's internal recruitment

ii. Diversity and Equal Opportunities

The Group is committed to creating a diverse and fair working environment by establishing communication channels and enhancing rights protection to eliminate all forms of discrimination for any reason, thus providing equal development opportunities for all employees.

Anti-Discrimination and Diversity

Anti-Discrimination

As a responsible corporate citizen, the Group supports the *Universal Declaration of Human Rights*, *International Human Rights Conventions* and other initiatives, and upholds the principle of equal opportunities in employment. We implement meritocracy to eliminate any bias or discrimination due to age, gender, nationality, race, religious belief, health status or other differences. We are continuously working towards standardising our complaint and grievance raising and handling procedures, aiming to foster an equal and inclusive work environment.

In addition, employees are encouraged to report any case of non-compliance such as discrimination, harassment, or any dissatisfaction or injustice at work. We guarantee that all internal complaints will be rigorously handled and thoroughly investigated, ensuring absolute confidentiality for the information provided in the complaints. Neither the complainant nor any witnesses will be subject to any disciplinary action for taking part in the complaint and grievance procedures.



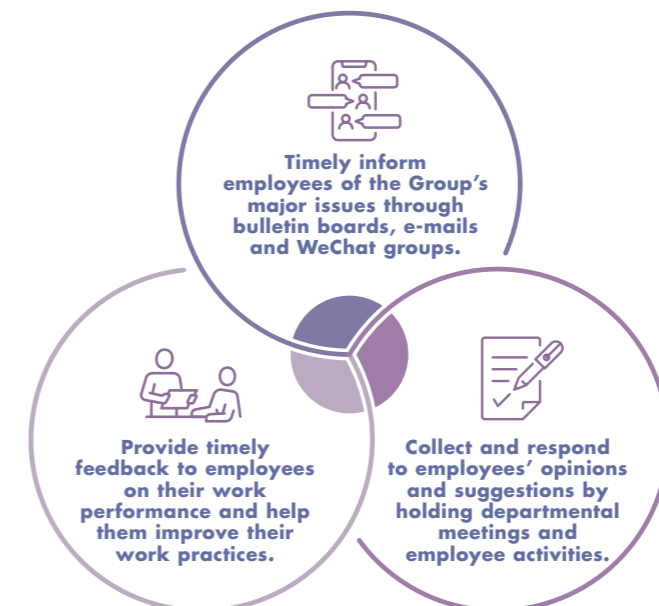
Diversity

Devoted to building a diverse talent pool, we offer all employees equal and broad development opportunities.



Employee Communication and Engagement

The Group places a high emphasis on communication with employees and respects their freedom of association. We have streamlined the internal communication channels and standardised the internal complaint procedures to address problems they may encounter at work and in life. We have established the following mechanisms and channels for communication:



In 2023, the Group conducted employee satisfaction surveys to all employees from three perspectives, namely administrative management, administrative services and corporate culture.

09 Unwavering Commitment to Enhancing the Value Chain

Employee Engagement Initiatives

Active Physical Activity: Strengthening the Body

During the year, we organised various recreational activities, including badminton, table tennis and yoga, to encourage employees to actively participate in sports activities in their leisure time.

148 recreational activities
938 participants



2023 Towngas Smart Energy Badminton Friendly Tournament



Table Tennis Match



Yoga Class

Outdoor Sports: Relaxing Body and Mind

During the year, we organised a wide range of outdoor sports activities for our employees to enjoy and relax.



Outdoor Activities



Team Building and Employee Care Activities

During the year, we organised special employee care activities themed “Embracing Positivity”, which included four series, namely “My Healthy Life”, “My Low-Carbon Life”, “My Happy Life”, and the “Employee Assistance Programme”.

Over **700** employees participated



“My Healthy Life” activities



“My Low-Carbon Life” activities



“My Happy Life” activities



“Employee Assistance Programme” – award ceremony of the scholarship scheme for employees’ children



14 applicants
Each sponsored
RMB10,000

09 Unwavering Commitment to Enhancing the Value Chain

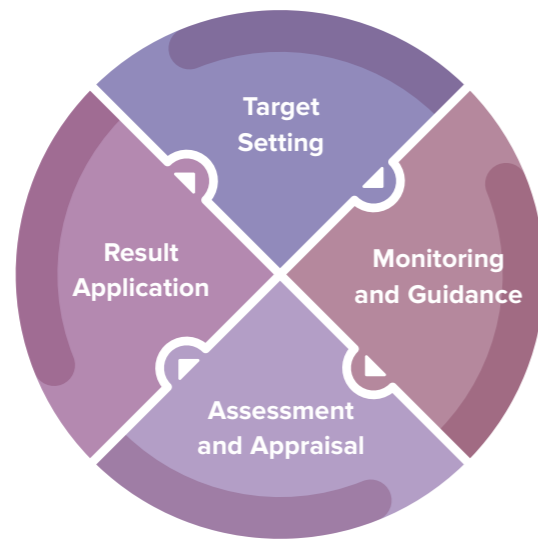
iii. Remuneration and Welfare

The Group places significant emphasis on the salaries and benefits of employees, and continuously refines its employee performance and salary management mechanisms, providing employees with competitive salaries and robust protection.

Performance and Salary Management

Performance Management

We follow the *Towngas Smart Energy Operation Guidelines on Corporate Performance Management* issued by the Group to effectively promote corporate strategic objectives and the personal development of our employees through a closed-loop management system consisting of four major elements.



In 2023, all businesses of the Group enhanced their existing performance appraisal systems from different dimensions according to actual business needs.

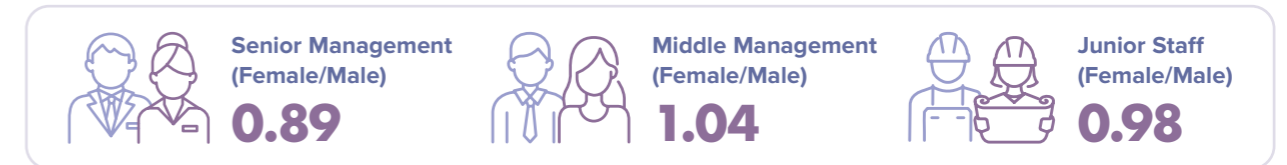
Utility Business
Two performance assessments are conducted annually, aiming to stabilise the Group's core business, promote the development of new businesses, and contribute to the Group's ESG performance.

Renewable Energy Business
A general competency/ability/performance evaluation has been introduced to expand the evaluation scope, and comprehensively benchmark employee performances and achievements internally. The "360-degree evaluation" mechanism has also been applied to the talent pipeline programme, and the appraisal results will be reviewed on a monthly basis.

Salary Management

We adhere to the principle of equal pay for equal work, and ensure that an employee's salary matches his/her rank but is not affected by gender, age, nationality, ethnicity or other issues. At the end of each year, we conduct a salary review and determine an employee's salary for the next year according to his/her performance, the Group's operating efficiency, and market conditions, ensuring a scientific and fair adjustment of salary and equitable distribution of compensation.

Ratio of Salary Between Female and Male Employees⁵:



Welfare and Benefits

In addition to paying Insurance and Housing Fund, as well as providing statutory public holidays for all employees in accordance with the laws, the Group provides a variety of commercial insurances, paid leave and other benefits to enhance the well-being of employees.

	<p>Social Security</p> <ul style="list-style-type: none"> Endowment Insurance Medical Insurance Unemployment Insurance Maternity Insurance Employment Injury Insurance Housing Fund
	<p>Commercial Insurance</p> <ul style="list-style-type: none"> Accidental Death/Disability Accidental Medical Treatment Hospitalisation Allowance Critical Illness Outpatient/Inpatient Medical Treatment Death Due to Illness Gynaecological Diseases Pregnancy
	<p>Leave and Holidays</p> <ul style="list-style-type: none"> Statutory Public Holidays Annual Leave Work Injury Leave Medical Leave Full-pay Examination Leave Special Leave (Marriage Leave, Maternity Leave, Paternity Leave, Compassionate Leave) Full-pay Sick Leave
	<p>Flexible Working Hours</p> <p>Our employees have the flexibility to choose to start their working day at 8:30, 9:00, or 9:30. The off-duty time can be flexibly adjusted correspondingly.</p>
	<p>Other Benefits and Facilities</p> <ul style="list-style-type: none"> Annual Health Check-ups Subsidies for Mobile Phone Plan Expenses Festive Benefits Recreational Activities Nursery Rooms Childcare Facilities

⁵ Refer to utility business-gas segment only

09 Unwavering Commitment to Enhancing the Value Chain

Employee Welfare and Benefits

Health Screening

The Group organises annual health check-ups for employees to monitor their health status. During the year, we offered employees a selection of over a thousand health screening centres and public hospitals.



Health screening centre

Festive Benefits

Upholding a people-oriented corporate culture, the Group actively organises welfare activities for employees during major festivities, primarily including the provision of electronic vouchers or customised hampers, to enhance employees' sense of identity and belonging to the Group.



Festive greetings

Mental Health Hotline

To support the mental and physical well-being of our colleagues, the Group has launched the Towngas Smart Energy Mental Health Hotline to help employees prevent, tackle, and alleviate various occupational mental health issues and crises.

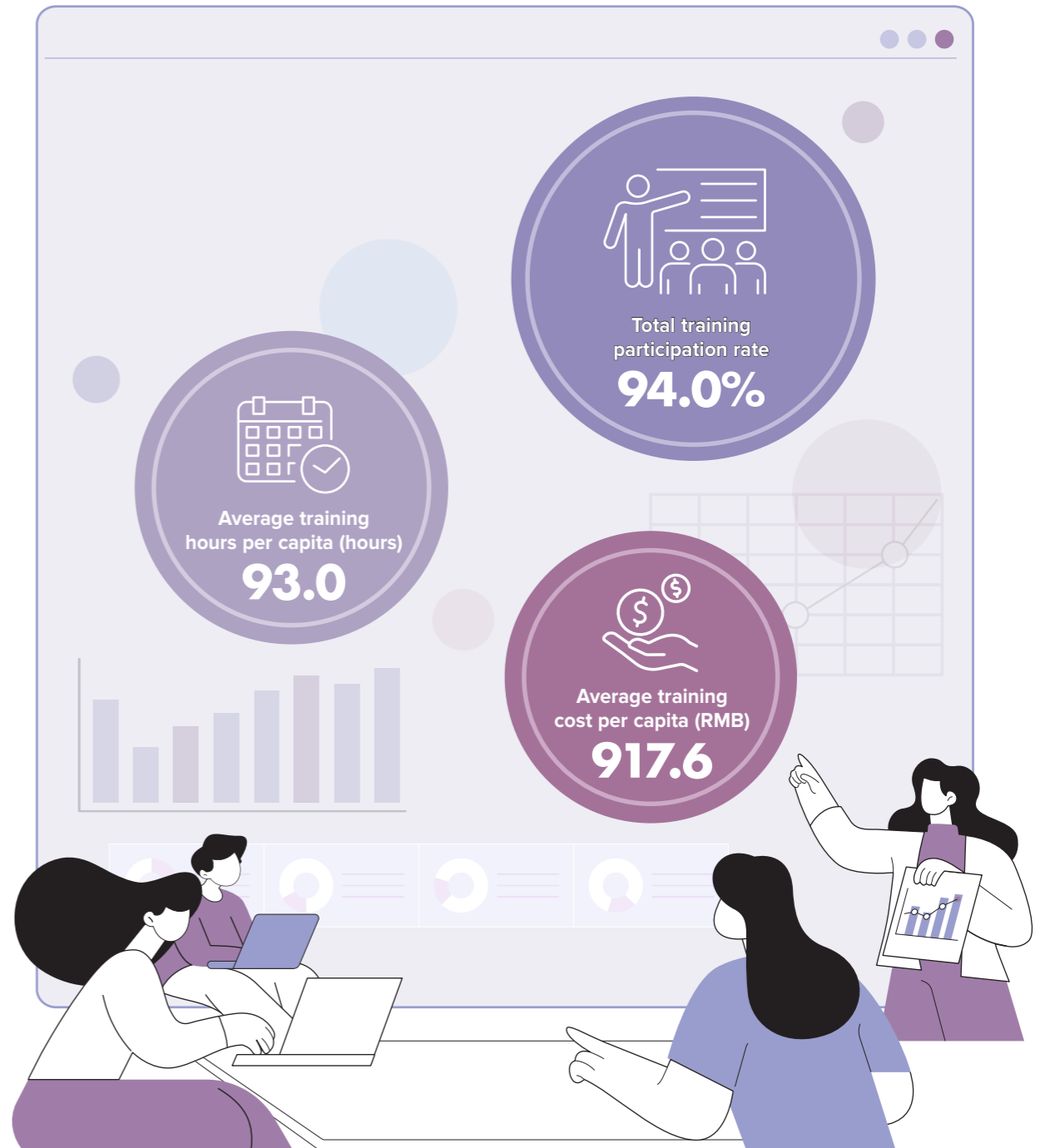


54 individuals served
Totalling **58.5 HOURS**



iv. Training and Development

The Group consistently supports the development and growth of its employees. We continuously optimise our system for the development and training of professional talent, and create a diversified model for talent cultivation. In addition, we have introduced a variety of talent development programmes, covering technical training, self-management, leadership, diverse career development paths and more.



09 Unwavering Commitment to Enhancing the Value Chain

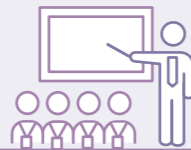
Professional Talent Training

Ignite Programme



④ Graduation ceremony of the Ignite Programme

As a specialised talent development programme for potential general managers of zero-carbon smart industrial parks, this programme is designed to help them in transitioning into new roles and empowering them to establish more exemplary zero-carbon smart industrial parks.



Industry-specific Professional Training in the Towngas Shandong Training Institute

The Towngas Shandong Training Institute is committed to refining its training approach, and offers continuing education courses to individuals employed in the gas industry to bolster their professional qualifications in the sector.



④ Professional training in the Towngas Shandong Training Institute



Skilled Talent Exchange Programme

Through arranging for technicians to attend trainings in Hong Kong, the programme aims to help participants understand the differences in policies, regulations, and technical standards between the two places, which can facilitate the mutual recognition of qualifications for gas technicians, laying a solid foundation for the mobility of technical and skilled talent.



④ Skilled talents exchange



Other Training Programmes

Online Learning via Towngas Mobile Academy

During the year, our gas segment conducted a variety of training activities through the Towngas Mobile Academy. We are committed to transforming the Towngas Mobile Academy into a comprehensive, diverse, and systematic platform for learning, facilitating the continuous development of our employees at all stages of their careers.



④ Learning Interface of the Towngas Mobile Academy



New learning programmes
860



Total learning hours
422,034



Academy users
20,701



Log in times
1,287,760



Average training hours per capita
19.5

Huangpu New Employee Induction Training

For new recruits, the Group has launched the Huangpu New Employee Induction Training programme. This training programme is held every three months, with each session accommodating 40 to 50 participants. It is designed to aid new employees in quickly familiarising themselves with the corporate culture and working environment.



Around **200** participants

09 Unwavering Commitment to Enhancing the Value Chain



Talent Pipeline Scheme

The Talent Pipeline Scheme serves as the cornerstone for nurturing the Group's management talent pool, dedicated to identifying young leaders who show potential for growth. Throughout the scheme, participants are provided with personalised development plans. These plans are specifically tailored to meet the talent's needs for enhancing their management capabilities at different stages of development.

Pursuit of Light Programme

The Pursuit of Light Programme is a comprehensive training programme for all personnel in the gas segment of the utility business. Revolving around the yearly theme of "Evolving Thought Processes", the programme unfolds across four quarterly learning themes: "Logical Thinking At Work", "Structured Thinking", "Win-Win Communication", and "Leadership Thinking".



① Pursuit of Light Programme – kick-off training session



② Pursuit of Light Programme – exchange and sharing session

Spotlight Programme

Aimed at the core members of the headquarters and regional offices in the gas segment of utility business, the Spotlight Programme offers a total of 30 mandatory and 20 elective courses.



① Poster of the Spotlight Programme



② Offline sharing session of the Spotlight Programme

Radiance Programme

The Radiance Programme is a leadership training programme for high-potential talent within the Group. Each session consists of three phases to ensure a gradual cultivation of leadership thinking.

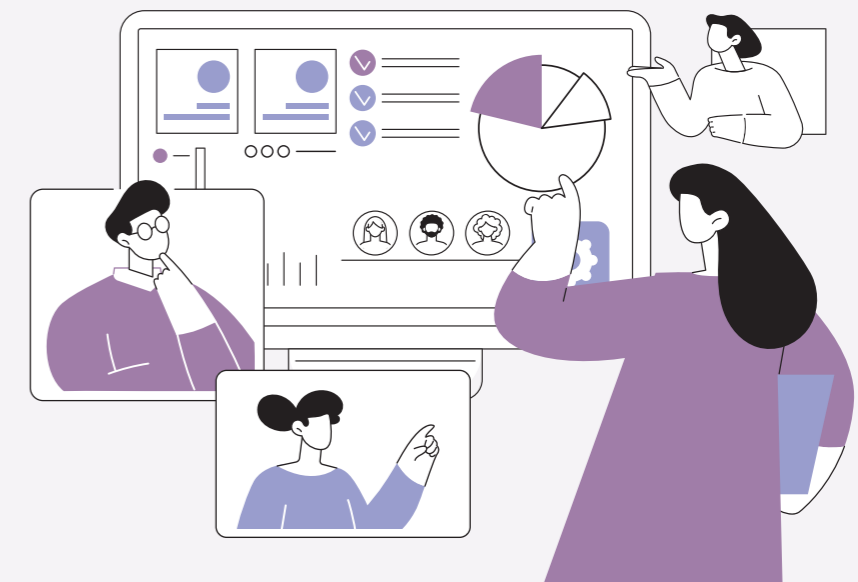
- Including
- 4 learning sessions
 - 9 leadership training courses



① Offline learning session of the Radiance Programme



② Poster of the Radiance Programme



09 Unwavering Commitment to Enhancing the Value Chain

II. Being a Protector of Customers' Rights

Towngas Smart Energy embraces the vision "to be a leading clean and smart energy supplier, with a view to creating a sustainable world driven by green energy". We are committed to delivering high-quality and high-standard products and services in return for the trust of consumers. By strengthening the construction of quality engineering, improving the maintenance of quality services, implementing the protection of intellectual property rights, and safeguarding information security, we enhance communication and collaboration with customers and business partners in our daily work, and strive to consistently uphold the interests and rights of our customers.



i. Development of Quality Engineering

The Group is dedicated to the development of quality engineering. We ensure high product quality through implementing a comprehensive quality management system, enhancing product design and optimising quality inspection processes.

Random Product Checks

Bauhinia, a brand under our extended businesses, actively collaborates with quality supervision departments of local governments on random product checks, and continuously optimises its customer complaint mechanism. A dedicated complaint hotline is available on Bauhinia's official website for prompt follow-up on complaints. Moreover, the after-sales department of Bauhinia maintains direct communication channels with market supervision units to ensure timely report of complaint handling plans and outcomes and swift response to complaints.

43 random product checks

100% of our products meet quality requirements

Quality Inspection

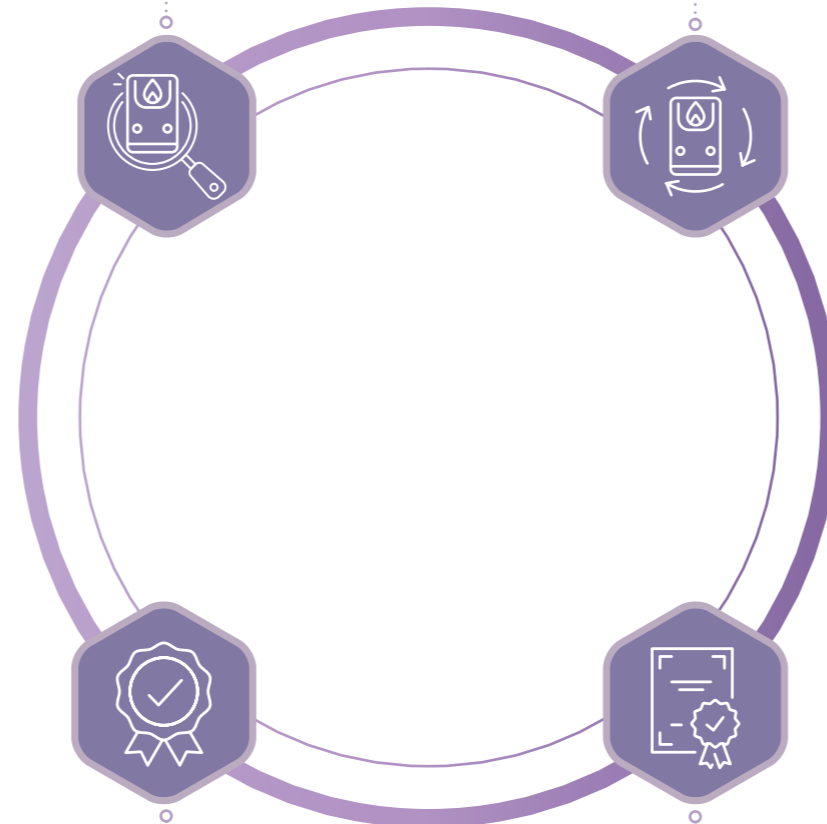
During the year, Bauhinia conducted random checks on various types of products, including gas stoves and range hoods. Through well-established quality inspection procedures, products quality issues have been reduced.

Upon encountering adverse results from random checks, suppliers are immediately informed and mandated to undertake improvement measures. These measures are closely monitored and their effectiveness shall be verified.

We conduct a comprehensive analysis of each defect complaint from the market and determine accountability accordingly.

Technical guidance and quality solutions are provided, and records for product quality defects are established.

Defective product complaints (YoY) **↓73%**



Product Recall

The project company collects, analyses and investigates product quality information, sampling checks information and external monitoring information from market feedback. For significant and non-occasional issues, meetings involving multiple departments are convened for discussion and analysis. If a product recall is deemed necessary, suppliers are promptly instructed to initiate a product recall to prevent problematic products from entering the market. Furthermore, Bauhinia implements a product coding system, enabling effective traceability of defective product batches.

0 product recall case

Quality Certification

The Group rigorously sets the ISO 9001 Quality Management System certification as a mandatory requirement for qualified suppliers. Furthermore, Bauhinia has achieved certification for various products, ensuring that the quality of our products complies with relevant national laws and regulations.



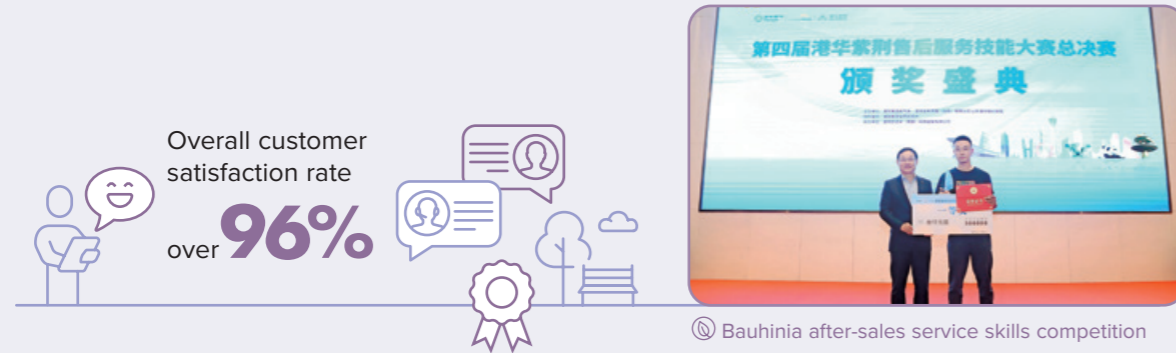
09 Unwavering Commitment to Enhancing the Value Chain

ii. Quality Services

High-quality service is the core competitiveness of our development. Upholding our “Customer-oriented service” philosophy, the Group constantly improves its service processes, refines its service management, and strives to enhance customer satisfaction, with an aim to consolidate the corporate brand image of responsible marketing.

Customer Service Management and Satisfaction Survey

The Group places high importance on the needs of every customer. We gather feedback and suggestions through various communication channels and respond swiftly, enabling our subsidiaries and regional branches to develop and implement improvement plans.



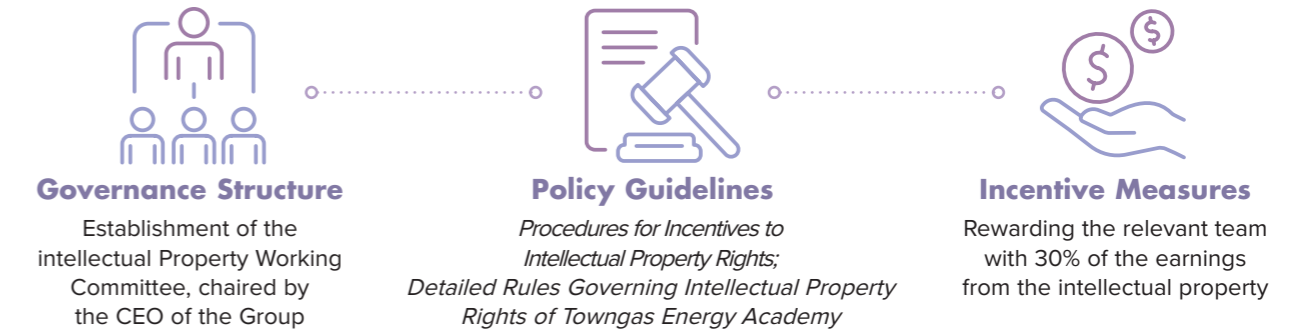
Responsible Marketing

Throughout its marketing and brand promotion efforts, the Group strictly prohibits any form of exaggeration, deceit or misleading information, committing to conveying truthful, precise and accountable content to our consumers. In advertising and branding publicity activities, it is essential that we have proper authorisation for the use of individuals' likeness, fonts, third-party intellectual property and other contents. This is to avoid any violation or legal dispute during the course of our promotional efforts.



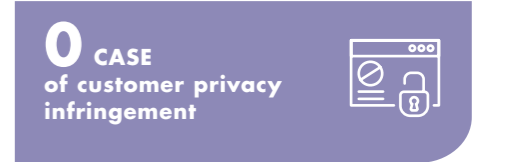
iii. Protection of Intellectual Property Rights

Towngas Smart Energy profoundly understands the significance of protecting intellectual property rights for safeguarding customer rights and interests and enhancing corporate competitiveness. The Company has formulated the *Procedures for Incentives to Intellectual Property Rights* and the *Detailed Rules Governing Intellectual Property Rights of Towngas Energy Academy*, and has implemented effective measures to protect intellectual property rights and prevent any infringement of these rights.



iv. Information Security Assurance

We always prioritise the protection of customer information and data security. In strict adherence to relevant laws and regulations, we have progressively established a comprehensive information security management policy and advanced data protection platforms.



Security Maintenance and Training

During the year, to effectively counter vulnerability scanning attacks and external threats, the Group organised information security training for employees via the Merit School online learning platform to enhance their information security awareness.



09 Unwavering Commitment to Enhancing the Value Chain

TGSE CHIP IoT Meter Creates a New Ecosystem for "Smart Kitchens"

Towngas Lifestyle, in collaboration with StarFive Technology and ChinaFive, has developed the TGSE CHIP, the first RISC-V Internet of Things ("IoT") security chip in the industry. Embedded within an IoT smart gas meter. The data can only be accessed if the chip ID recognised by the Towngas Lifestyle Security Platform successfully matches the data key. This ensures secure access to protected data content. During the year, the TGSE CHIP was fully integrated and adapted, and passed the Group's professional testing and certification process.



Debut of the "TGSE CHIP" IoT meter

Information Security Management System Certification

The certification of the Group's information security management systems mark a key milestone in its information security management. During the year, following system registration, information reporting, vulnerability scanning, system evaluation and rectification, the Group's Tera Planet, Photovoltaic Cloud, Dual-carbon Detection System, and Project Lifecycle Management System have all obtained Grade 2 Certifications under the Cyber Security Grade-based Protection system.

Towngas Management System

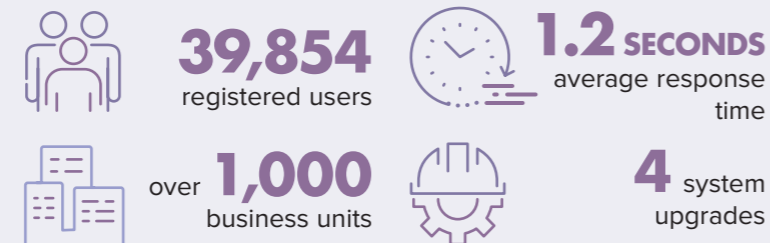
The Towngas Management System ("TMS") is a data analysis platform developed by the Group, now fully integrated across all of our major business segments. To guarantee the security of the system, the Group has designated specific roles for system security management and employs system operations and maintenance engineers who deliver round-the-clock proactive services.



TMS monitoring dashboard

The TMS is equipped with various functions, including:

- Financial management
- Big data application
- Supply chain management
- Smart robot application



III. Being a Collaborator with Business Partners

Towngas Smart Energy adheres to a win-win business philosophy. We place great emphasis on our relationship with business partners and firmly believe that collaboration is a crucial driver for our development. Leveraging our technical and resource advantages in various business sectors, we consistently enhance the quality of our products and services as well as the customer experience by strengthening communication and cooperation with our suppliers, customers, business partners and other stakeholders in our daily operations.

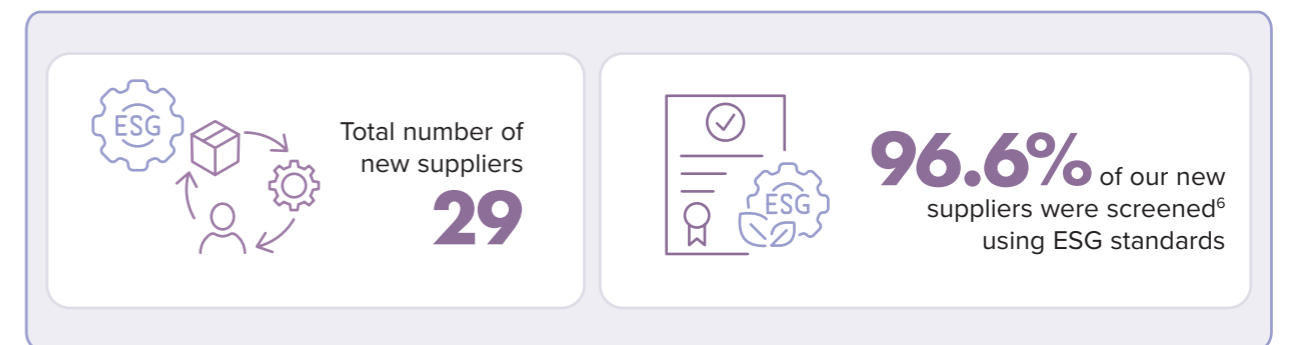


i. Supply Chain Management

Suppliers are required to comply with the Group's unified standards on quality, health, environment and safety. Policies and systems, including the *Blue Book: Procurement Manual for Group Affiliates* and the *Manual on Joint Procurement Management*, are established to uphold high standards of business ethics and jointly build a transparent supply chain. In addition, the Group values training for and communication with suppliers, which can help suppliers better understand the needs of the Group and boost the sustainable development of the supply chain.

Supplier Management

In our collaborations with suppliers, we continuously refine the incentive and elimination mechanisms. We organise both on-site inspections and online self-assessments, with their ESG performances incorporated as one of the assessment criteria. For deficiencies identified during inspections, we issue formal letters to suppliers with suggestions for improvement. For those who are assessed as "unqualified", their qualifications as our suppliers will be suspended. Moreover, for products subject to lengthy export, import, or supply cycles, we collaborate with domestic agencies that have partnerships with foreign suppliers, while also seeking local alternatives to reduce potential risks in the supply chain.



⁶ Including on-site inspections and online self-assessments.

09 Unwavering Commitment to Enhancing the Value Chain

Supplier Training and Communication

The Group attaches importance to the coordination and communication with suppliers and strives to establish and maintain good partnership with them.

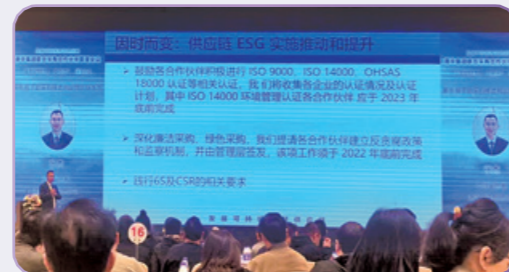
Coordination and Communication with Suppliers



Second edition of "Towngas Smart Energy Approved Suppliers – Creative Award" at the SMART ceremony



Towngas Smart Energy joint procurement partner management meeting



Offline training for CSR audit and 6S audit



Launch meeting of supply chain ESG promotion and carbon footprint platform

Supplier Integrity

To enforce ethical procurement, we advocate and urge our suppliers to establish monitoring mechanisms and anti-corruption policy. This has become a mandatory criterion in the CSR self-assessment from the year, requiring relevant supporting documents from suppliers. By the end of the year, all major suppliers had provided relevant documents.

In our supplier management meetings, we further emphasised the Group's ESG requirements and clarify our procurement policies, which strictly prohibit corrupt and fraudulent practices. Suppliers found to be in serious violation of the rules are immediately and unconditionally disqualified, and are obliged to compensate for any breach of contract.

100% of our suppliers attended anti-corruption trainings by the Group



Supplier integrity training

Green Procurement

We actively practise green purchasing strategies, choosing eco-friendly products to conserve resources, reduce pollution and promote resource recycling where possible. We give priority to suppliers with environmental certifications, such as ISO 14001, when purchasing products with the same quality. We advocate for minimal packaging and employ clean production processes. Our objective is that at least three partners in each region adopt green packaging for their components.

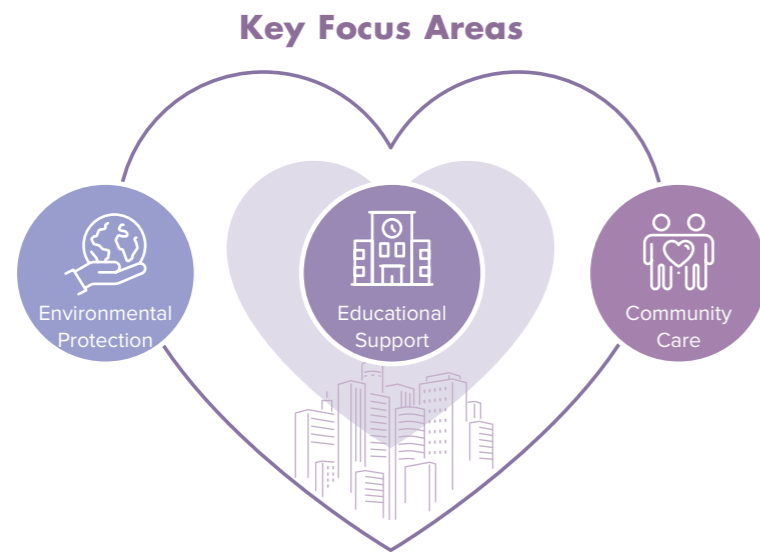
Over **80%** of our suppliers hold ISO 14001 and ISO 45001 certifications



09 Unwavering Commitment to Enhancing the Value Chain

IV. Being an Exemplary Corporate Citizen

Upholding the ethos of “benefiting society, contributing to the community”, Towngas Smart Energy actively shoulders its corporate responsibility and contributes to society through charity activities. We take tangible actions to give back, build our reputation, foster goodwill, and demonstrate our unwavering commitment.



Environmental Protection

Forging a Green and Low-Carbon Future

In March 2023, we organised a series of low-carbon initiatives themed “Forging a Green and Low-Carbon Future”, encouraging employees to embrace green and eco-friendly practices in their daily lives and contribute to environmental protection from the small actions.



Forging a Green and Low-Carbon Future event

2,400 trees planted

1,800 potted plants

Mangrove Conservation - “Towngas Smart Energy Forest”

To facilitate the growth of mangroves wetlands and conserve biodiversity, we planted the Towngas Smart Energy Forest in Baguang Heritiera Littoralis Wetland Park in Dapeng New District, Shenzhen, and regularly arrange employees to conserve tree seedlings and collect marine debris in the surrounding area, with a view to raise awareness of ecological protection.



“Towngas Smart Energy Forest” - mangrove conservation activities

Educational Support

Tenth Anniversary of the Gentle Breeze Movement

In support of the central government’s initiative of poverty alleviation through education, Towngas Smart Energy leverages the Group’s resource advantages to carry out education welfare projects and create a better teaching and learning environment for teachers and students in poverty-stricken areas.

Since its launch in 2013, the Gentle Breeze Movement has been contributing to the development of rural schools and students through donations and supporting activities with dedicated funding and regular events. In June 2023, our Gentle Breeze Movement extended its presence to Lüshunkou district in Dalian, organising tenth-anniversary events of the Gentle Breeze Movement at five local primary schools. The Group built charity libraries, and donated choir uniforms, a large amount of sports equipment and educational devices.



Tenth-anniversary events of Gentle Breeze Movement

Presence in **12** provinces

Donated to **38** schools

Cumulative donations exceeded **RMB3.69 MILLION**

Benefiting over **15,000** individuals

09 Unwavering Commitment to Enhancing the Value Chain

Green Firefly Centre

The Group has been invited to join the Green Firefly Project held by the BEA Charity Fund since 2009 and became the first "caring enterprise" to co-sponsor the establishment of "Green Firefly Centre". During the year, the inauguration ceremonies of the Towngas Smart Energy – BEA Charity Fund Green Firefly Centre took place in two schools in Baotou, Inner Mongolia. We aim to provide more children with opportunities for digital education by donating various types of electronic education equipment.



The Green Firefly Project was present in regions including:

- 1 Sichuan
- 2 Yunnan
- 3 Anhui
- 4 Shandong
- 5 Zhejiang
- 6 Inner Mongolia



Green Firefly Project

Sponsored **9** schools with "Green Firefly Centre"

RMB1.6 MILLION committed to the co-sponsorship



Community Care

Rice Dumplings for the Community

Towngas Smart Energy organised the Rice Dumplings for the Community event again before the Dragon Boat Festival in 2023. We visited communities surrounding our business locations to show our care and send holiday greetings to charities, elderly homes, and impoverished families.



Rice Dumplings for the Community



Over **60** participating companies



20,000 rice dumplings made



RMB180,000 worth of donations



Love and Care for Military Veterans

In late July 2023, Towngas Smart Energy joined hands with the Sungang Sub-district Office in Luohu district, Shenzhen, to organise an activity themed "Army Day Warmth: Celebrating Military-civilian Bond" to care for military veterans. Gifts were presented to 93 individuals, including those enjoying preferential treatment, senior military veterans and other veterans in need, sharing festive blessings of the Army Day with them in advance.



Conducted **4** activities



RMB100,000 worth of donations



Love and care for military veterans

In the future, we will continue to dedicate more resources, as well as practical and effective assistance to people in need to show our love and care, with a view to setting an example for creating a harmonious and inclusive society as a corporate citizen.

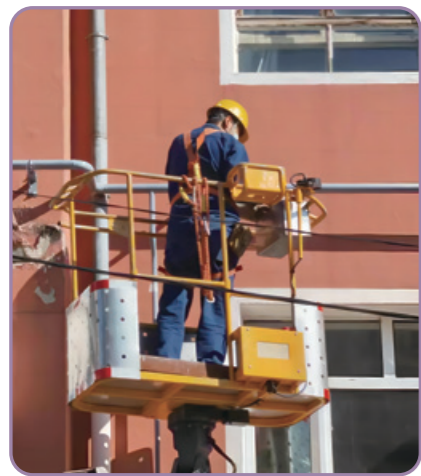
09 Unwavering Commitment to Enhancing the Value Chain



Tackling Gas Supply Challenges in Old Communities for Residents' Welfare

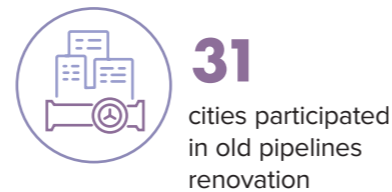
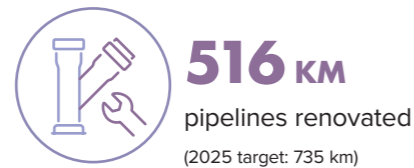
In recent years, to facilitate the use of natural gas in residences and to resolve the problem of gas supply in old communities, the Group's project companies in different regions adhere to the principle of public service and have actively enhanced their coordination with the goal of improving service quality. From project planning to systematic construction and gas commissioning, the Group ensures the high-quality and efficient completion of relevant projects. These efforts have reduced the need for residents to manually transport their own gas cylinders, thereby enhancing the safety and convenience of their daily lives.

Taking initiatives: farewell to gas supply challenges in old communities



Onsite inspections of gas pipelines

Owing to legacy issues, the gas pipelines in some old communities often have smaller diameters, which are further complicated by spatial limitations within the community, leading to narrow spaces for constructions. The Group's engineers have conducted comprehensive surveys and devised strategic plans for the redevelopment of pipelines in these areas. They meticulously compiled and analysed information provided by residents, before utilising a variety of technical methods to design and implement schemes that enable gas connections.



Addressing Residents' Concerns in Constructing the "Last Mile" Pipelines

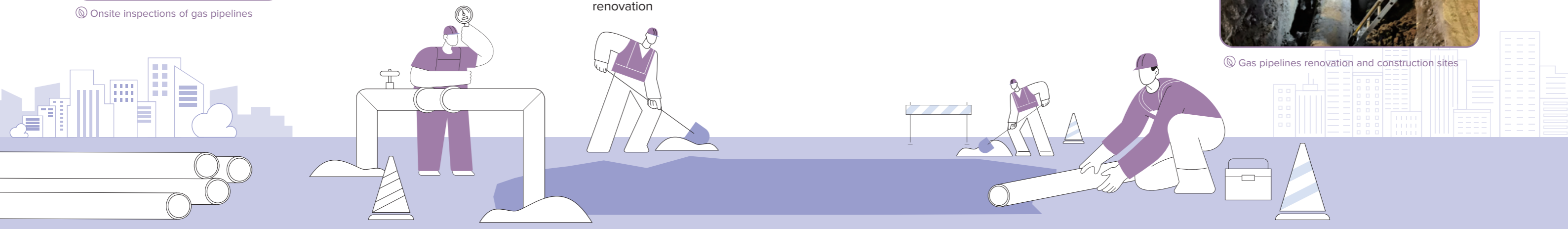
Beyond technical challenges, the renovation process also encounters social issues such as unclear property ownership of the concerned buildings and nuisance during construction. To address this, the Group's engineers maintain close contact with residents, while engaging in timely communication and negotiations regarding construction plans. This approach facilitates a unified renovation for all households, successfully building the "last mile" pipelines.

Putting People First: Proactive Implementation of Livelihood Projects

Looking forward, with ongoing renovations of gas pipelines in old communities, the Group will remain committed to fulfilling its responsibilities and take the initiative to excel in these livelihood projects.



Gas pipelines renovation and construction sites



Appendix I: Quantitative Data Table

Operating Performance				
Economic Data	Unit	2023	2022	2021
Revenue	HK\$' million	19,842	20,073	17,125
Profit for the year attributable to shareholders	HK\$' million	1,575	965	1,253
Earnings per share	HK cents	47.74	30.17	41.53
Gas sales volume	Million cubic metres	16,458	15,246	14,579
Length of pipeline network	Kilometres	75,690	70,935	63,727

Environmental Performance ⁷				
Emissions	Unit	2023	2022	2021
Nitrogen oxide (NO _x)	Kilograms	68,263.3	50,621.2	38,946.0
Sulphur dioxide (SO ₂)	Kilograms	1,302.5	854.8	574.1
Respirable suspended particulates (PM ₁₀)	Kilograms	1,088.9	1,227.6	1,380.7
Total volume of hazardous waste				
Total volume of hazardous waste (solid)	Tonnes	20.6	17.7	16.2
Intensity of hazardous waste (solid)	Tonnes/company	0.2	0.2	0.2
Total volume of hazardous waste (liquid)	Litres	8,015.6	7,510.0	8,298.0
Intensity of hazardous waste (liquid)	Litres/company	91.1	84.4	100.0
Total volume of non-hazardous waste				
Total volume of non-hazardous waste (solid)	Tonnes	75,094.1	80,400.9	85,628.1
Intensity of non-hazardous waste (solid)	Tonnes/company	853.3	903.4	1,031.7
Total volume of non-hazardous waste (liquid)	Litres	465.6	477.6	498.5
Intensity of non-hazardous waste (liquid)	Litres/company	5.3	5.4	6.0

⁷ During the year, we used the financial control approach to determine our scope of statistics. Specifically, we incorporated 100% of the relevant data of project companies owned 50% or more by us, while the relevant data of those project companies owned less than 50% by us were excluded.

Use of Resources	Unit	2023	2022	2021
Diesel	MWh	2,464.1	2,476.7	2,461.6
Natural gas	MWh	337,266.7	226,213.9	147,372.7
LPG	MWh	11.5	11.8	10.1
Coal	MWh	0	0	0
Others	MWh	16,071.8	17,029.9	16,437.6
Consumption of non-renewable resources (from fuel combustion)	MWh	355,814.1	245,732.3	166,282.0
Electricity purchased	MWh	46,394.6	44,213.6	41,692.9
Total energy consumption	MWh	402,208.7	289,945.9	207,974.8
Energy consumption intensity	MWh/company	4,570.6	3,257.8	2,505.7
Water consumption	Cubic metres	698,289.6	495,797.7	326,333.3
Water consumption intensity	Cubic metres/company	7,935.1	5,570.8	3,931.7
Total weight of product packaging materials	Tonnes	468.6	660.6	753.3
Average weight of product packaging materials per piece	Tonnes	0.002	0.002	0.002

Greenhouse Gas Emissions	Unit	2023 ⁸	2022	2021
Utility business-gas segment	Tonnes CO ₂ e	41,801.9	43,435.3	41,823.8
Renewable energy business	Tonnes CO ₂ e	62,538.1	39,820.8	24,103.2
Total greenhouse gas emissions	Tonnes CO ₂ e	104,340.0	83,256.1	65,927.0
Greenhouse gas emissions intensity	Tonnes CO ₂ e/HK\$100 million	525.9	414.8	385.0

⁸ Greenhouse gas emissions saw an increase this year primarily due to the expansion of the renewable energy business and a decrease in the implementation of Work From Home measures after the pandemic. Scope 3 greenhouse gas emission is not included.

Appendix I: Quantitative Data Table

Social Performance ^{9, 10}				
Staff	Unit	2023	2022	2021
Total headcount	Persons	10,800	23,663	23,287
Type of employment				
Full-time	%	99.9	100	99.9
Part-time	%	0.1	0	0.1
By gender				
Male	%	68	68	68
Female	%	32	32	32
By age group				
≤25	%	6	6	6
26-35	%	37	35	36
36-45	%	32	30	29
46-55	%	21	24	24
≥56	%	4	5	5
By region				
Group Head Office	%	4	1	2
Northeast China	%	38	27	33
North China	%	10	16	19
Central China	%	8	7	8
East China	%	9	20	5
West China	%	21	16	19
South China	%	9.5	13	14
Others (U-Tech)	%	0.5	/	/
By employee category				
Senior Management	%	4	3	3
Middle Management	%	15	12	12
Junior Staff	%	81	85	85

⁹ During the year, we used the financial control approach to determine our scope of statistics for calculating quantitative data for staff, health and safety and development and training. Specifically, we incorporated 100% of the relevant data of project companies owned 50% or more by us, while the relevant data of those project companies owned less than 50% by us were excluded.

¹⁰ Since 1 February 2023, the Group has adjusted the regional division of its utility business segment on the Chinese mainland. The new regions are: East China, West China, Central China, North China, Northeast China and South China.

Staff	Unit	2023	2022	2021
Total number of new employees	Persons	912	1,457	768
Staff ratio of new employees by gender				
Male	%	67	69	69
Female	%	33	31	31
Staff ratio of new employees by age group				
≤25	%	22	28	22
26-35	%	52	50	56
36-45	%	24	16	20
46-55	%	2	5	2
≥56	%	0	1	0
Staff ratio of new employees by region				
Group Head Office	%	13	13	18
Northeast China	%	21	11	16
North China	%	12	19	21
Central China	%	9	19	10
East China	%	19	15	12
West China	%	12	10	10
South China	%	13	13	13
Others (U-Tech)	%	1	/	/
Employee turnover	%	3.7	2.8	3.1
Employee turnover ratio by gender				
Male	%	69	70	69
Female	%	31	30	31
Employee turnover ratio by age group				
≤25	%	12	17	12
26-35	%	56	57	65
36-45	%	25	18	17
46-55	%	6	7	5
≥56	%	1	1	1

Appendix I: Quantitative Data Table

Staff	Unit	2023	2022	2021
Employee turnover ratio by region				
Group Head Office	%	6	10	11
Northeast China	%	26	11	18
North China	%	13	13	8
Central China	%	10	14	13
East China	%	18	11	13
West China	%	11	18	17
South China	%	14	23	20
Other (U-Tech)	%	2	/	/
Coverage of labour contract	%	100	100	100
Coverage of social insurance	%	100	100	100
Ratio of female management¹¹	%	26.5	28.8	24.1
Proportion of employees receiving regular performance appraisal and career development review	%	100	100	100

¹¹ Since 2022, the calculation method of the ratio of female management has been revised. We calculated the number of female management as a percentage of the total number of management (middle management and senior management staff), and retroactively adjusted the data of 2021.

Health and Safety	Unit	2023	2022	2021
Staff				
Number of recordable work-related injuries ¹²	Persons	1	3	4
Rate of recordable work-related injuries ¹³	1,000 employees	0.09	0.28	0.17
Rate of recordable work-related injuries ¹⁴	1,000,000 hours worked	0.05	0.11	/
Number of severe work-related injuries ¹⁵	Persons	0	0	/
Rate of severe work-related injuries ¹⁶	1,000,000 hours worked	0	0	/
Number of work-related fatalities	Persons	0	0	0
Ratio of work-related fatalities ¹⁷	%	0	0	0
Work days lost due to work-related injuries	Days	5	147	115
Number of employees with occupational diseases	Persons	0	0	/
Contractors				
Number of recordable work-related injuries ¹²	Persons	0	1	/
Work days lost due to work-related injuries	Days	0	0	/
Number of contractors with occupational diseases	Persons	0	0	/
Number of work-related fatalities	Persons	0	1	0

¹² Recordable work-related injuries refer to work-related injuries that result in a worker's death or resignation, work limitation or job transfer, medical treatment beyond first aid, loss of consciousness, or other significant injuries diagnosed by a doctor or other licensed healthcare professional.

¹³ Rate of recordable work-related injuries per 1,000 employees = Number of recordable work-related injuries × 1,000 / total number of employees.

¹⁴ Rate of recordable work-related injuries per 1,000,000 hours worked = Number of recordable work-related injuries × 1,000,000 / total working hours during the year.

¹⁵ Severe work-related injuries refer to injuries (excluding deaths) occurring at work that make it impossible or difficult for workers to recover to their pre-injury health status within six months.

¹⁶ Rate of severe work-related injuries (excluding deaths) = Number of severe work-related injuries × 1,000,000 / total working hours during the year.

¹⁷ Rate of work-related fatalities = number of work-related fatalities / total number of employees.

Appendix I: Quantitative Data Table

Development and Training	Unit	2023	2022	2021
Training ratio by staff gender				
Male	%	95.1	92.8	96.8
Female	%	91.7	90.6	96.8
Training ratio by employee category				
Senior Management	%	94.4	93.9	94.9
Middle Management	%	86.7	94.8	95.1
Junior Staff	%	95.3	91.7	97.1
Per capita training hours by staff gender				
Male	Hours	90.8	59.2	52.3
Female	Hours	97.9	59.6	54.2
Per capita training hours by employee category				
Senior Management	Hours	64.8	45.2	44.2
Middle Management	Hours	92.3	58.0	52.5
Junior Staff	Hours	94.5	60.0	53.2
Per capita training cost by gender				
Male	RMB	1,037.4	/	/
Female	RMB	660.0	/	/
Per capita training cost by employee category				
Senior Management	RMB	1,557.3	/	/
Middle Management	RMB	1,329.1	/	/
Junior Staff	RMB	811.3	/	/
Supply Chain Management				
Number of major suppliers				
	Number	144	121	131
Proportion of spending on local suppliers				
	%	100	98.11	/
Number of major suppliers by geographical region				
Chinese mainland	Number	144	117	125
Overseas countries and regions	Number	0	4	6

Product Responsibility	Unit	2023	2022	2021
Percentage of products subject to recalls over safety and health concerns	%	0	0	0
Number of product- and service-related complaints received	Cases	79 ¹⁸	50	66
Community Investment				
Number of volunteers	Persons	5,207	8,038	6,900
Number of beneficiaries	Persons	120,823	178,535	170,000
Hours of social services	Hours	106,077	415,441	300,000
Charity investment by the Group	RMB'000	5,526	6,178	7,410
Anti-corruption				
Number of concluded legal cases regarding corrupt practices	Cases	0	0	0
Coverage of people receiving anti-corruption training	%	100	100	/
Anti-corruption training	Hours	24,585	11,526	523

SASB: Gas Utilities and Distributors						
Issue	Index No.	Accounting Indicator	Unit	2023		
Integrity of gas transmission facilities	IF-GU-540a.3	Percentage of gas transmission and distribution pipelines inspected	%	100		
			IF-GU-000.C	Length of high-pressure gas pipelines	Kilometres	7,260
					Length of medium-pressure gas pipelines	53,723
Length of low-pressure gas pipelines	69,609					

¹⁸ All complaints have been handled.

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Statement of use	Towngas Smart Energy Company Limited has reported the information cited in this GRI content index for the period 1 January 2023 through 31 December 2023. The relevant information complies with the GRI Standards.		
GRI 1 used	GRI 1: Foundation 2021		
GRI Standards	GRI 11: Oil and Gas Sector 2021 Sector Standard Ref. No.	ESG Reporting Guide by The Stock Exchange of Hong Kong Limited	Section
General Disclosures			
GRI 2: General Disclosures 2021	2-1 Organisational details		About This Report About Towngas Smart Energy
	2-2 Entities included in the organisation's sustainability reporting	Reporting Scope	About This Report
	2-3 Reporting period, frequency and contact point		About This Report
	2-4 Restatements of information	Reporting Principles	About This Report
	2-5 External assurance		Verification Statement
	2-6 Activities, value chain and other business relationships	KPI B5.1	Business Overview Supply Chain Management Appendix I: Quantitative Data Table
	2-7 Employees	KPI B1.1	Appendix I: Quantitative Data Table
	2-8 Workers who are not employees	KPI B5.1	Supply Chain Management
	2-9 Governance structure and composition		Refer to the annual report for details
	2-10 Nomination and selection of the highest governance body		Refer to the annual report for details
	2-11 Chair of the highest governance body		Refer to the annual report for details
	2-12 Role of the highest governance body in overseeing the management of impacts		Refer to the annual report for details
	2-13 Delegation of responsibility for managing impacts	Governance Structure	Refer to the annual report for details

GRI Standards	GRI 11: Oil and Gas Sector 2021 Sector Standard Ref. No.	ESG Reporting Guide by The Stock Exchange of Hong Kong Limited	Section
	2-14 Role of the highest governance body in sustainability reporting	Governance Structure	ESG Governance
	2-15 Conflicts of interest		Refer to the annual report for details
	2-16 Communication of critical concerns		Stakeholder Engagement
	2-17 Collective knowledge of the highest governance body		ESG Governance
	2-18 Evaluation of the performance of the highest governance body		Refer to the annual report for details
	2-19 Remuneration policies		Remuneration and Welfare
	2-20 Process to determine remuneration		Remuneration and Welfare
	2-21 Annual total compensation ratio		Refer to the annual report for details
	2-22 Statement on sustainable development strategy	Governance Structure	ESG Governance
	2-23 Policy commitments		Compliance Management
	2-24 Embedding policy commitments		Compliance Management
	2-25 Processes to remediate negative impacts		Whistleblowing Mechanism and Whistleblower Protection Policy
	2-26 Mechanisms for seeking advice and raising concerns		Business Ethics
	2-27 Compliance with laws and regulations		Compliance Management
	2-28 Membership associations		Promoting Industry Development
	2-29 Approach to stakeholder engagement	Reporting Principles	Stakeholder Engagement
	2-30 Collective bargaining agreements		Employee Communication and Engagement

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GRI Standards		GRI 11: Oil and Gas Sector 2021 Sector Standard Ref. No.	ESG Reporting Guide by The Stock Exchange of Hong Kong Limited	Section
Material Topics				
GRI 3: Material Topics 2021	3-1 Process to determine material topics			Stakeholder Engagement
	3-2 List of material topics			Stakeholder Engagement
Economic Performance				
GRI 201: Economic Performance 2016	201-2 Financial implications and other risks and opportunities due to climate change	11.2.2	General Disclosure A4 KPI A4.1	Responding to Climate Change
Indirect Economic Impacts				
GRI 203: Indirect Economic Impacts 2016	203-1 Infrastructure investments and services provided	11.14.4		Being an Exemplary Corporate Citizen
Procurement Practices				
GRI 3: Material Topics 2021	3-3 Management of material topics	11.14.1	KPI B5.2	Supply Chain Management
GRI 204: Procurement Practices 2016	204-1 Proportion of spending on local suppliers	11.14.6		Appendix I: Quantitative Data Table
Anti-corruption				
GRI 3: Material Topics 2021	3-3 Management of material topics	11.20.1	General Disclosure B7 KPI B7.2	Business Ethics
GRI 205: Anti-corruption 2016	205-2 Communication and training about anti-corruption policies and procedures	11.20.3	KPI B7.3	Business Ethics
	205-3 Confirmed incidents of corruption and actions taken	11.20.4	KPI B7.1	Business Ethics
Anti-competitive Behaviour				
GRI 3: Material Topics 2021	3-3 Management of material topics	11.19.1		Business Ethics
GRI 206: Anti-competitive Behaviour 2016	206-1 Legal actions for anti-competitive behaviour, anti-trust, and monopoly practices	11.19.2		Business Ethics

GRI Standards		GRI 11: Oil and Gas Sector 2021 Sector Standard Ref. No.	ESG Reporting Guide by The Stock Exchange of Hong Kong Limited	Section
Tax				
GRI 3: Material Topics 2021	3-3 Management of material topics	11.21.1		Refer to the annual report for details
GRI 207: Tax 2019	207-1 Approach to tax	11.21.4		Refer to the annual report for details
	207-2 Tax governance, control, and risk management	11.21.5		Refer to the annual report for details
Materials				
GRI 3: Material Topics 2021	3-3 Management of material topics		General Disclosure A2 General Disclosure A3 KPI A3.1	Our Environmental Management System Resource and Emissions Management Green Procurement
GRI 301: Materials 2016	301-1 Materials used by weight or volume		KPI A2.5	Appendix I: Quantitative Data Table
Energy				
GRI 3: Material Topics 2021	3-3 Management of material topics	11.1.1	General Disclosure A2 KPI A2.3 General Disclosure A3 KPI A3.1	Our Environmental Management System Responding to Climate Change
GRI 302: Energy 2016	302-1 Energy consumption within the organisation	11.1.2	KPI A2.1	Responding to Climate Change Appendix I: Quantitative Data Table
	302-3 Energy intensity	11.1.4	KPI A2.1	Appendix I: Quantitative Data Table
	302-4 Reduction of energy consumption			Responding to Climate Change Appendix I: Quantitative Data Table
	302-5 Reductions in energy requirements of products and services		KPI A2.3	Responding to Climate Change Appendix I: Quantitative Data Table

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GRI Standards		GRI 11: Oil and Gas Sector 2021 Sector Standard Ref. No.	ESG Reporting Guide by The Stock Exchange of Hong Kong Limited	Section
Water and Effluents				
GRI 3: Material Topics 2021	3-3 Management of material topics	11.6.1	General Disclosure A2 General Disclosure A3 KPI A3.1	Our Environmental Management System Resource and Emissions Management
GRI 303: Water and Effluents 2018	303-1 Interactions with water as a shared resource	11.6.2	KPI A2.4 KPI A3.1	Resource and Emissions Management
	303-2 Management of water discharge-related impacts	11.6.3	KPI A3.1	Resource and Emissions Management
	303-3 Water withdrawal	11.6.4		Resource and Emissions Management
	303-4 Water discharge	11.6.5		Resource and Emissions Management
	303-5 Water consumption	11.6.6	KPI A2.2	Appendix I: Quantitative Data Table
Biodiversity				
GRI 3: Material Topics 2021	3-3 Management of material topics	11.4.1	General Disclosure A3 KPI A3.1	Feature Story: Moving to a New Phase and Advancing TNFD Assessment See <i>Climate-related and Nature-related Directive Guide</i> for details
GRI 304: Biodiversity 2016	304-1 Operational sites owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas	11.4.2		Feature Story: Moving to a New Phase and Advancing TNFD Assessment See <i>Climate-related and Nature-related Directive Guide</i> for details
	304-2 Significant impacts of activities, products and services on biodiversity	11.4.3		Feature Story: Moving to a New Phase and Advancing TNFD Assessment See <i>Climate-related and Nature-related Directive Guide</i> for details

GRI Standards		GRI 11: Oil and Gas Sector 2021 Sector Standard Ref. No.	ESG Reporting Guide by The Stock Exchange of Hong Kong Limited	Section
Addressing Climate Change				
GRI 3: Material Topics 2021	3-3 Management of material topics	11.2.1	General Disclosure A1	Our Environmental Management System Responding to Climate Change
		11.3.1	KPI A1.5 General Disclosure A3 KPI A3.1	
GRI 305: Emissions 2016	305-1 Direct (Scope 1) GHG emissions 305-2 Energy indirect (Scope 2) GHG emissions 305-4 GHG emissions intensity 305-5 Reduction of GHG emissions 305-7 Nitrogen oxides (NO _x), sulphur oxides (SO _x), and other significant air emissions	11.1.5	KPI A1.2	Responding to Climate Change
		11.1.6	KPI A1.2	Responding to Climate Change
		11.1.8	KPI A1.2	Responding to Climate Change Appendix I: Quantitative Data table
		11.2.3		Responding to Climate Change Appendix I: Quantitative Data Table
		11.3.2	KPI A1.1	Appendix I: Quantitative Data Table
Waste				
GRI 3: Material Topics 2021	3-3 Management of material topics	11.5.1	General Disclosure A1 KPI A1.6	Our Environmental Management System Resource and Emissions Management
GRI 306: Waste 2020	306-1 Waste generation and significant waste-related impacts 306-2 Management of significant waste-related impacts 306-3 Waste generated	11.5.2	General Disclosure A3 KPI A3.1	Resource and Emissions Management
		11.5.3	General Disclosure A3 KPI A3.1	Resource and Emissions Management
		11.5.4	KPI A1.3 KPI A1.4	Resource and Emissions Management Appendix I: Quantitative Data Table

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GRI Standards		GRI 11: Oil and Gas Sector 2021 Sector Standard Ref. No.	ESG Reporting Guide by The Stock Exchange of Hong Kong Limited	Section
Supplier Environmental Assessment				
GRI 3: Material Topics 2021	3-3 Management of material topics		General Disclosure B5	Supply Chain Management
GRI 308: Supplier Environmental Assessment 2016	308-1 New suppliers that were screened using environmental criteria		KPI B5.4	Supply Chain Management
	308-2 Negative environmental impacts in the supply chain and actions taken		KPI B5.3	Supply Chain Management
Employment				
GRI 3: Material Topics 2021	3-3 Management of material topics	11.10.1 11.11.1	General Disclosure B1	Compliant Employment
GRI 401: Employment 2016	401-1 New employee hires and employee turnover	11.10.2	KPI B1.2	Appendix I: Quantitative Data Table
	401-2 Benefits provided to full-time employees (temporary or part-time employees excluded)	11.10.3	General Disclosure B1	Remuneration and Welfare
Labour Relations				
GRI 3: Material Topics 2021	3-3 Management of material topics	11.10.1		Compliant Employment
Occupational Health and Safety				
GRI 3: Material Topics 2021	3-3 Management of material topics	11.9.1	General Disclosure B2	Our HSE Management System
GRI 403: Occupational Health and Safety 2018	403-1 Occupational health and safety management system	11.9.2	KPI B2.3	Occupational Health and Safety
	403-2 Hazard identification, risk assessment, and incident investigation	11.9.3	KPI B2.3	Operational Safety
	403-3 Occupational health services	11.9.4	KPI B2.3	Occupational Health and Safety Customer and Community Safety

GRI Standards		GRI 11: Oil and Gas Sector 2021 Sector Standard Ref. No.	ESG Reporting Guide by The Stock Exchange of Hong Kong Limited	Section	
	403-4 Worker participation, consultation, and communication on occupational health and safety	11.9.5		Occupational Health and Safety	
	403-5 Worker training on occupational health and safety	11.9.6	KPI B2.3	Occupational Health and Safety	
	403-6 Promotion of worker health	11.9.7	KPI B2.3	Occupational Health and Safety Remuneration and Welfare	
	403-7 Prevention and mitigation of occupational health and safety impacts directly linked by business relationships	11.9.8	KPI B2.3	Occupational Health and Safety	
	403-8 Workers covered by an occupational health and safety management system	11.9.9		Our HSE Management System	
	403-9 Work-related injuries	11.9.10	KPI B2.1 KPI B2.2	Appendix I: Quantitative Data Table	
	403-10 Work-related ill health	11.9.11	KPI B2.1	Occupational Health and Safety	
	Training and Education				
	GRI 3: Material Topics 2021	3-3 Management of material topics	11.10.1 11.11.1	General Disclosure B3	Training and Development
	GRI 404: Training and Education 2016	404-1 Average hours of training per year per employee	11.10.6 11.11.4	KPI B3.1 KPI B3.2	Appendix I: Quantitative Data Table
404-2 Programs for upgrading employee skills and transition assistance programs		11.10.7		Training and Development	
404-3 Percentage of employees receiving regular performance and career development reviews				Remuneration and Welfare Appendix I: Quantitative Data Table	

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Diversity and Equal Opportunity				
GRI 3: Material Topics 2021	3-3 Management of material topics	11.11.1	General Disclosure B1	Diversity and Equal Opportunities
GRI 405: Diversity and Equal Opportunity 2016	405-1 Diversity of governance bodies and employees	11.11.5	KPI B1.1	Diversity and Equal Opportunities Refer to the annual report for details
Anti-discrimination				
GRI 3: Material Topics 2021	3-3 Management of material topics	11.11.1	General Disclosure B1	Diversity and Equal Opportunities
GRI 406: Non-discrimination 2016	406-1 Incidents of discrimination and corrective actions taken	11.11.7		Diversity and Equal Opportunities
Freedom of Association and Collective Negotiation				
GRI 3: Material Topics 2021	3-3 Management of material topics	11.13.1		Diversity and Equal Opportunities
Child Labour and Forced Labour				
GRI 3: Material Topics 2021	3-3 Management of material topics	11.12.1	General Disclosure B4 KPI B4.1 KPI B4.2	Compliant Employment
Local Communities				
GRI 3: Material Topics 2021	3-3 Management of material topics	11.15.1	General Disclosure B8	Being an Exemplary Corporate Citizen
GRI 413: Local Communities 2016	413-1 Operations with local community engagement, impact assessments, and development programmes	11.15.2	KPI B8.1 KPI B8.2	Being an Exemplary Corporate Citizen
Supplier Social Assessment				
GRI 3: Material Topics 2021	3-3 Management of material topics		General Disclosure B5	Supply Chain Management
GRI 414: Supplier Social Assessment 2016	414-1 New suppliers that were screened using social criteria	11.10.8 11.12.3		Supply Chain Management

GRI Standards		GRI 11: Oil and Gas Sector 2021 Sector Standard Ref. No.	ESG Reporting Guide by The Stock Exchange of Hong Kong Limited	Section
Customer Health and Safety				
GRI 3: Material Topics 2021	3-3 Management of material topics		General Disclosure B6 KPI B6.4	Customer and Community Safety
GRI 416: Customer Health and Safety 2016	416-1 Assessment of the health and safety impacts of product and service categories	11.3.3		Customer and Community Safety
	416-2 Incidents of non-compliance concerning the health and safety impacts of products and services		KPI B6.1	Development of Quality Engineering
Marketing and Labelling				
GRI 3: Material Topics 2021	3-3 Management of material topics		General Disclosure B6	Quality Services
GRI 417: Marketing and Labelling 2016	417-1 Requirements for product and service information and labelling		General Disclosure B6	Quality Services
	417-2 Incidents of non-compliance concerning product and service information and labelling		KPI B6.2 KPI B6.3	Quality Services
	417-3 Incidents of non-compliance concerning marketing communications			Quality Services
Customer Privacy				
GRI 3: Material Topics 2021	3-3 Management of material topics		General Disclosure B6 KPI B6.5	Information Security Assurance
GRI 418: Customer Privacy 2016	418-1 Substantiated complaints concerning breaches of customer privacy and losses of customer data		KPI B6.5	Information Security Assurance
Asset Integrity and Critical Incident Management				
GRI 3: Material Topics 2021	3-3 Management of material topics	11.8.1		Operational Safety
GRI 11.8: Asset Integrity and Critical Incident Management	306-3 Significant spills	11.8.2		Operational Safety
	Additional sector-specific disclosures	11.8.3		Operational Safety



VERIFICATION STATEMENT

Scope of Verification

Hong Kong Quality Assurance Agency (“HKQAA”) conducted an independent verification for the Environmental, Social and Governance Report 2023 (“the Report”) of Towngas Smart Energy Company Limited (“Towngas Smart Energy”). The scope of HKQAA’s verification covered the performance data and information regarding environmental, social and governance aspects of Towngas Smart Energy for the period from 1 January 2023 to 31 December 2023. Also, the Report outlines the commitments and efforts of Towngas Smart Energy towards sustainability.

The Report has been prepared in accordance with the Environmental, Social and Governance Reporting Guide (“ESG Guide”) contained in Appendix C2 to The Rules Governing the Listing of Securities on The Stock Exchange of Hong Kong Limited and Sustainability Reporting Standards of the Global Reporting Initiatives (“GRI Standards”). Also, referencing the International Financial Reporting Standards (“IFRS”) Sustainability Disclosure Standards set by International Sustainability Standards Board (“ISSB”), standards set by the Sustainability Accounting Standards Boards (“SASB Standards”), recommendations from the Task Force on Climate-related Financial Disclosures (“TCFD”), recommendations from The Taskforce on Nature-related Financial Disclosures (“TNFD”), GRI 11: Oil and Gas Sector 2021 (“GRI 11”), Guidelines on Corporate Social Responsibility Reporting for Chinese Enterprises 4.0 (“CASS-CSR 4.0”), and ISO 26000 Guidance on Social Responsibility Guidance (“ISO 26000”).

Level of Assurance and Methodology

The process applied in this verification was based on 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, calculating and reporting performance data.

Independence

Towngas Smart Energy is responsible for preparing the report. HKQAA was not involved in calculating, compiling, or in the development of the Report. Our verification activities are independent from Towngas Smart Energy.

Conclusion

Based on the verification results and in accordance with the verification procedures undertaken, HKQAA has obtained a reasonable assurance and is in the opinion that:

- The Report has complied with all mandatory disclosure requirements and “comply or explain” provisions outlined in the ESG Reporting Guide and the GRI Standards;
- The Report has been prepared with reference to the IFRS Sustainability Disclosure Standards set by ISSB, SASB Standards, TCFD recommendations, TNFD recommendations, GRI 11, CASS-CSR 4.0 and ISO 26000 for disclosure;
- The Report illustrates the sustainability performance of Towngas Smart Energy, covering all material and relevant aspects in a balanced, comparable, clear, and timely manner;
- The content regarding stakeholder engagement and materiality assessment processes is authentic; 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
February 2024



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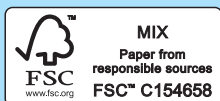
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