



Environmental, Social and Governance Report 2021



ABOUT THIS REPORT

Approach to Reporting

The Hong Kong and China Gas Company Limited (Towngas) has been reporting our environmental, social and governance (ESG) performance on an annual basis for over a decade. In this report, we cover our approach to ESG, which is based on our Towngas ESG Framework, disclose our achievements in five key areas, and acknowledge where further improvements can be made.

Reporting Scope and Boundary

This report examines the material topics that arose at Towngas and its subsidiaries (the Group) during the period from 1 January 2021 to 31 December 2021, unless otherwise stated.

Reporting Guidelines

This report was prepared in accordance with the Global Reporting Initiative (GRI) Standards: Core Option, with reference to the GRI G11 Oil and Gas Sector Disclosures. It also fulfils the mandatory disclosure requirements and “comply or explain” provisions of the latest ESG Reporting Guide (ESG Guide) under Appendix 27 to the Rules Governing the Listing of Securities on The Stock Exchange of Hong Kong Limited (SEHK). For the GRI and ESG Guide Content Index, please refer to our [ESG Website](#).

This ESG Report aims to provide a balanced presentation of the Group’s ESG management approach and performance during the Reporting Period. Consistent methodologies are employed, using year-on-year data, for a meaningful comparison.

Independent Verification

This report has been verified by an independent third party, Hong Kong Quality Assurance Agency, to ensure its accuracy and completeness and to verify its adherence to the reporting guidelines.

Acknowledgement

We are sincerely grateful to everyone who contributed their time, knowledge and insights towards the preparation of this report. We also thank our staff, partners, customers and other stakeholders who share our vision.

Your Feedback

The full version of this report is published on the Towngas website and the website of SEHK. We welcome your comments on this report, as well as any opinions on our future ESG strategy, by completing the [online questionnaire](#) or emailing us at cad@towngas.com.

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01 BOARD STATEMENT

The Towngas Board of Directors (the Board) is committed to our environmental, social and governance (ESG) development for a sustainable future. This commitment is reflected in our Vision and Mission, which guide our evolving ESG strategy.

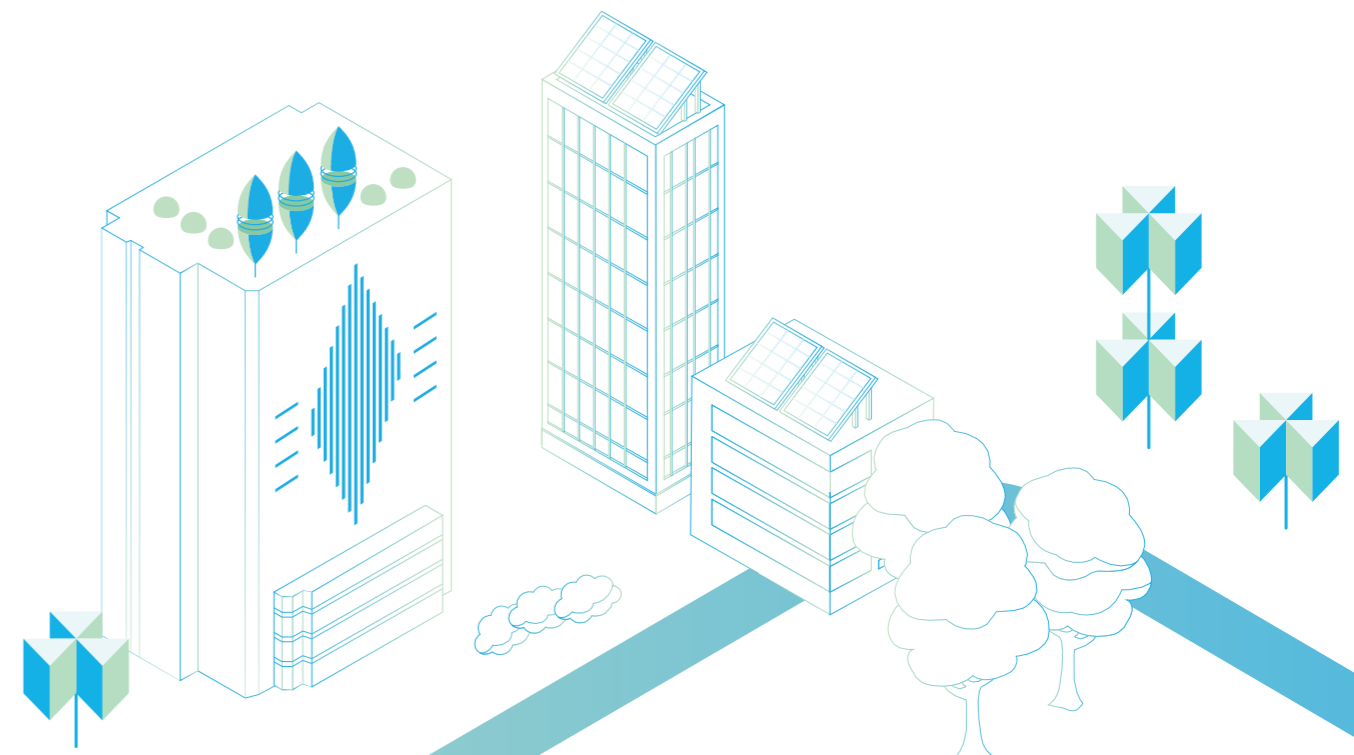
Our ESG Framework covers five key areas:

- Creating Business Opportunities,
- Ensuring Health and Safety,
- Protecting the Environment,
- Contributing to Stakeholders, and
- Strengthening Corporate Governance

Material ESG issues are prioritised and regularly reviewed through our engagement with stakeholders as well as monitoring of global trends. The Board has the overall responsibility of overseeing these material ESG issues and evaluating, determining and integrating relevant risks and opportunities into our key governance processes. Our governance procedures are applied to all areas of decision-making and strategic planning across Towngas.

To further integrate ESG practices into our business operations, the ESG Committee has been established. The Board has appointed the Managing Director be the Chairman of this Committee, which has responsibility for our strategies, policies and practices on ESG matters. Updates on ESG related policies, initiatives, progress, goals, targets and achievements are reported and discussed on a regular basis.

The Board will continue our commitment to our ESG efforts in every aspect of our operations as we work towards creating a sustainable world and long-term value for stakeholders.



02 MANAGING DIRECTOR'S MESSAGE



Alfred Chan Wing-kin
Managing Director

Despite the lingering impact of the COVID-19 pandemic, 2021 was a year of economic recovery for the Chinese mainland and Hong Kong and hopefully the beginning of a gradual return to normal.

Gross domestic product in the Chinese mainland grew by 8.1 % in 2021, enabling us to achieve double-digit volume growth in most of our businesses in the country, where we are now the largest supplier of city-gas following the agreement formed with Shanghai Gas in 2020. Today, we serve 40 million households in the major cities of Shanghai, Shenzhen, Xian, Wuhan, Jinan, Hangzhou, Chengdu, Changchun and Nanjing.

In Hong Kong, we experienced a slight decline in residential gas sales in 2021, mainly due to warmer weather, but this was offset by a rebound in the commercial and industrial sectors and a solid increase in appliance sales.

The year was also marked by a significant expansion for Towngas, from a supplier of gas and related products as its core business, into one that is also putting focus on smart energy. This was a natural progression for us in our evolution as a company with a strong commitment to sustainability.

In 2021, we again received recognition for our achievements in sustainability. These included three first-place rankings at the Exemplar level in the Business Sustainability Indices of Greater China, Greater Bay Area and Hong Kong, developed by the Centre for Business Sustainability of The Chinese University of Hong Kong. Another prestigious set of wins was the Grand Award (Large Organisations), Hong Kong Sustainability Award (Large Organisations), and Most Respected Organisations Award, all from The Hong Kong Management Association.

A Year of Transition and Transformation

We share the concerns of the global community about climate crisis that is posing an existential threat to our way of life. These concerns, along with pledges to reverse growing carbon dioxide levels in the atmosphere, were raised at the Paris Agreement in 2015 and reiterated in 2021 at the 26th United Nations Climate Change Conference of the Parties (COP26) held in Scotland.

The Central Government of China has also committed to reducing carbon levels, as reflected in its Fourteenth Five-Year Plan implemented in 2021, with targets for achieving carbon neutrality by 2060 and peak carbon emissions before 2030.

At Towngas, we have followed suit by updating our Environmental, Social and Governance policies and committing to become carbon neutral by 2050 through energy transition and innovation, including the development of renewable energy, waste-to-energy, green hydrogen, efficiency improvement, carbon management, and other collaborative projects with universities and research institutes.

In 2021, we took several steps towards achieving this target and our long-term plans to transition into a renewable energy company. Most significantly, this included the agreement with one of Asia's leading private equity firms, Affinity Equity Partners (Affinity), to invest HK\$2.8 billion in our mainland business arm, Towngas China Company Limited.

On 26 November 2021, to reflect the new direction in which we are headed, we officially changed the name of Towngas China Company Limited to Towngas Smart Energy Company Limited.



The injection of such a substantial sum will enable us to pursue business opportunities more aggressively in renewable energy. In particular, we have set our sights on solar energy systems in zero-carbon industrial parks, distributed energy systems and power storage projects, as well as smart energy management and the use of big data and artificial intelligence. Corollary businesses would include carbon auditing, carbon trading and asset management, all of which are designed to help customers achieve their decarbonisation goals.

Under this plan, we intend to invest in the Chinese mainland 200 zero-carbon industrial parks by 2025. Indeed, in 2021 we were well on the way to reaching this goal, with more than 110 renewable energy projects planned across 21 provincial regions and 32 zero-carbon smart industrial parks negotiated for development.

During the transition to a smart energy business, however, natural gas will continue to play a key role in the economies of the Chinese mainland and Hong Kong, as it is the cleanest of all fossil fuels with 41% less carbon dioxide emissions than coal and 23% less than oil.

Innovation for the Future

Innovation is at the heart of Towngas and this can be observed in everything we do, from the way we develop new energy solutions and manage our gas networks to how we meet customers' needs, train our people and provide caring services to the communities we serve.

In our home base of Hong Kong, we have made some truly remarkable advances in the innovative technologies we are developing. One example is the application of gas desiccant dehumidification to improve indoor air quality as well as to reduce air conditioning load and hence energy consumption. Another one is the extraction of hydrogen – a clean and abundant fuel source – from our network gas mix, which contains 49% of hydrogen, so

that it can be used for powering the city's buses. As we perfect this process, we believe we can become one of the leading suppliers of hydrogen energy to the transport sector, an initiative that is in line with the Hong Kong government's Hong Kong's Climate Action Plan 2050 for achieving carbon neutrality.

Another initiative in this direction was the launch of the first-ever TERA-Award competition in June 2021. Together with State Power Investment Corporation Limited (SPIC) from the Chinese mainland, we invited organisations around the world to submit their ideas and research results for new smart technology that will help significantly reduce carbon emissions. With a first prize of US\$1 million, the competition attracted over 200 submissions from 23 countries and regions. From the winners that have been selected, Towngas and SPIC will invest in their ideas and help bring them to commercial fruition.

Bright Prospects for our Businesses

Although we are confident about the prospects for our businesses in the year ahead, there are still challenges that must be contended with.

These include the Omicron variant of the COVID-19 virus, which appeared towards the end of the year and continues to infect people in many countries. Depending on the course of the pandemic, this could further affect Hong Kong's hospitality industry and hence our gas sales to this sector.

Another issue of concern in our home market is the rising costs of maintenance, materials and manpower, which have significantly increased our operational costs. Ensuring a safe and reliable gas supply that meets future needs will necessitate a substantial outlay in capital investment for the city's long-term expansion.

In the Chinese mainland, we face challenges such as the ongoing trade tensions between the United States and China as well as the exceptionally high costs for piped natural gas (PNG)/liquefied natural gas (LNG) and emerging cyber security threats.

Nevertheless, our brand remains fundamentally strong, and we have many opportunities for our long-term business growth. Among these is a massive new development project in Hong Kong, the Northern Metropolis, near the boundary with the Chinese mainland. To meet the gas supply needs of this new project, we are planning to lay new pipelines and modify several off-take stations in order to increase capacity to meet future demands.

In the Chinese mainland, we are now in a high growth period with many opportunities opening up for our zero-carbon industrial parks and smart energy solutions. There are also growing demands for the advanced biofuels we are producing for the European market, agricultural waste utilisation, as well as our municipal waste treatment projects in the Chinese mainland, among others.

A Better Year Ahead

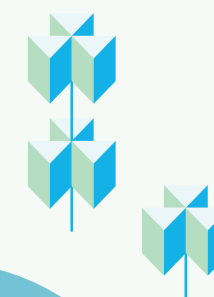
Though at the time of writing, Hong Kong is taking on the challenge of harnessing the fifth wave of COVID-19 outbreak caused by the Omicron variant, I believe 2022 will be a much better year for all of us. With the "Dynamic Zero Infection" campaign fully supported by the Central Government in the provision of experience and necessary resources, as well as the high vaccination rate achieved, the situation will be put under control and people's lives can be returned to a pre-pandemic state of normal. 2022 will also be a very special year for Towngas as we celebrate our 160th anniversary in Hong Kong.

We have come a long way since 1862, when Towngas began supplying gas to light up the city centre of Hong Kong and operated a coal gas plant and a network of gas pipes just 24 kilometres in length. Today, we are a widely-respected company in the gas industry on the threshold of becoming a world leader in smart energy solutions for the future.

Towngas can play a significant role in helping to shape that future through the clean natural gas we supply, as well as the renewable smart energy and innovative products and services we provide that are contributing to the country's carbon neutrality goals.

In closing, I would like to express my deepest appreciation to our staff for their dedication and hard work during the year, as well as to our customers, business partners and members of our Board for their continuing support.

Alfred Chan Wing-kin
Managing Director



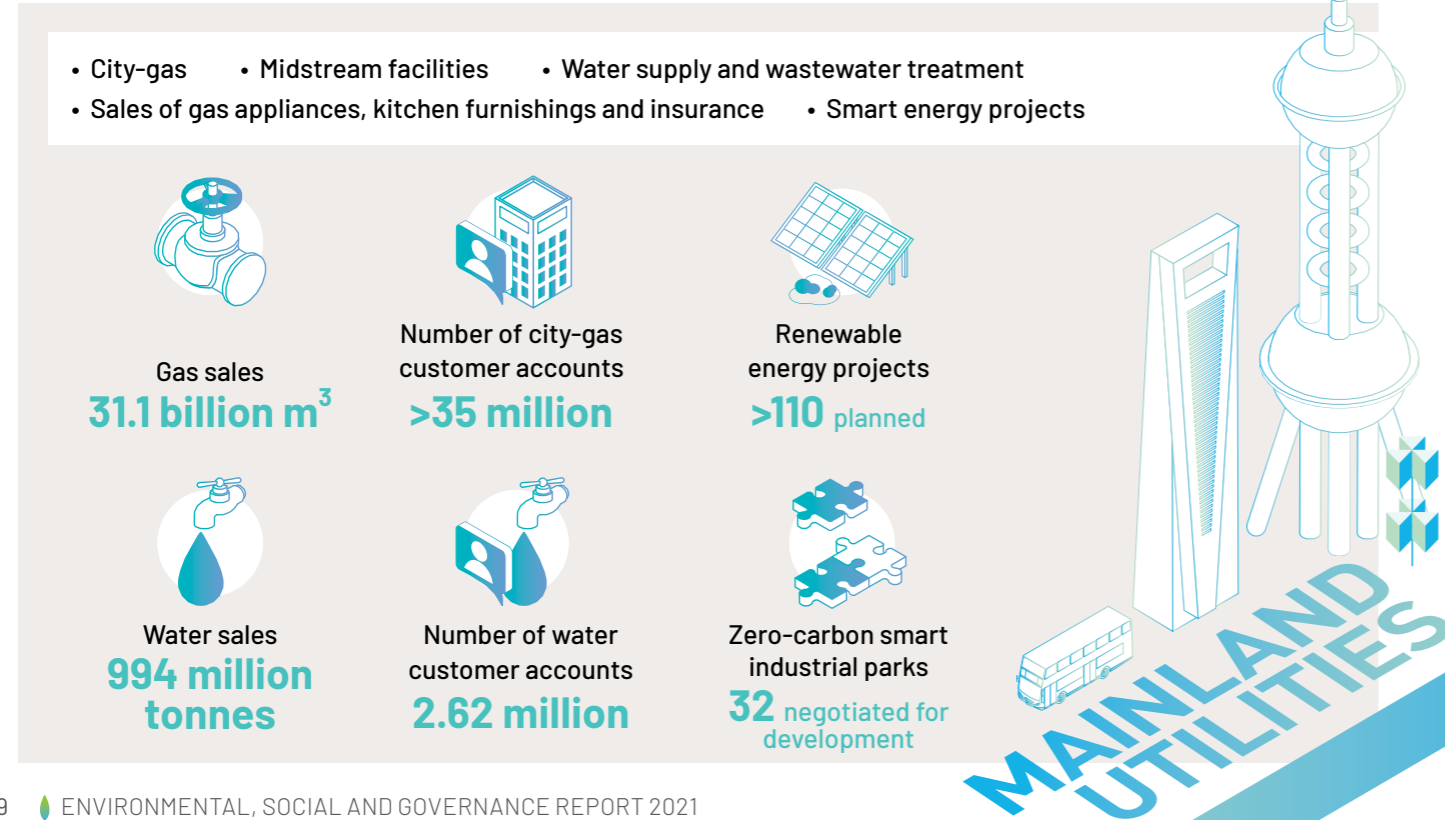
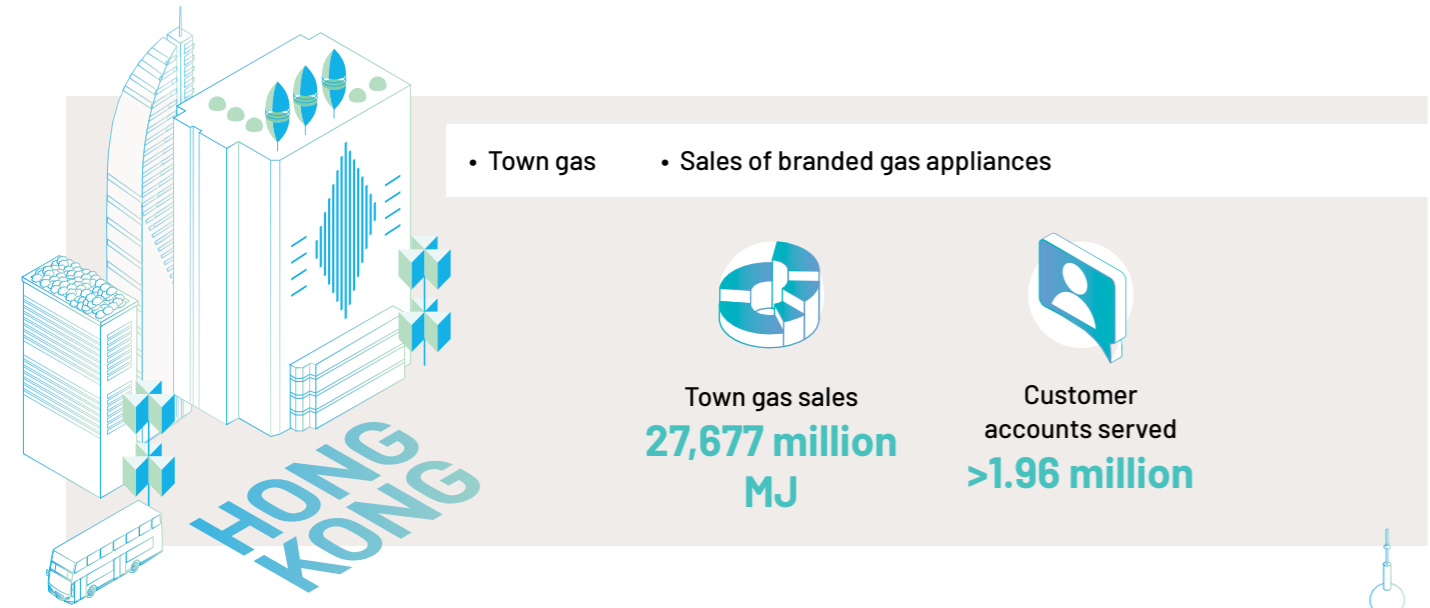
03 BUSINESS PROFILE

Towngas: Approaching 160 Years of Service

Founded in 1862, Towngas is Hong Kong's first public utility. In the nearly 160 years since then, Towngas has grown from a gas company supplying fuel for streetlamps to become one of the largest energy suppliers in Hong Kong and the Chinese mainland. Towngas today is a limited liability company, incorporated and headquartered in Hong Kong and listed on The Stock Exchange of Hong Kong Limited (Stock Code: 3).

Well regarded for its world-class corporate management and business practices, Towngas provides customers in Hong Kong with a safe and reliable supply of gas and gas-related services. In addition to our Hong Kong operations, Towngas today has a portfolio that includes 514 projects in 28 provincial regions in the Chinese mainland, as well as one in Thailand. More information on the expansion of our business portfolio in 2021 is available in our [Annual Report 2021](#).

Business Profile in 2021



- Green energy
- Telecommunications
- Information technology
- Civil and building services engineering
- Manufacture of gas-related products

Aviation fuel: approximately **3 million tonnes** (Hong Kong)

LNG: approximately **173,000 tonnes** (Chinese mainland)

Coalbed methane

Coal

Methanol: approximately **231,000 tonnes** (Chinese mainland)

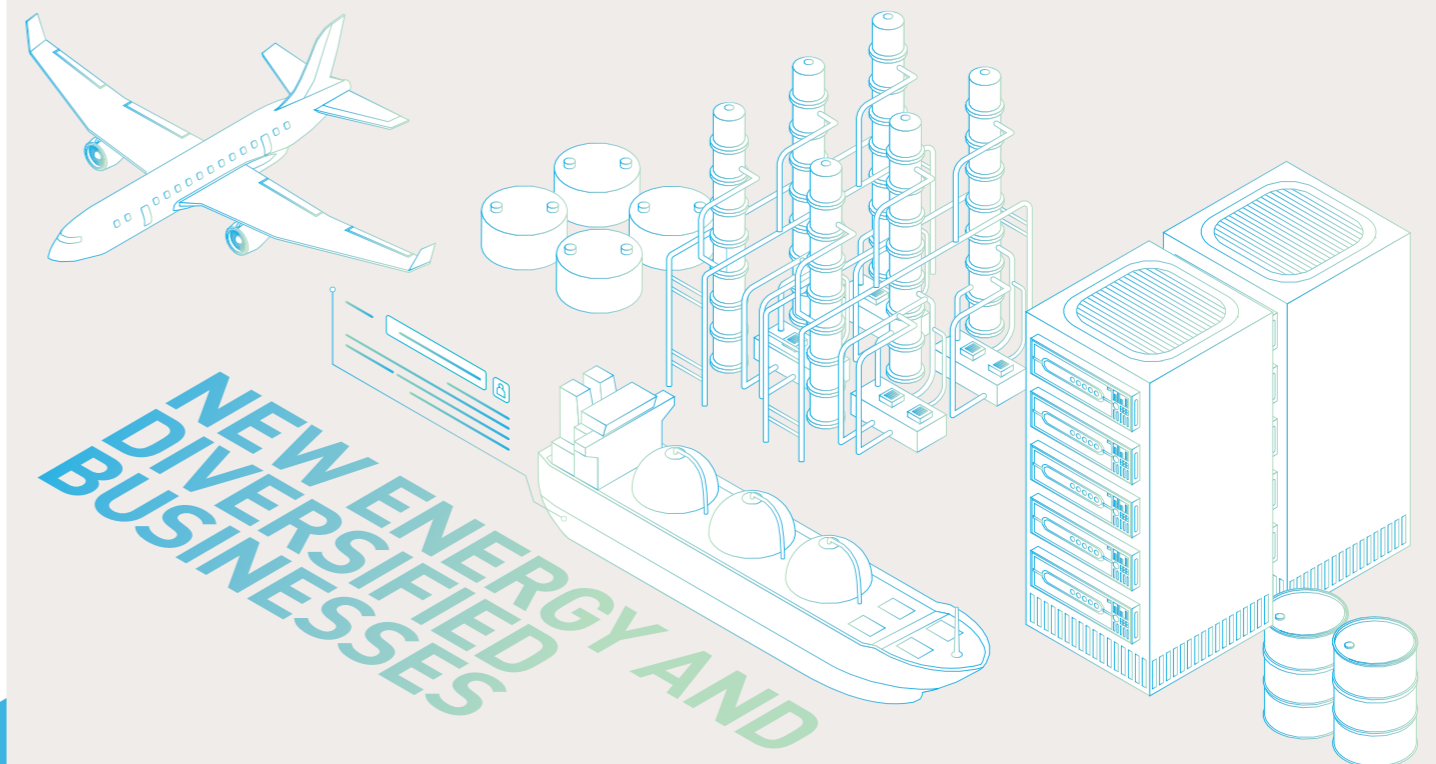
Coal

Ethylene glycol: approximately **79,000 tonnes** (Chinese mainland)

Waste oil

Hydro-treated vegetable oil: approximately **180,000 tonnes** (Chinese mainland)

Data centres: **6** in Hong Kong and the Chinese mainland, accommodating up to **17,600 server racks**



Based in Hong Kong,
Towngas has a portfolio comprising

514 projects*

in 28 provincial regions in the Chinese mainland,
as well as one in Thailand.

Towngas (0003)

- Towngas Group Hong Kong headquarters
- Piped city-gas projects
- Liquefied natural gas receiving stations
- Provincial natural gas pipeline networks
- City high pressure pipeline networks/ underground gas storages
- Upstream projects
- Smart energy
- CNG/LNG refilling stations
- Water/Waste treatment
- Telecommunications
- Coal mining, logistics and coal-based chemicals
- Biomass
- Oilfield
- Others

Towngas Smart Energy (1083)

- Piped city-gas projects
- City high pressure pipeline networks
- Upstream project
- Distributed energy systems
- CNG refilling stations
- Smart energy
- Others

* 2020 year end: 436 projects, inclusive of city-gas projects re-invested by the Group's companies



Revenue
HK\$53,564 million



Capital Expenditure
HK\$8,387 million



Manpower Costs
HK\$3,624 million

Equipment Sales and
Maintenance Services

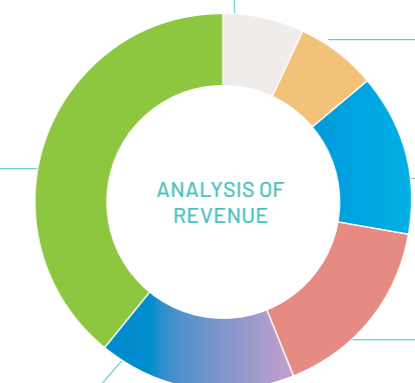
7%

Gas Sales
(Industrial)

39%

Gas Sales
(Residential)

17%



Gas Connection Income
7%

Gas Sales
(Commercial)
14%

Water, Oil, Coal, Hydro-
treated Vegetable Oil
related sales and others
16%

Customer Service

2%

Distribution

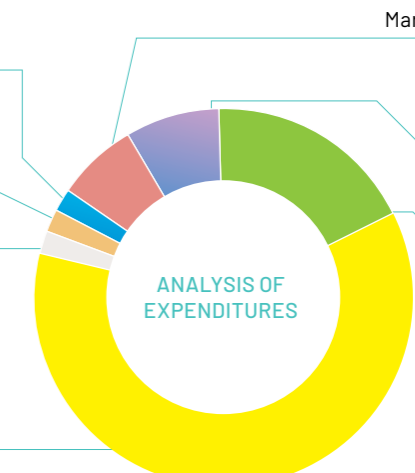
2%

Other Expenses

2%

Fuel Cost

61%



Marketing & Equipment Costs
7%

Corporate
Administration
8%

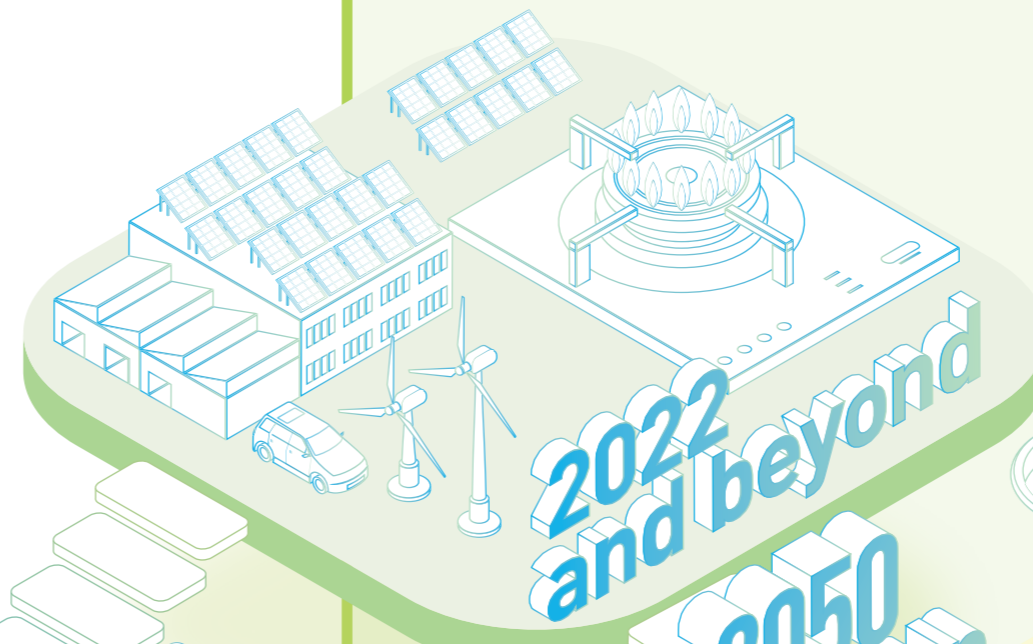
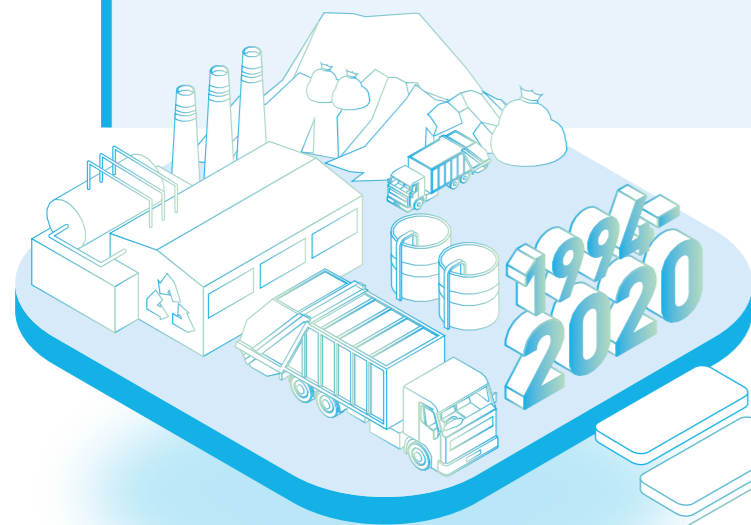
Other
Production Costs
18%

04 TOWNGAS CARBON NEUTRALITY ROADMAP

Towngas is committed to becoming carbon neutral by 2050 through energy transition and innovation, including the development of renewable energy, waste-to-energy, green hydrogen, efficiency improvement, carbon management, and other collaborative projects with universities and research institutes.

1994 - 2020

- 1994 Commenced **gas businesses** in the Chinese mainland
- 1999 Started to use renewable landfill gas from **3** landfills in Hong Kong
- 2000 Began to develop a wide range of **environmentally-friendly energy businesses** using innovative technologies
- 2006 Started to use natural gas for town gas production, accumulated carbon reduction **>1,200,000 tCO₂e**



2022 and beyond

Targets by 2025

- » Reduce group operational GHG emissions by **10%** (2020 baseline)
- » Reduce **10 million tonnes** of GHG emissions for the environment per year
- » Reduce **15%** energy use for North Point Headquarters building (2015 baseline)

Targets by 2030

- » Increase **2%** eco-efficiency of gas appliances

Main measures to achieve the targets by 2025:

- **200** zero-carbon industrial parks
- **8 GW** solar photovoltaics
- **Waste-to-energy** (e.g. utilising bio-grease and agricultural waste to produce advanced biofuel)
- **Hydrogen** separation and utilisation
- **60** electric vehicles in service to replace petrol cars

As at 2021

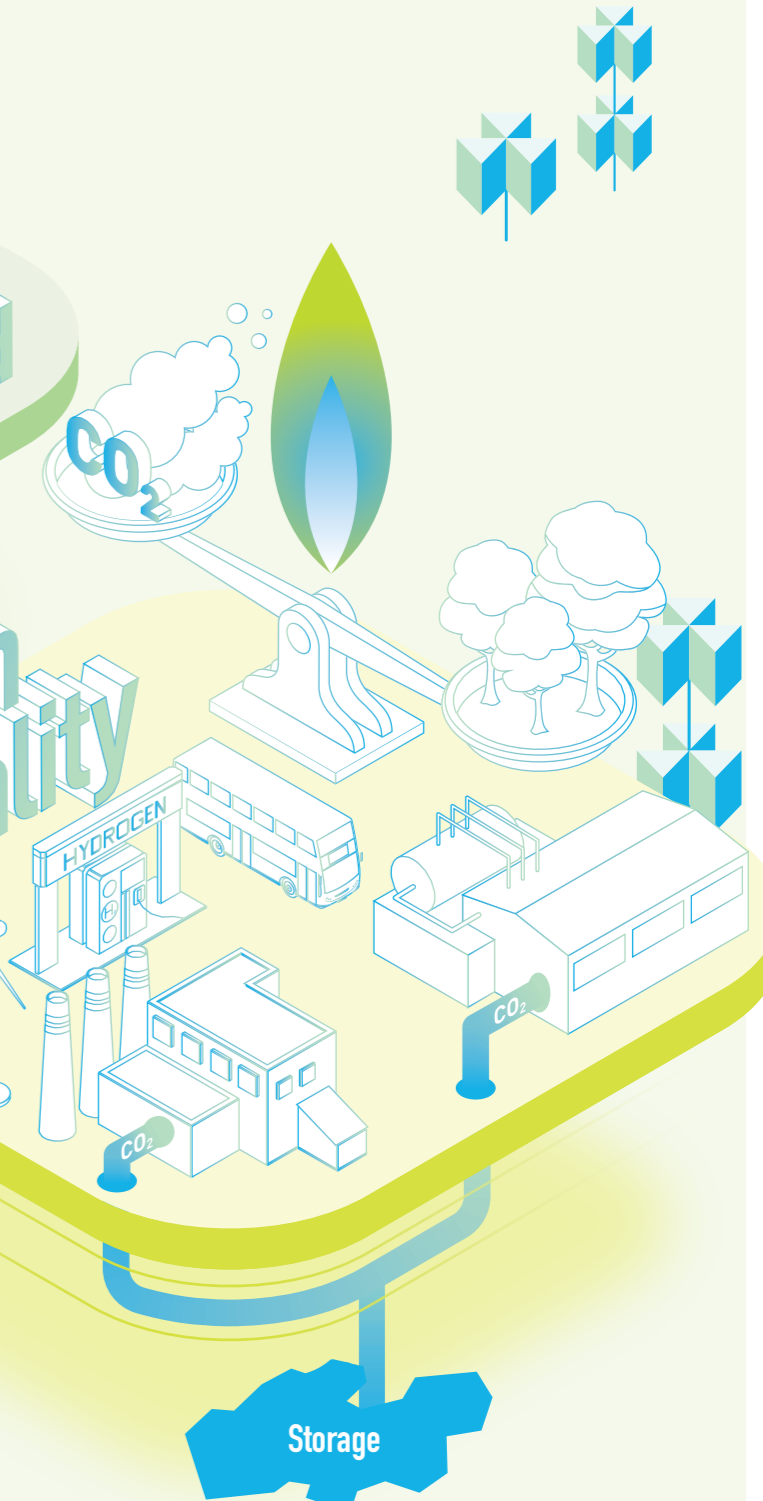
- Hong Kong gas production carbon intensity reduced **23%** (2005 baseline)
- 303 city-gas projects in the Chinese mainland, serving over **35 million** customers in 28 provincial regions
- Increased investment in smart energy solutions – more than **110** renewable energy projects planned and **32** zero-carbon smart industrial parks negotiated for development
- Patented technologies on the biomass utilisation are implemented in a number of projects



2050 Carbon Neutrality



- **Further Energy Efficiency Improvement**
- **Renewable Energy and Biofuel**
- **Carbon Capture and Trading**
- **Green Hydrogen**
- **Carbon Management**



Storage

05 2021 HIGHLIGHTS

STRENGTHENING CORPORATE GOVERNANCE

Corporate Governance

- Launched and updated **ESG policies**
- Provided **anti-corruption training** to the Board

Business Integrity

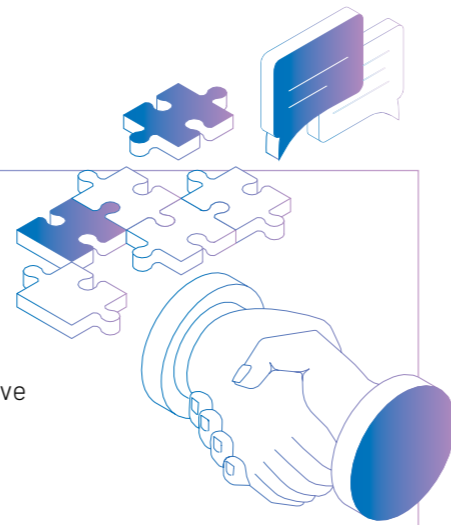
- Reinforced our Corporate Culture of **Integrity, Courtesy and MasterCraft** through refresher training and workshops

Risk Management

- **Mitigated risks** that may have a significant impact on our business

Data Privacy and Cyber Security

- Strengthened the **anomaly detection capacity** in critical areas to minimise the impact of a cyberattack



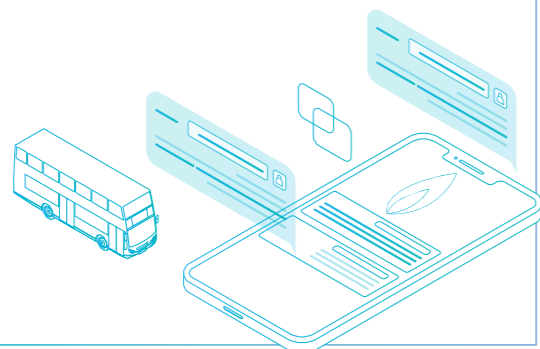
CREATING BUSINESS OPPORTUNITIES

Reliable Operations and Clean Energy Transition

- Uninterrupted gas supply: **99.996%** (Hong Kong)
- Concluded ESG loans at a total value of **HK\$2 billion**
- More than **110** renewable energy projects planned and **32** zero-carbon smart industrial parks negotiated for development

Innovation and Digitalisation

- Held the first smart energy innovation competition **TERA-Award**



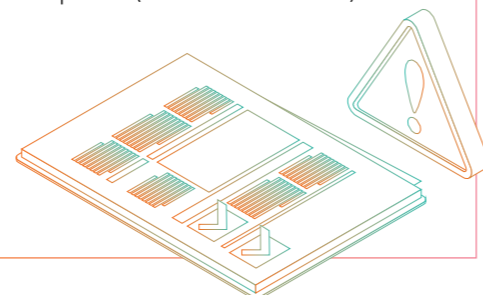
ENSURING HEALTH AND SAFETY

Occupational Health and Safety

- Group Lost-Time Injury Frequency Rate:
 - » Employees: **0.36**
 - » Contractors: **0.20**
 accidents per 1,000,000 man-hours
- Improved health and safety through **innovation** (e.g. Follow-Me Robot, immersive VR technology, drones for monitoring work)

Customers and Public

- Customer-related emergency reports (Hong Kong): **↓18%** in last five years
- **Record low number** of gas incidents achieved in 2021 and reduced by **10%** in last five years (Hong Kong)
- **No** major incidents and chemical leakages at our chemical plants (Chinese mainland)



PROTECTING THE ENVIRONMENT

Climate Change

- Committed to become **carbon neutral by 2050** through energy transition and innovation with **two** medium-term carbon reduction targets
- Conducted **physical risk assessments** under various climate scenarios for the Group to align with the Recommendation of the TCFD

Resources Management

- Achieved BEAM Plus Existing Buildings V2.0 Final Platinum – the **highest score** in Energy Use Aspect – Comprehensive Scheme category 2020/2021
- **>1,600 tonnes** of metal recovered under the Used Gas Appliance Recycling Program



CONTRIBUTING TO STAKEHOLDERS

Employees

- Number of employees: **2,442** (Hong Kong) **52,637** (outside Hong Kong)
- Average training hours per employee: **21.6** hours (Hong Kong) **51.5** hours (outside Hong Kong)
- **60%** of new Graduate Trainees were female

Customers

- Targets in Towngas Service Pledge were **all** achieved
- Efficiency: 8.99* (**exceeded target**)
- Courteous and friendly attitude: 8.99* (**exceeded target**)

*Exceeded target score of 8.5 out of 10

Community

- Volunteer service hours: **14,122** (Hong Kong) **578,586** (Mainland utility businesses)
- Conducted various **online volunteer** services for the elderly despite of the pandemic

Suppliers

- Identified **critical tier 1** suppliers
- Assessed **>90%** of suppliers¹ on their CSR performance. No significant negative impact was found

¹ Based on total purchase value of products and materials



2021 AWARD HIGHLIGHTS

Towngas Wins Three HKMA Sustainability Awards

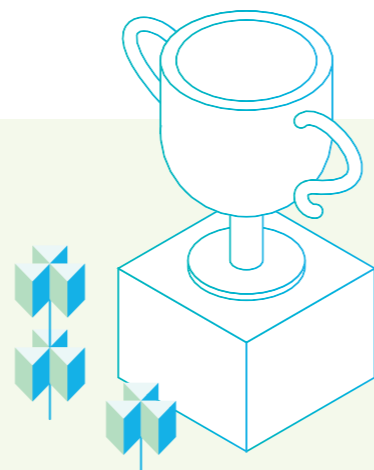
At the 2020/21 Sustainability Award Presentation Ceremony of The Hong Kong Management Association (HKMA), Towngas received three prestigious sustainability awards in recognition of our environmental, economic and social performance, as well as for promoting a low-carbon future.

1. Grand Award (Large Organisations)
2. Hong Kong Sustainability Award (Large Organisations)
3. Most Respected Organisations Award

Out of the many corporations in the awards competition, Towngas was the sole winner of the Grand Award in the Large Organisations category.

The three awards recognise the innovation and environmental protection measures Towngas has initiated, as well as the substantial resources we have invested in multiple sustainable projects such as the development of smart energy, zero-carbon industrial parks and food waste treatment, as well as corporate social responsibility.

As a socially responsible company, Towngas has provided assistance to seniors and the underprivileged, promoted public health and worked towards an inclusive society through the Towngas Volunteer Services Team.



Towngas Ranked First on Three Sustainability Indexes

Towngas took the top spot in three sustainability indexes, compiled by the Centre for Business Sustainability of The Chinese University of Hong Kong's Business School.

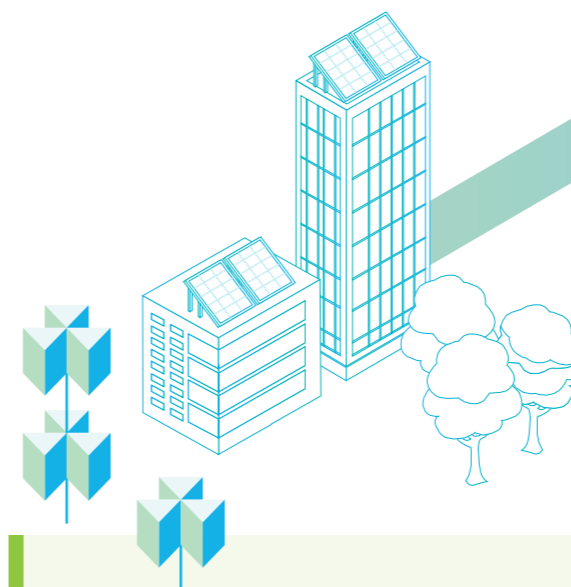
1. Greater China Business Sustainability Index, Exemplar Level (GCBSI)
2. Greater Bay Area Business Sustainability Index, Exemplar Level (GBABSI)
3. Hong Kong Business Sustainability Index, Exemplar Level (HKBSI)

The inaugural GCBSI assessed 200 constituent companies of the Hang Seng Index, FTSE TWSE Taiwan 50 Index, Shenzhen 100 Index and Shanghai Stock Exchange SSE 50 A Share Index on their sustainability performance.

Towngas has been ranked first on the GBABSI for two consecutive years and on the HKBSI for three consecutive years.

The three awards affirm Towngas' commitment to sustainability in areas such as smart energy in Hong Kong and the Chinese mainland, as well as our environmental solutions in distributed energy systems, photovoltaic power generation, energy storage and batteries, all of which contribute towards the Chinese mainland's 2030/2060 dual carbon goals. Corporate governance and social responsibility are also taken into consideration.

The three indexes are formulated under the Values-Process-Impact (VPI) model, with corporations assessed on and ranked according to their performance in sustainable development.



Major Corporate Awards and Recognitions in 2021

The 1st Greater China Business Sustainability Index

- Ranked First
- Exemplar Level

The Chinese University of Hong Kong



The 2nd Greater Bay Area Business Sustainability Index

- Ranked First
- Exemplar Level

The Chinese University of Hong Kong



The 6th Hong Kong Business Sustainability Index

- Ranked First
- Exemplar Level

The Chinese University of Hong Kong



The 20th Hong Kong Occupational Safety and Health Award

- OSH MVP Award 15 Years PLUS
- OSH Enhancement Program Award - Gold
- OSH Innovation Award - Gold
- Safety Performance Award
 1. The Hong Kong and China Gas Company Limited - Gas Production Stream
 2. ECO - HK LPG Filling Station
 3. P-Tech Engineering Company Limited
 4. Towngas Telecommunications Company Limited
 5. U-Tech Engineering Company Limited

Occupational Safety and Health Council



2020/21 Hong Kong Sustainability Award

- Hong Kong Sustainability Award - Grand Award (Large Organisations)
- Hong Kong Sustainability Award (Large Organisations)
- Most Respected Organisations Award

The Hong Kong Management Association



2021 Best Corporate Governance and ESG Awards

- ESG Awards: Special Mention (Hang Seng Index Category)

The Hong Kong Institute of Certified Public Accountants



Award for Excellence in Training and Development 2021

- Campaign Awards - Gold Award
- Excellence in Cultural Change

The Hong Kong Management Association



Industry Cares Recognition Scheme 2021

- Outstanding Caring Award (Enterprise Group)
- The Most Innovative Award (Enterprise Group)

Federation of Hong Kong Industries



Best Project Award 2020-2021 (New Design in Covid-19 Age)

Institution of Mechanical Engineers (Hong Kong Branch)



Innovative Energy Project of the Year Award 2021

The Association of Energy Engineers



China IDC Industry 2021 Quality Service Award

China IDC Industry Annual Ceremony Organization Committee



2021 CarbonCare® ESG Label (Level 4)

CarbonCare InnoLab and CarbonCare Asia



BOCHK Corporate Environmental Leadership Awards 2020

- Manufacturing sector - Gold Award
 - Sustainable Business Award
- Federation of Hong Kong Industries



IDC Best Third-party Data Centre Award

2021 Global Internet Data Conference and South China Data Centre Alliance Summit



Asia Data Centre Annual Safety Shield Award

The 9th Asia IDC Expo 2021



Employer of Choice Award 2021

- Workplace Culture Change Award
- Health and Wellbeing Award
- COVID-19 Caring Employer

Job Market Publishing Limited

ESG Recognition Scheme 2021

- 2020-2021 Special Recognition - Outstanding Sustainable Public Utility
 - Excellent ESG Enterprise of 2020-2021
- Hong Kong Economic Times

Hong Kong Customer Contact Association Award 2021

Mystery Caller Assessment Award - Public Service and Utilities - Gold Award
Hong Kong Customer Contact Association

Hong Kong Green Award 2021

Sustainable Procurement Award (Large Corporation) - Procurement Governance
Green Council

Hong Kong Green Shop Alliance Award 2021

Best Green Practice in Shops (Catering Sector) - 1st Runner-Up
Hong Kong Green Shop Alliance

IFPHK Financial Education Leadership Awards 2021

Corporate Financial Education Leadership - Gold Award
Institute of Financial Planners of Hong Kong

Sing Tao Service Awards 2020

After-sales Services Award
Sing Tao Daily

SportsHour Company Scheme

- Inaugural SportsHour Company Scheme Recognised Company List - Companies >500 employees
- "CO-FIT" Best Practice Showcase Recognised Companies / Organisations - Companies or organisations >500 employees

InspiringHK Sports Foundation

Construction Industry Volunteer Award Scheme 2021

Excellence in Construction Industry Volunteering Collaboration - Silver Award
Construction Industry Council

Equal Opportunity Employer Recognition Scheme

- Gender Equality
- Equality for Diverse Abilities
- Family Status Equality

Equal Opportunities Commission

2021 Randstad Employer Brand Awards

Most Attractive Employer Second Runner Up
Randstad

Caring Company

1. The Hong Kong and China Gas Company Limited
2. Towngas Telecommunications Company Limited

The Hong Kong Council of Social Service

Junzi Corporation Award

The Hang Seng University of Hong Kong

2020/2021 Environmental Paper Award

Certificate of Merit
The Hong Kong Institution of Engineers (Environmental Division)

Hong Kong Service Award 2021

Public Utilities
Eastweek

Highest Service Hour Award 2020

- Private Organisations - Best Customers Participation - Honour
 - Private Organisations - Category 1 - Merit
- Social Welfare Department

06 OUR ESG APPROACH

Towngas puts a high priority on environmental, social and governance (ESG) issues as we transit from mainly a gas products and services provider into a smart energy company making substantial contributions towards a sustainable future.

To guide us in this continually-evolving process, we have established an ESG Framework that is aligned with our Vision, Mission, Commitment and Responsibility. This framework has been endorsed by our ESG Committee.

| | |
|--|---|
| <p>VISION</p> <p>To be Asia's leading clean energy supplier and quality service provider, with a focus on innovation and environmental friendliness.</p> | <p>MISSION</p> <p>To provide our customers with a safe, reliable supply of energy and the caring, competent and efficient service they expect, while working to preserve, protect and improve our environment.</p> |
| <p>COMMITMENT</p> <p>To conduct ourselves in an ethical and transparent manner so that all stakeholders know we are accountable to them for the decisions and actions we take to become a sustainable business.</p> | <p>RESPONSIBILITY</p> <p>To recognise the importance of our employees and their contributions to the success of our business, and our responsibility to keep them safe, informed, engaged and equipped to undertake our mission.</p> |

ESG Framework

Our ESG framework takes into consideration our positive and negative impacts on stakeholders, with five focus areas for sustainable development. These include strengthening corporate governance; creating business opportunities; ensuring health and safety; protecting the environment; and contributing to stakeholders.

Our framework is based on our philosophy of "Growth = innovation x implementation", under which we invest in research and development and encourage our employees to propose new ideas. Focusing on these five areas will enable us to achieve long-term sustainability for our business and create shared value for our stakeholders.

Strengthening Corporate Governance
Uphold strong corporate governance standards and operate ethically

Creating Business Opportunities
Diversify our portfolio for business development growth and deliver sustainable economic performance

Ensuring Health and Safety
Manage our operations safely and responsibly and provide a safe and healthy environment for our employees and workers

Protecting the Environment
Reduce our environmental footprint and combat climate change

Contributing to Stakeholders
Create value for all of our stakeholders and the communities in which we operate

Managing ESG at Towngas

Our ESG Committee is responsible for overseeing the Company's ESG strategies, policies and practices. Headed by the Managing Director of the Company, Mr Alfred Chan Wing-kin, it comprises eight Executive Committee members and two members of senior management. The Chairman, who is appointed by the Towngas Board of Directors, reports ESG matters to the Board.

All 10 members represent different areas of our business, including operations, finance, human resources, engineering, commercial, health, safety and the environment, as well as community engagement.

The ESG Committee is responsible for identifying and reviewing ESG issues, risks and opportunities; tracking ESG performance and recommending improvement strategies; reviewing and evaluating the annual ESG Report and recommending its endorsement by the Board/Executive Committee; and providing updates to the Board/Executive Committee on the latest relevant ESG matters.

In 2021, the ESG Committee met on two separate occasions and discussed the following key ESG topics:

- Endorsement of the Group's ESG Policy;
- Performance on ESG indices;
- Climate-related physical risk assessment to align with the Recommendations of the TCFD;
- Establishment of medium-term carbon reduction targets; and
- Towngas Sustainability Award for internal awareness;
- Community initiatives undertaken

For additional details on how we manage ESG at Towngas, please refer to our [ESG website](#).

Group-wide ESG Training

To instill integrity and an ethical corporate culture into the thinking of employees, and raise their awareness of ESG, we produced nine in-house training videos that all our staff and contractors are required to view in 2021-2022:

ESG Introduction to ESG

| | | | |
|--|---------------------------------------|--|------------------------------------|
| | Climate risks and opportunities | | Equal opportunities |
| | Transitioning to a low-carbon economy | | Community involvement |
| | Circular economy | | Whistleblowing and anti-corruption |
| | Health and safety in the workplace | | Integrity |

Supporting the Sustainable Development Goals

Our support for the United Nations Sustainable Development Goals (SDGs) aligns with our commitment to overcome the challenges of climate change and contribute towards the carbon reduction efforts of Hong Kong and the Chinese mainland.

We have selected the four SDGs most relevant to our operations and value chain, as we believe these make the greatest difference towards achieving our carbon reduction targets. In doing so, we evaluated any potential negative impacts on our operations, such as risks to people and the environment, and selected our products, services or investments that would contribute most to the SDGs. We also reviewed the impacts and contributions of all SDGs on our company at each stage of our value chain.

How we are Contributing to SDGs



Ensure availability and sustainable management of water and sanitation for all

Potential Impacts

- + Deliver a safe and reliable supply of drinking water to our customers
- Production processes consume / generate significant amount of water/ wastewater

Action Taken/Achievement

- ◇ **2.62 million** customer accounts with drinking water up to national standard
- ◇ **3rd** reserve osmosis system at Tai Po Gas Production Plant completed and in operation and **120,498 m³** of water conserved through the reverse osmosis systems



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

Potential Impacts

- + Expedite our coverage of gas supply and promote fuel conversion to gas
- + Develop a clean energy business
- Fossil fuels as the major raw materials of town gas production

Action Taken/Achievement

- ◇ **1.96 million** town gas customer accounts in Hong Kong
- ◇ **35 million** city-gas customer accounts in the Chinese mainland
- ◇ More than **110** renewable energy projects planned and **32** zero-carbon smart industrial parks negotiated for development
- ◇ Landfill gas accounts for approximately **1%** of town gas fuel mix
- ◇ Production of approximately **180,000 tonnes** of hydro-treated vegetable oil (HVO) in 2021 and look forward to producing **Sustainable Aviation Fuel (SAF)** in the near future



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

Potential Impacts

- + Provide a safe and reliable supply of energy
- + Promote recycle and reuse within our company's businesses and for customers
- Produce both hazardous and non-hazardous waste during operation and along value chain

Action Taken/Achievement

- ◇ Uninterrupted gas supply **99.996%**
- ◇ **Record low number** of gas incidents achieved in 2021 and **10%** in last five year (Hong Kong)
- ◇ **No major** incidents and chemical leakages at our chemical plants (Chinese mainland)
- ◇ **>160,000 tonnes** of organic waste was processed in our organic waste resource utilisation project in Suzhou, equivalent of reduction of **16,900 tCO₂e**
- ◇ **>1,600 tonnes** used appliances collected for recycling



Take urgent action to combat climate change and its impacts

Potential Impacts

- + Promote a low-carbon lifestyle along our value chain
- Physical and transition risk that affects our operations and businesses
- Generate greenhouse gas emissions that accelerate climate change

Action Taken/Achievement

- ◇ Committed to become **carbon neutral by 2050** through energy transition and innovation with **two** medium-term carbon reduction targets
- ◇ Conducted **physical risk assessments** under various climate scenarios for the Group to align with the Recommendation of the TCFD
- ◇ Carbon intensity in Hong Kong gas production **↓23%** compared with the 2005 baseline
- ◇ Partnerships with various stakeholder groups to promote environmental protection and sustainable development awareness

Stakeholder Engagement and Materiality Assessment

We engage both external and internal stakeholders regularly in order to set ESG targets, measure our performance and determine the effectiveness of our existing ESG strategy. What's more, it helps us to identify risks and opportunities, and refine our ESG policies.

Stakeholder Engagement Approach

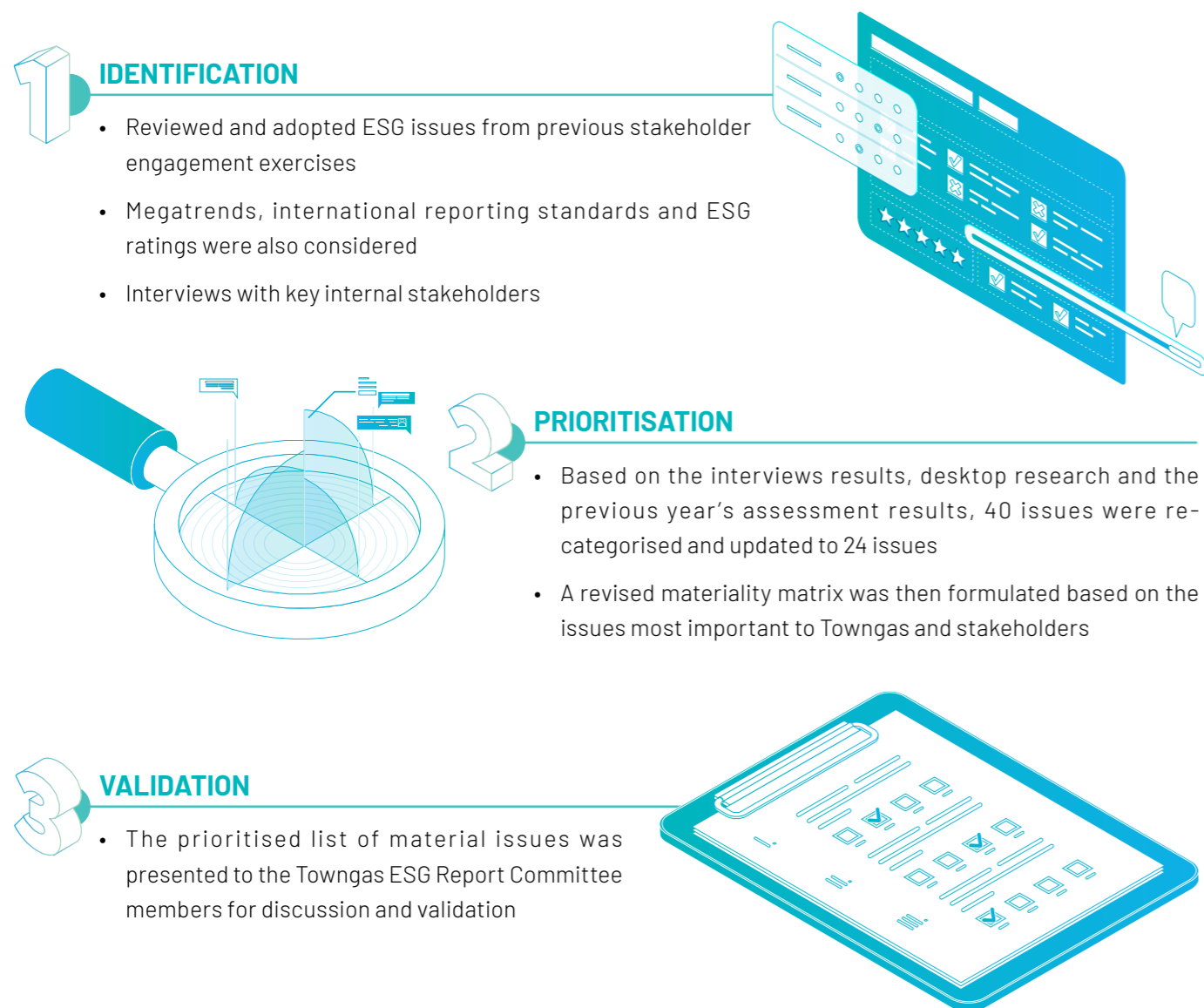
Our key stakeholders are those who are significantly affected by our operations or businesses. Typically, we will organise regular engagement exercises with them through a variety of channels, as shown on our [ESG website](#).

Materiality Assessment

Building on the results of the full materiality review conducted last year, in 2021 we conducted internal reviews and engaged key internal stakeholders with significant involvement in the strategic direction of the Company, to gain a more in-depth understanding of the risks and opportunities we face as well as any significant changes that have occurred. The findings were then used to validate and revise our materiality matrix.

For 2022, we plan to engage external stakeholders to obtain a more holistic view.

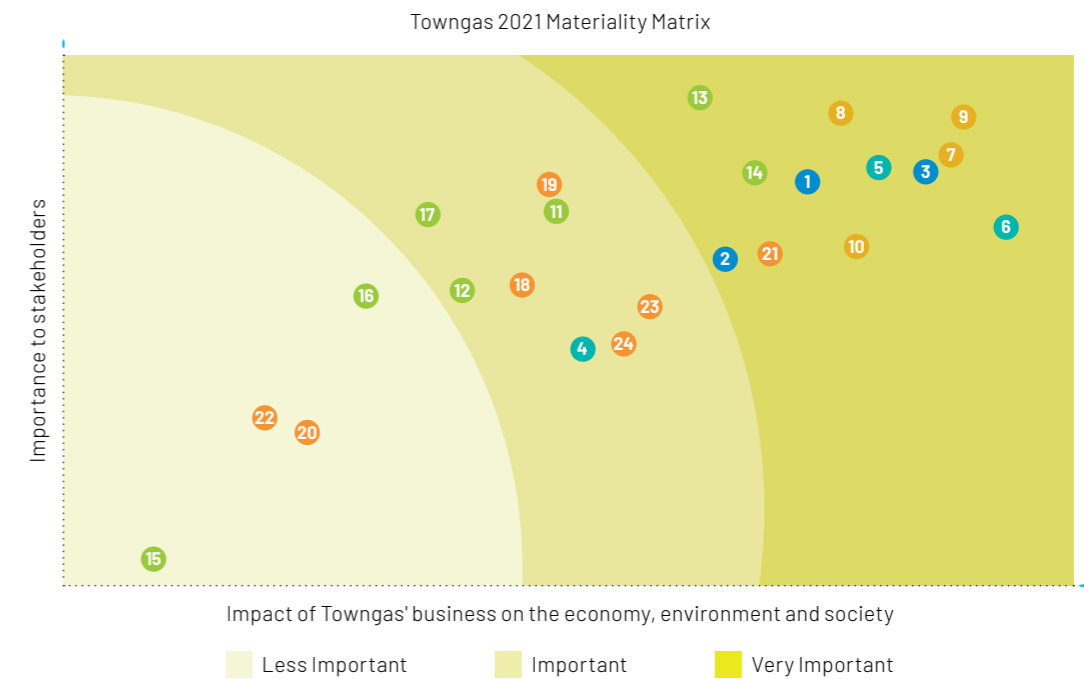
In preparing our materiality assessment, we adopted the internationally recommended three-step process of Identification, Prioritisation and Validation.



Towngas 2021 Materiality Matrix

The materiality matrix presented here summarises the relative importance of the 24 material issues by their importance to stakeholders (Y-axis) and the impact of Towngas' business on the economy, environment and society (X-axis).

A total of 12 issues were prioritised as very important for Towngas to address and report on.



Strengthening Corporate Governance

- Business integrity
- Corporate governance
- Data privacy and cybersecurity

Creating Business Opportunities

- Economic impacts
- Fossil fuel alternatives
- Innovation

Ensuring Health and Safety

- Asset integrity and emergency preparedness and response
- Customer health and safety
- Occupational health and safety
- Supply security and reliable production

Protecting the Environment

- Air emissions
- Biodiversity
- Climate resilience and greenhouse emissions
- Energy
- Materials
- Waste
- Water and effluents

Contributing to Stakeholders

- Community engagement
- Customer relationship
- Freedom of association and collective bargaining
- Human capital development
- Human rights management
- Inclusion and diversity
- Supply chain management

Most of the very important material issues – occupational health and safety, data privacy and cybersecurity, energy, supply security and reliable production and human capital development – were consistent with those identified last year.

Climate change was also seen as increasingly important among our stakeholders, who have growing expectations on companies (particularly those involved in the fossil fuel industry) to monitor their greenhouse gas emissions and to set decarbonisation targets aligned with the Paris Agreement or national climate targets.

Other issues of concern include innovation and fossil fuel alternatives, which offer new opportunities to develop sustainable energy solutions, as well as corporate governance, a topic that is considered to be core to Towngas' values and business operations.

Boundaries and Impacts

The tables below show all material issues covered in this report, their corresponding boundaries, where the impacts occur and Towngas' involvement in them.

TOPIC BOUNDARIES FOR MATERIAL ISSUES

| Material Issues | Boundaries | | | | Impacts |
|---|------------|---------------------------|-----------|-----------|---|
| | EMPLOYEES | CONTRACTORS AND SUPPLIERS | CUSTOMERS | COMMUNITY | |
| 1 Business integrity | 🌿 | 🌿 | 🌿 | 🌿 | Strengthening Corporate Governance |
| 2 Corporate governance | 🌿 | 🌿 | 🌿 | 🌿 | |
| 3 Data privacy and cybersecurity | 🌿 | 🌿 | 🌿 | | |
| 4 Economic impacts | 🌿 | 🌿 | 🌿 | 🌿 | Creating Business Opportunities |
| 5 Fossil fuel alternatives | 🌿 | 🌿 | 🌿 | | |
| 6 Innovation | 🌿 | 🌿 | 🌿 | 🌿 | |
| 7 Asset integrity and emergency preparedness and response | 🌿 | 🌿 | 🌿 | 🌿 | Ensuring Health and Safety |
| 8 Customer health and safety | 🌿 | 🌿 | 🌿 | | |
| 9 Occupational health and safety | 🌿 | 🌿 | | | |
| 10 Supply security and reliable production | 🌿 | 🌿 | 🌿 | 🌿 | Protecting the Environment |
| 11 Air emissions | 🌿 | 🌿 | 🌿 | 🌿 | |
| 12 Biodiversity | 🌿 | 🌿 | | 🌿 | |
| 13 Climate resilience and greenhouse emissions | 🌿 | 🌿 | 🌿 | 🌿 | |
| 14 Energy | 🌿 | 🌿 | 🌿 | | |
| 15 Materials | 🌿 | 🌿 | | | |
| 16 Waste | 🌿 | 🌿 | | | |
| 17 Water and effluents | 🌿 | 🌿 | 🌿 | 🌿 | Contributing to Stakeholders |
| 18 Community engagement | 🌿 | | | 🌿 | |
| 19 Customer relationship | 🌿 | 🌿 | 🌿 | | |
| 20 Freedom of association and collective bargaining | 🌿 | 🌿 | | | |
| 21 Human capital development | 🌿 | 🌿 | | | |
| 22 Human rights management | 🌿 | 🌿 | | | |
| 23 Inclusion and diversity | 🌿 | 🌿 | | | |
| 24 Supply chain management | 🌿 | 🌿 | | | |

Results and Our Responses

Based on the interviews we conducted and our desktop research, we have identified opportunities in low carbon transition, health and safety and human capital development as key priorities to be addressed.

In the table below, we indicate these key issues and stakeholder feedback from the engagement process along with our corresponding responses:

OPPORTUNITIES IN LOW CARBON TRANSITION

Smart energy is a key area for business development as well as helping customers lower their carbon emissions

To accelerate our transition from a traditional utility company into an integrated energy supplier, Towngas Smart Energy Company Limited will focus on renewable energy solutions, such as solar energy systems for commercial and industrial customers, distributed energy systems and power storage projects. Towngas Smart Energy Company Limited will also expand its digital capabilities through cloud computing, smart energy management systems, carbon auditing, carbon trading and asset management.

HEALTH AND SAFETY

Ensuring employee, customer and public health and safety

Health and safety are at the core of our business operations. We continue to develop new technologies that enhance the health and safety of employees and customers while also further improving the customer experience. We also carry out audits of our facilities and pipelines to ensure the safety of our assets and leverage the latest technology to train our workers in high-risk work environments.

HUMAN CAPITAL DEVELOPMENT

Ensuring a sustainable workforce to mitigate social risks such as the ageing population

Towngas organises a range of talent development programmes to support staff succession and a sustainable talent pipeline. These included internship and apprenticeship schemes, as well as subsidies for staff to attend external training/higher education. Workshops, seminars and training programmes are also held to develop employee skills and in areas such as our Code of Conduct. We also make a strong effort to attract women, older workers and the disabled in line with our commitment to diversity.

07 STRENGTHENING CORPORATE GOVERNANCE

TAKING MEANINGFUL ACTION

At Towngas, we strive to be a well-managed company that encourages all staff to be ethical and transparent in their dealings with their colleagues as well as customers, suppliers, investors and other external stakeholders. We have corporate policies and guidelines that help to ensure good corporate governance, with relevant whistleblowing channels in place for reporting improprieties. In addition, we have established a robust risk management system so we can deal effectively with any contingencies that may arise.

In 2021, we further strengthened our corporate governance, and reinforced our commitment to sustainability by launching and updating our Environmental, Social and Governance (ESG) policies.

As new staff join the company, they receive comprehensive mandatory training in our corporate culture of integrity and ethics, as well as regular refresher training to keep their knowledge up-to-date.



Corporate Governance

Our high standard of corporate governance protects the rights and interests of our shareholders. In 2021, we strengthened our corporate governance, updated and comprehended our ESG policies.



Risk Management

We have a robust risk management system that enables us to deal with risks effectively. This system is regularly updated, and includes climate change impacts on our businesses.



Business Integrity

At Towngas, we comply with all major local laws and regulations which have a significant impact on the Group. Our Code of Conduct and other related policies ensure our staff and business partners behave ethically at all times.



Data Privacy and Cybersecurity






We take every step to ensure our customers' privacy is protected. We also take every precaution to keep our computer and network systems safe and secure.



2021 Performance Highlights

-  Launched and updated **ESG policies**
-  Provided **anti-corruption training** to the Board
-  Ensured the **effectiveness of our risk management system** in accordance with the relevant framework by continuously mitigating risks that may have a significant impact on our business
-  Strengthened the **anomaly detection capacity** in critical areas to minimise the impact of a cyberattack
-  Reinforced our Corporate Culture of **Integrity, Courtesy and MasterCraft** through gamified refresher training, competitions and workshops

Future Actions and Targets

-  Promote **business ethics and compliance** by regularly reviewing relevant policies and guidelines; carry out risk management training and internal audits
-  Review the **effectiveness of our risk management system** to keep abreast of the changing business environment
-  Review the **corporate governance principles and practices** adopted by the Group to ensure Listing Rules' compliance
-  Continue to work with **law enforcement** for better collaboration and intelligence exchanges to combat any potential cyber threats
-  Continue to promote **Corporate Culture and Code of Conduct** through the new design of e-learning programmes

CORPORATE GOVERNANCE MANAGEMENT APPROACH

At Towngas, our high standard of corporate governance helps to assure shareholders that their rights and interests are well protected. For other stakeholders, including investors, customers, employees, suppliers and members of the community, our adherence to good corporate governance principles and practices is a clear demonstration of our commitment to fulfilling our social responsibilities.

The Board of Directors of Towngas (the Board) is the Group's highest governing body. It is responsible for enforcing corporate governance and risk management through effective internal controls that enhance transparency and accountability.

Policies adopted by the Board include the *Board Diversity Policy* and a *Nomination Policy* to ensure it has a balance of skills, experience and diversity of perspectives appropriate to the requirement of the Company's businesses.

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

For details on the corporate governance management approach and relevant policies, please refer to our [ESG website](#).

PROGRESS AREAS

As at 31 December 2021, the Board comprised nine members: three executive directors and six non-executive directors, three of whom are independent.

Given below are names of Directors:

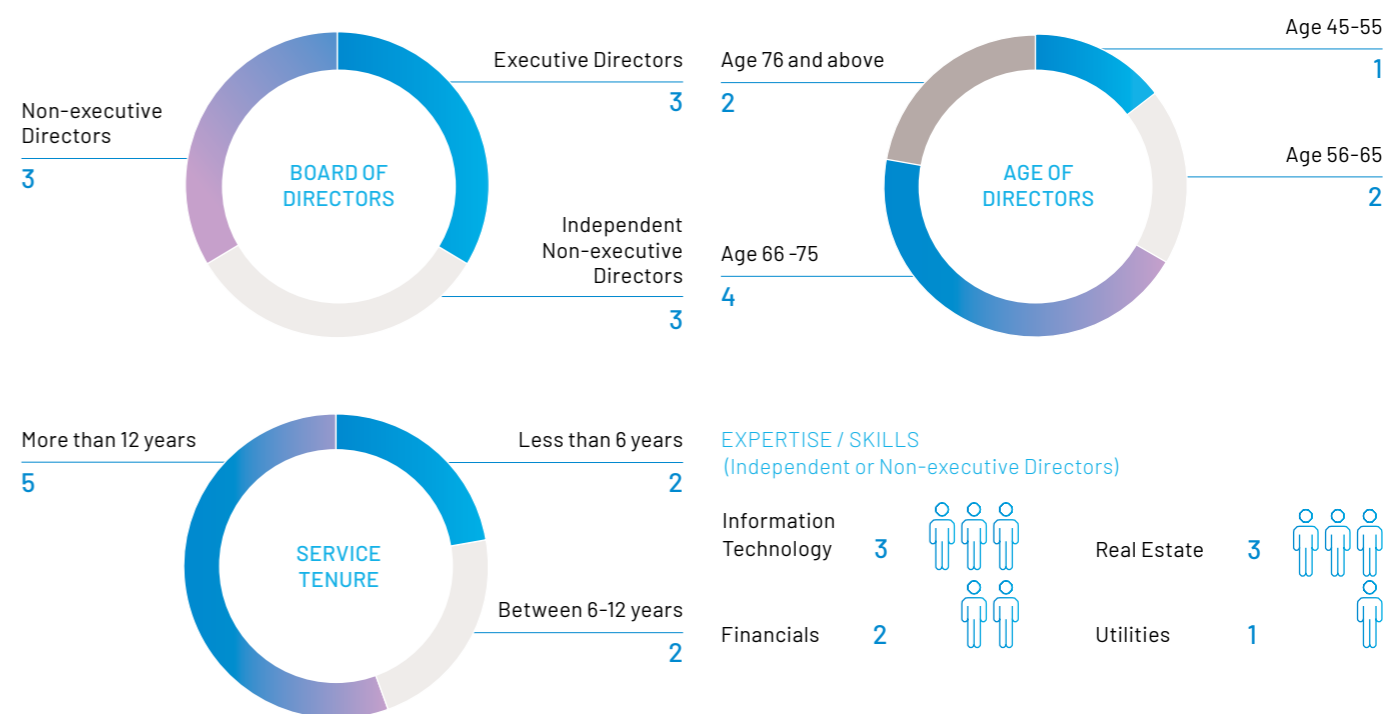
| | |
|--------------------------------------|---|
| Non-executive Directors: | Dr. Lee Ka-kit (Chairman), Dr. Lee Ka-shing (Chairman) and Dr. Colin Lam Ko-yin |
| Independent Non-executive Directors: | Dr. the Hon. Sir David Li Kwok-po, Prof. Poon Chung-kwong and Dr. the Hon. Moses Cheng Mo-chi |
| Executive Directors: | Mr. Alfred Chan Wing-kin, Mr. Peter Wong Wai-ye and Mr. John Ho Hon-ming |

The Board is ultimately accountable for the Group's activities, strategies and financial performance. Additionally, anti-corruption training materials are circulated to the Board of Directors during the year; Independent Commission Against Corruption (ICAC) materials on anti-corruption are disseminated in the monthly reports to directors.

To enhance diversity of the Board, at least one female board member will be appointed to the Board on or before 31 December 2024.

The Board has a balanced composition and the Board diversity mix is shown below.

DIVERSITY OF BOARD OF DIRECTORS



For details about the Board, its composition, biographical details, operation and committees, please refer to our [corporate website](#) or our [Annual Report 2021](#).

ESG Policies

During the year, Towngas launched the Group ESG Policy with 23 ESG-related policies which outline its commitment to operating its business in an environmentally, socially and economically responsible manner. We will review the policies from time to time as appropriate, to ensure their effectiveness. To view these policies, please refer to our [ESG website](#).

| ESG Policy | | |
|---|---|--|
| Environmental | Social | Governance |
| <ul style="list-style-type: none"> Climate Change Policy Environmental Policy | <ul style="list-style-type: none"> 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 | <ul style="list-style-type: none"> 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 |



RISK MANAGEMENT

MANAGEMENT APPROACH

Risk management at Towngas, which covers all business units in the organisation, is an ongoing process and an intrinsic aspect of our day-to-day operations and part of the culture at Towngas.

We have established a robust system of risk management and internal control, which contributes to our future success and helps to increase our long term value for key stakeholders. To ensure proper risk reporting channels are in place, the Group Risk Management Committee recommends the risks and corresponding controls to the Executive Risk Management Committee and reports them to the Board for its endorsement.

For details on the risk management approach and relevant policies, please refer to our [ESG website](#).

PROGRESS AREAS

As one of our ongoing risk management efforts, the Board reviewed the effectiveness of our risk management system, as well as key risks impacting our business and their corresponding controls, during the bi-annual risk assessment. For further information about risk management at Towngas, please refer to our [Annual Report 2021](#).



BUSINESS INTEGRITY

MANAGEMENT APPROACH

At Towngas, we comply fully with all the major local laws and regulations of the jurisdictions in which we operate.

Our staff members are expected to adhere fully to the principles of equal opportunity, fair practice, freedom of association, whistleblowing, conflicts of interest and integrity as set out in our [Code of Conduct](#) and will be subject to disciplinary action if they contravene those principles. In addition, we require our suppliers to maintain an equally high standard of ethics as stipulated in our [Code of Practice for Suppliers](#).

We also have an [Anti-Fraud Policy](#) to promote integrity as a core company value and have put in place a [Whistleblowing Policy](#) that encourages employees and stakeholders to raise concerns about any misconduct, malpractice or irregularity. In addition, all employees must respect intellectual property rights, and not infringe copyrighted work or engage in anti-competitive behaviour in the course of their work.

Training in anti-corruption and the Code of Conduct is mandatory for all staff and is included in our induction course when they join the Company. Refresher programmes on the Code of Conduct and Whistleblowing Policy are conducted regularly to ensure our people have the updates and constant understanding.

For details on our business integrity management approach and relevant policies, please refer to our [ESG website](#).

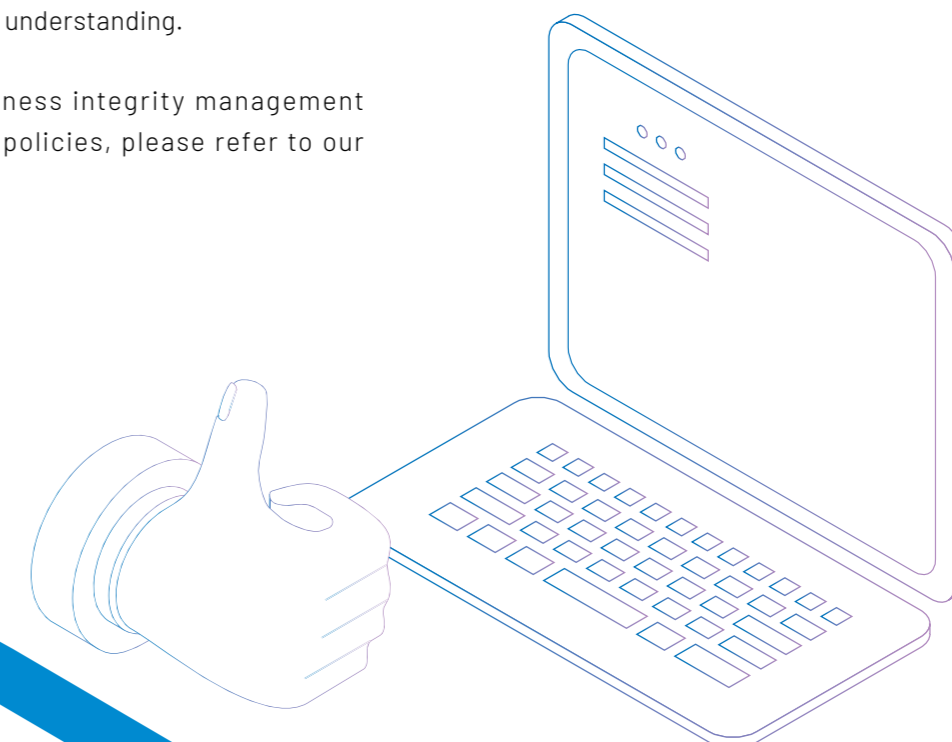
PROGRESS AREAS

Promoting an Ethical Culture

In Hong Kong, we resumed face-to-face ICAC Anti-Fraud Training by ICAC Officers in 2021 for our existing staff and all new joiners; 196 employees had been trained during the year. Training in the Towngas Code of Conduct was added in 2021 as a module in the self e-learning pack for new joiners. Every new joiner is required to complete the e-learning within three months after joining the Company. 198 employees had completed the training.

In our Mainland businesses, over 2,400 staff at our Mainland Headquarters and regional offices completed the training on our Anti-Fraud Policy and Code of Conduct during the year. These included new joiners, who participated through e-learning courses or our orientation programme.

Towngas complies with all major local laws and regulations which have a significant impact on the Group.



Legal Compliance

Towngas complies with all major local laws and regulations which have a significant impact on the Group, as the basic requirement for how we operate.

| | | |
|--------------------------|--|--|
| Business Ethics | Anti-corruption | No Reportable Cases |
| | Anti-competitive behaviour | No Reportable Cases |
| | Labour standards (child and forced labour) | No Reportable Cases |
| Health and Safety | Occupational health and safety | No Significant Reportable Cases ¹ |
| | Customers and the public | No Reportable Cases |
| Employees | Employment practices ² | No Reportable Cases |
| Customers | Customer privacy | No Reportable Cases |
| | Product and service information and labelling, and marketing information | No Reportable Cases |
| The Environment | - | No Reportable Cases |

1. An accident case happened in December 2020. Subsequent to the accident, our Company was fined in 2021.
1. Employment practices related to compensation and dismissal, recruitment and promotion, working hours, rest periods, equal opportunity, diversity, anti-discrimination, and other benefits and welfare.

DATA PRIVACY AND CYBER SECURITY

MANAGEMENT APPROACH

As data privacy and cyber security have become key concerns of our stakeholders, we have a Data Privacy Standing Committee, which is responsible for protecting stakeholders' personal data which we have collected or held, such as safeguarding our customers' data in our communications with them, and a *Personal Data Privacy Policy*, which sets out our standards for handling personal data. Our *Information Security Policy* ensures the confidentiality, integrity and availability of the Group's information and technology assets. To deal with cyber security issues, we have a Cyber Security Committee responsible for all cyber security matters at Towngas. The Head of Corporate Information Technology directly reports to Deputy Managing Director who is in

the Executive Committee and responsible for overseeing cybersecurity within the Company. Additionally, we test our incident response procedures annually.

To ensure the accountability of each department in the Company, all departments must submit a declaration of compliance with data protection requirements annually.

For more information on how Towngas handles personal data, mitigates the risks of data leakages and guards against cyberattacks, please refer to our [ESG website](#).

PROGRESS AREAS

Customer Privacy

During the year, we published our Data Processor Review Checklist requirements for existing data processors and new processors and built up our data inventory. We also developed an online Privacy Management Programme, using Microsoft Power Apps. This Privacy Management Programme serves as a strategic framework to assist the Company in building a robust privacy infrastructure to facilitate compliance with the requirements under the Personal Data (Privacy) Ordinance of Hong Kong and embrace personal data privacy protection as part of our Company's corporate governance responsibilities.

In any new project, Towngas will walk through our Privacy Impact Assessment in order to ensure customer data is protected. This assessment, which also aims to ensure our compliance with current regulations, helps to enhance the privacy of our customers.

In addition to the Privacy Impact Assessment, we require a Data Processor Checklist walk-through whenever there is a new or existing project that involves processing customer data by a third party on behalf of the Company.

Cyber Security

Early anomaly detection allows suspected data breaches to be detected in the early stage, which effectively minimises their impact. By making use of threat intelligence and active monitoring under the Mitre framework, any suspected activities will come under tight scrutiny; any such detected activities will be validated against their legitimacy and incident response procedures.

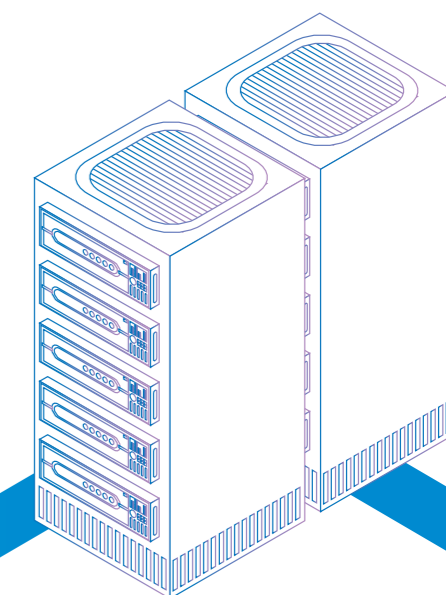
To ensure our recovery capability, we conduct an annual disaster recovery drill on a backup site.

In fortifying our security posture, awareness is of the utmost importance. Our user community receives regular updates on information security as well as tips during our annual Cyber Security Week. Under the theme, Be Cyber Smart, this year's Cyber Security Week event featured security experts from different companies, who shared their insights on current cyber security risks, cases of data breaches and prevention methods.

Beyond these precautions, our Corporate Crisis Management Team has incorporated a Cybersecurity Incident Response Plan, with playbooks on various scenarios that are ready for action when triggered by an alarm.

Our third party consultant uses a platform with enhanced detection capabilities that strengthens our cybersecurity capabilities and minimises our cyber risks on our journey towards digital modernisation.

Our consultant also has a list of recognised cases and incident responses, as well as experience in performing cyber-attack simulations for reputable banks, multinational companies and other critical infrastructure organisations. By approaching cyber incidents with the "hacker" mindset, they give Towngas the ability to react and contain any incident in the most efficient and effective manner.



08 CREATING BUSINESS OPPORTUNITIES

TAKING MEANINGFUL ACTION

At the 26th United Nations Climate Change Conference of the Parties (COP26) in Glasgow this year, world leaders and participants committed to using advanced technologies to combat climate change and pledged to achieve net-zero carbon emissions.

At Towngas, we have been making significant progress in both areas. Earlier in the year, we organised the first international award programme – the TERA-Award – targeting zero-carbon innovation technology. A total of 208 projects from 23 countries and regions were received. We also continued to promote innovation with a particular focus on new developments in smart energy and unconventional fuels. Additionally, we increased our investments in smart energy and other Environmental, Social and Governance (ESG) projects by utilising green finance.



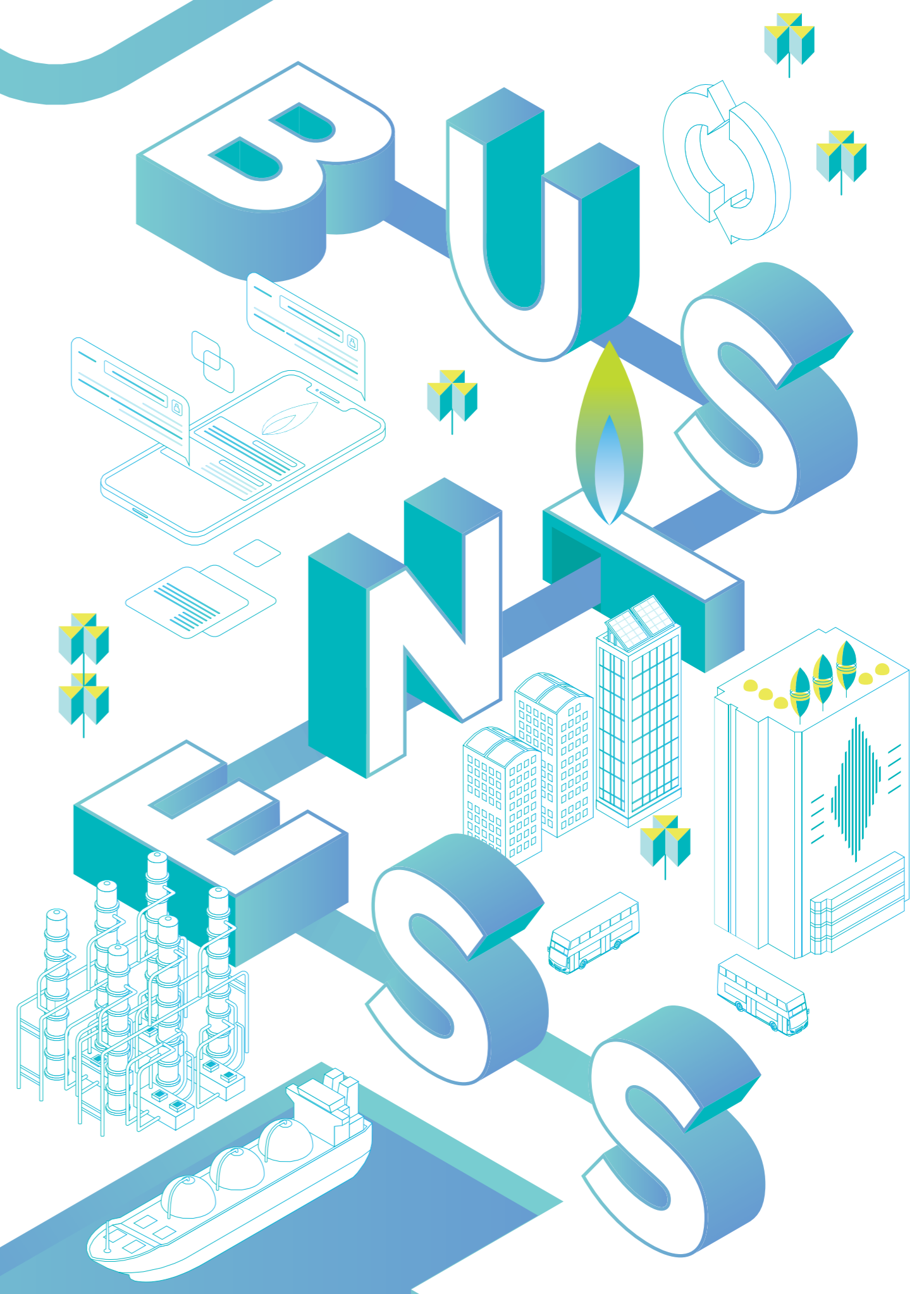
Reliable Operations and Clean Energy Transition

By developing sustainability-based solutions, we propel our transition into a clean energy company and contribute to a low-carbon future. Today, we are investing in zero-carbon projects, smart energy, waste-to-energy projects and more.



Innovation and Digitalisation

Innovation is at the forefront of our corporate culture and is embedded in our “Growth = innovation x implementation” philosophy. We encourage our staff and external parties to innovate ideas that support our sustainable future.



2021 Performance Highlights



Concluded **HK\$2 billion** ESG loans



Held the first smart energy innovation competition **TERA-Award**



More than **110** renewable energy projects planned and **32** zero-carbon smart industrial parks negotiated for development



Produced approximately **180,000** tonnes of HVO



>160,000 tonnes of organic waste was processed in our organic waste resource utilisation project in Suzhou, equivalent of reduction of **16,900** tCO₂e

Future Actions and Targets



Invest in **200** zero-carbon industrial parks with a total capacity of **8 GW** solar photovoltaics by 2025



Look forward to producing **SAF** in the near future



Explore the feasibility of providing **hydrogen** for clean energy applications in Tai Po Gas Production Plant



RELIABLE OPERATIONS AND CLEAN ENERGY TRANSITION

MANAGEMENT APPROACH

We are committed to providing our customers with a safe, reliable supply of energy. Our gas production plants were designed and built based on proven engineering and chemical processes, and we exert great efforts in safeguarding the conditions and availability of the plants.

With such solid foundations, we have continued to develop more sustainable forms of energy that will transform our business for years to come.

PROGRESS AREAS

An Reliable Energy Supply

In 2021, our uninterrupted town gas supply remained at the high level of 99.996%. This was mainly due to our highly effective and efficient maintenance and emergency handling systems. Besides, our dual feedstock of natural gas and naphtha, also makes us one of the most secure gas supply systems in the world.

To enhance gas supply reliability, we installed our first

This transformation is part of the broader transition to cleaner energy that is currently taking place across the globe. By diversifying into related businesses such as clean energy and smart energy, we believe we can play a leading role in this process - in line with our Vision to be Asia's leading supplier of clean energy.

For further details on how we are expanding beyond our traditional business of supplying gas in Hong Kong and the Chinese mainland, please refer to our [ESG website](#).

gas-heated reformer as a subsidiary system at one of our eight gas production units in Tai Po Gas Production Plant, which increased the capacity by 20%.

We also held a tendering exercise for the upgrade of the console at the Tai Po Gas Production Plant to enhance cyber security and plant control system reliability. The project will be implemented during the summer of 2022.

Network Enhancement Projects

In 2021, we completed a 9 km transmission pipeline linking Tuen Mun and Tai Lam. This pipeline is the last part of the ring-feed transmission system in the North West New Territories, and its completion marks a milestone in the enhancement of our gas supply reliability.

A land application for the Tsuen Wan West Offtake Station, which has been proposed for enhancing gas supply reliability to Tsuen Wan West and Tsing Yi District, was in progress during the year.

Towngas Service Riser Maintenance Contract Programme

Towngas offers maintenance services on the defective gas service pipes of private estates and buildings with a fixed monthly charge. The programme helps to reduce gas leakage incidents, thereby increasing gas supply safety and reliability and reducing inconvenience to customers.

Interest-free Instalment for Service Lateral Replacement

In 2021, we began to provide a new 10-month interest-free instalment payment option on top of the existing one-off payment option for customers of premises with defective gas service laterals. This arrangement is designed to reduce the financial burden on customers and accelerate the replacement of their defective pipes.

Green Finance

Towngas Green Bond

In 2017, Towngas became the first energy utility in Hong Kong to issue green bonds. We also obtained post-issuance stage certification from the Hong Kong Quality Assurance Agency (HKQAA) under its Green and Sustainable Finance Certification Scheme (previously known as Green Finance Certification Scheme) in each subsequent year, including 2021. This has served to reinforce investor confidence.

Our green initiatives are financed according to our [Towngas Green Bond Framework](#).

USE OF PROCEEDS

| PROJECT CATEGORY | LOCATION | EQUITY | ESTIMATED PROJECT COST (MILLION) | AMOUNT AND RATIO ALLOCATED (HK\$ MILLION) | |
|--|-------------------------------------|--------|----------------------------------|---|-------------------|
| | | | | ISIN HK0000375300 | ISIN XS1720566790 |
| Landfill Gas Utilisation | Tseung Kwan O, Hong Kong | 100% | HK\$350 | 145.0 (24.3%) | 35.0 (25.4%) |
| Kitchen Waste Processing (Waste to Energy) | Suzhou city, Jiangsu province | 55% | RMB443 | 23.0 (3.9%) | 24.0 (17.5%) |
| Hydro-treated Vegetable Oil (Waste to Energy) | Zhangjiagang city, Jiangsu province | 90% | RMB935 | 400.0 (67.0%) | 56.0 (40.7%) |
| Agricultural Waste to Green Chemicals and Paper Pulp | Tangshan city, Hubei province | 90% | RMB400.5 | 28.9 (4.8%) | 22.5 (16.4%) |

PROJECT UPDATE

| PROJECT CATEGORY | ESTIMATED GHG REDUCTION (tCO ₂ e/yr) | PROJECT PROGRESS |
|--|---|---|
| Landfill Gas Utilisation | 11,000 | <ul style="list-style-type: none"> Delivered 172TJ equivalent in synthetic natural gas to our town gas network in 2021 |
| Kitchen Waste Processing (Waste to Energy) | 16,900 | <ul style="list-style-type: none"> Phase II officially commissioned in August 2021 Treated over 160,000 tonnes of waste in 2021 |
| Hydro-treated Vegetable Oil (Waste to Energy) | 596,000 | <ul style="list-style-type: none"> Produced approximately 180,000 tonnes of HVO in 2021 Received International Sustainability and Carbon Certification for the fifth year |
| Agricultural Waste to Green Chemicals and Paper Pulp | 120,000 | <ul style="list-style-type: none"> Delayed due to further modification and fine-tuning Expected to be commissioned in mid 2022 |

ESG Loans

In 2021, we concluded a total of HK\$2 billion in ESG loans. Key performance indicators (KPIs) for evaluating ESG performance included greenhouse gas (GHG) emissions reductions, renewable energy generation, scrap material recycling and safety. This shows that banks are supportive of our continuous efforts to achieve our ESG objectives and targets. Our performance in these areas is summarised in the following table:

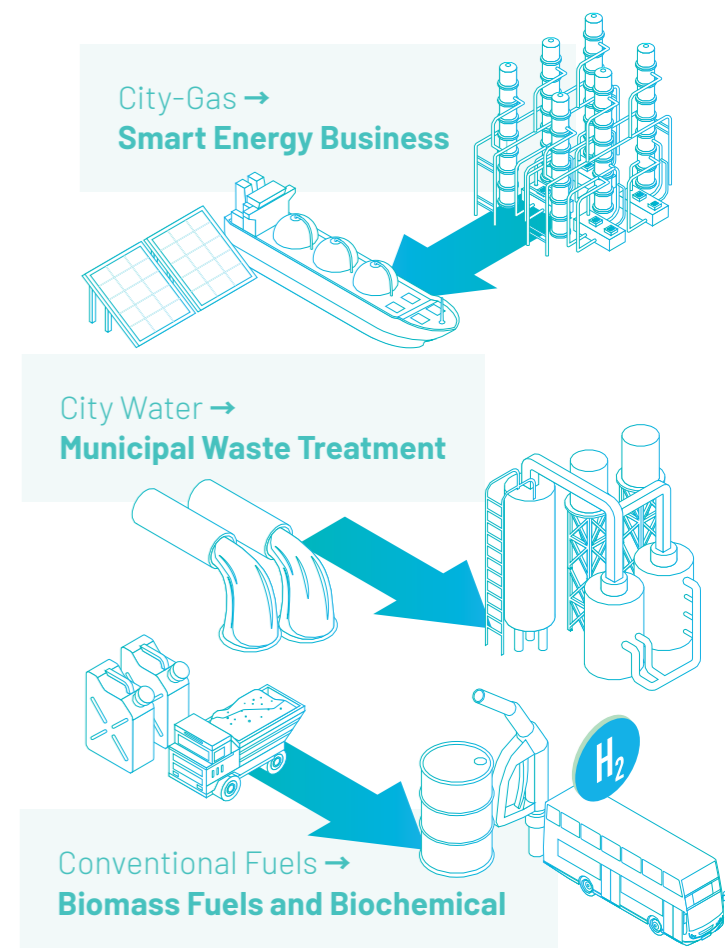
| ESG KPIS | 2019 | 2020 | 2021 |
|--|--|---|---|
| GHG reduction per year (tCO ₂ e/yr) contributed by the food waste processing projects in the Chinese mainland | 3,940 | 5,903 | 16,900 |
| GHG reduction per year (tCO ₂ e/yr) contributed by HVO project in the Chinese mainland | 81,000 | 259,000 | 596,000 |
| GHG emissions per year (tCO ₂ e/yr) of gas production in Hong Kong | 357,060 | 344,549 | 339,068 |
| Scrap metal recycled (tonnes) from used gas appliances in Hong Kong | 1,678 | 1,626 | 1,607 |
| Renewable energy (kWh) generated by photovoltaic systems installed at Towngas' premises in Hong Kong | 30,624 | 180,392 | 306,589 |
| Emergency Team's average arrival time in Hong Kong | Arrived within 21.5 minutes on average | Arrived within 21.57 minutes on average | Arrived within 21.39 minutes on average |

Transitioning to a Low-carbon Future

Natural gas and renewable energy will both play critical roles in the global energy transition to carbon neutrality.

Within the Chinese mainland, the focus on green economic development has ignited a growing demand for clean energy, including natural gas. Known as the cleanest fossil fuel, natural gas remains a major energy source in the Chinese mainland and an important transition fuel.

We have established a transition plan for our business to align with the development and become a more sustainable business model:



The Role of Natural Gas in Energy Transition

In 2021, we extended our city-gas business in the Chinese mainland to 28 provincial regions and served more than 35 million customer accounts. We have also been expanding our gas storage capacity in the Chinese mainland with the construction of a natural gas storage facility in underground salt caverns in Jintan district, Changzhou city, Jiangsu province. Construction of this project is proceeding in phases and will ultimately reach a total storage capacity of 1.1 billion cubic metres, enabling us to supplement gas supplies in eastern China during the winter peak season when gas demand is highest.

New partnerships

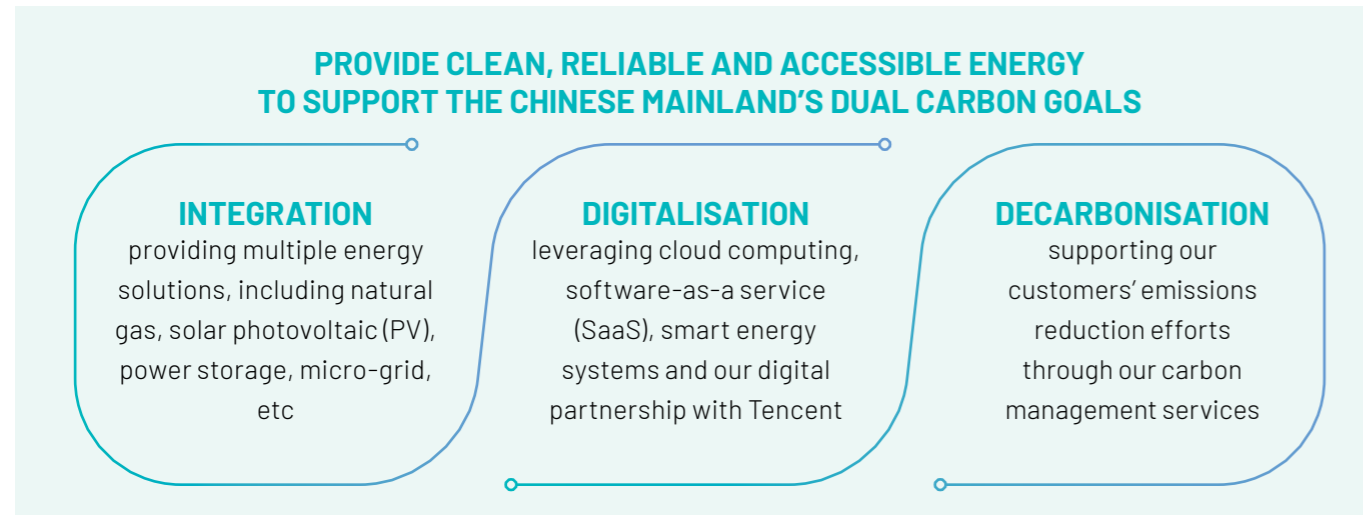
During the year, we formed two partnerships that will contribute substantially towards our decarbonising goal.

In April 2021, we announced a deal with EnerVenue, a leading supplier of metal-hydrogen batteries based in the United States, strengthening our zero-carbon smart energy platform. Under this agreement, we will utilise EnerVenue's energy storage systems and act as EnerVenue's exclusive distribution partner to our customers in the Chinese mainland and Hong Kong. We also formed a deal, in October 2021, with Affinity Equity Partners – one of the largest independent

private equity firms in the Asia Pacific. To help us transition from a traditional utility services provider into a leading integrated energy company, this firm made a strategic investment of HK\$2.8 billion in Towngas China Company Limited. It will cover solar energy systems for our commercial and industrial customers, as part of our distributed energy system, power storage, and energy monitoring business. The amount will also use the investment to expand our digital capabilities in cloud computing and smart energy management systems, carbon auditing, carbon trading and asset management. Under this new direction, Towngas China Company Limited has changed its name to Towngas Smart Energy Company Limited since November 2021.

Development of Smart Energy Business

We have a long-term vision to create an integrated, sustainable and tangible smart energy business, built on three core pillars: integration, digitalisation and decarbonisation.



Zero-Carbon Industrial Parks

In line with our new focus on smart energy, we have initiated zero-carbon industrial park projects in cities across the Chinese mainland. These projects involve installing solar photovoltaic power generation systems on the rooftops of large-scale production plants and logistics warehouses and the configuration of energy storage, charging and swapping power stations, multi-energy (cold, heat and electricity) supply and other energy facilities to provide zero-carbon smart energy supply services for industrial parks.

With more than 110 renewable energy projects planned across 21 provincial regions and 32 zero-carbon smart industrial parks negotiated for development in 2021, our aim is to invest in 200 zero-carbon industrial parks with a total capacity of 8 GW of solar photovoltaics by 2025.

Since carbon is also becoming an important asset class, we are building a smart energy platform which will incorporate value-added services such as energy efficiency management, and energy and carbon trading for our industrial and commercial customers in the parks. Digital energy solutions are now being developed in partnership with world-leading companies such as Tencent Cloud, with a focus on cloud computing technology.

Development of New Energy and Unconventional Energy

HVO from Inedible Bio-grease

We set up our first hydro-treated vegetable oil (HVO) plant in Zhangjiagang city, Jiangsu province, for converting inedible bio-grease feedstock into advanced biofuels. The fuels produced at this plant, which have received International Sustainability and Carbon Certification (ISCC), provide a significant reduction in greenhouse gas (GHG) emissions compared with traditional fossil diesel.



With the completion of the plant's second phase in 2020, the designed production capacity of HVO reached 250,000 tonnes in 2021. We also look forward to producing our first batch of Sustainable Aviation Fuel (SAF) production in the near future.

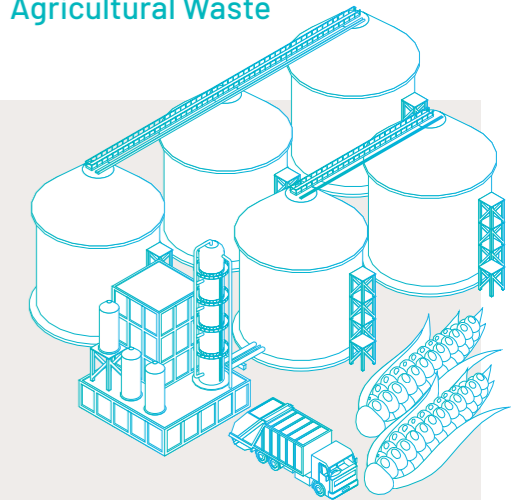
Another source of renewable energy, cellulosic ethanol, is being produced from agricultural waste such as straw and corn cobs using a new technology developed by Towngas. In addition to this advanced biofuel, the plant is capable of producing paper pulp and furfural, a chemical that can be used as a building block for renewable fuels.

At present, we have two pilot projects in Hebei province, one in Tangshan and another in Cangzhou. Each has an annual feedstock handling capacity of 240,000 tonnes. In 2021, the Tangshan plant began selling furfural at market prices, and construction of the Cangzhou plant was completed in September 2021.

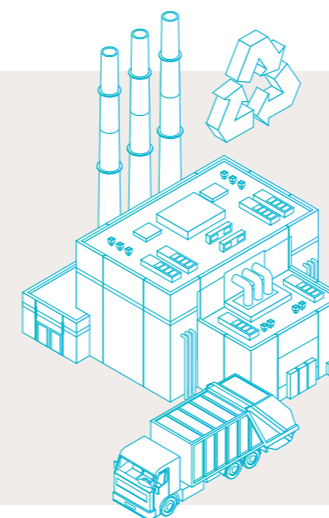


As a result of this new technology, we are helping to reduce pollution caused by the widespread burning of agricultural waste each year and, at the same time, generating high-value commodities that can partially replace fossil fuels. We believe this will make a significant contribution towards the alleviation of the country's energy shortage as well as the reduction of air pollution, carbon emissions and waste.

Utilisation of Agricultural Waste



Organic Waste Resource Utilisation



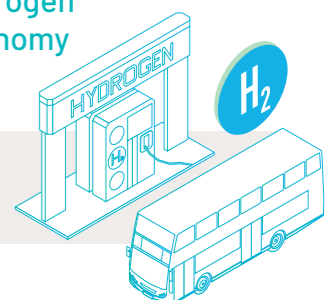
Our first organic waste resource utilisation project in Suzhou Industrial Park, Suzhou city, Jiangsu province has been converting up to 800 tonnes of waste into natural gas each day after the second phase was completed in June 2021. Over 160,000 tonnes of organic waste was processed from nearby catering businesses in 2021, which helped our downstream customers realise a reduction of 16,900 tonnes of carbon emissions.

Our other food resource waste utilisation project in Tongling city, Anhui province is capable of processing 100 tonnes of food waste each day. With the second phase of this project commencing operation in 2023, it will soon double its food waste processing capacity.

During the year, another new food waste treatment project was started in Changzhou city, Jiangsu province. A total daily treatment capacity of 300 tonnes is expected upon the completion of the project at the end of 2023.

In Hong Kong, we are exploring the feasibility of separating hydrogen from our town gas for use in locations such as the depots of Hong Kong's leading bus companies. The hydrogen we supply through this project, which is the first of its kind in the world, will be less expensive for our customers and safer to use. A small pilot project is scheduled to begin in 2022.

Hydrogen Economy





INNOVATION AND DIGITALISATION

MANAGEMENT APPROACH

Innovation, which is at the heart of our corporate culture, is embedded in our philosophy of "Growth = innovation x implementation".

We promote innovation by welcoming ideas – from both in-house sources and the wider community – that enable us to achieve a low-carbon economy and the continuing growth of our business.

Internally, we have established platforms and initiatives such as our Dream Zone, Towngas Hall of Innovation and G = i x i Lab, which inspire our staff to think creatively. If an idea is considered feasible, we will provide the funding needed to help bring their concepts to life.

We also have two research and development facilities, in Shanghai city and Suzhou city, that are dedicated to producing advanced biofuels from agricultural waste, inedible bio-grease and other feedstocks.

Externally, we look for innovative technologies, products and solutions from across the globe, particularly those related to smart energy.

For details on the innovation and digitalisation management approach, please refer to our [ESG website](#).

PROGRESS AREAS

Innovation in Action

The First TERA-Award

In 2021, Towngas joined State Power Investment Corporation Limited (SPIC) from the Chinese mainland to organise the first-ever smart energy innovation competition to collect ideas from international organisations and identify innovative technologies and solutions for a future powered by smart energy.

Under the theme "Exploring zero-carbon innovations for the future", the competition called on start-ups around the world to submit ideas supporting innovative smart energy technology. One of the main goals of the competition was to select projects that will help the Chinese mainland achieve its goal of carbon neutrality by 2060.

The focus of the entries was on four areas: energy supply, energy demand, green transportation and the energy internet.

The judging panel consisted of leading industry, academic and research experts from Towngas, the SPIC Central Research Institute, Greater Bay Area Homeland Investments Limited, The Chinese Academy of Sciences, Tsinghua University and The University of Hong Kong. Judging criteria included innovation, implementation and team capability.

Out of 208 projects from 23 countries and regions, 10 were selected as finalists, whose projects ranged from battery technology and hydrogen energy to the energy internet. The winner was Dalian Institute of Chemical Physics - their Liquid Sunshine Methanol project uses renewable energy to generate green hydrogen, and then mix it with carbon dioxide to make liquid methanol. The top winner was awarded with a prize money of US\$1 million, and some outstanding projects will receive support from Towngas and SPIC to bring their technological ideas to fruition.



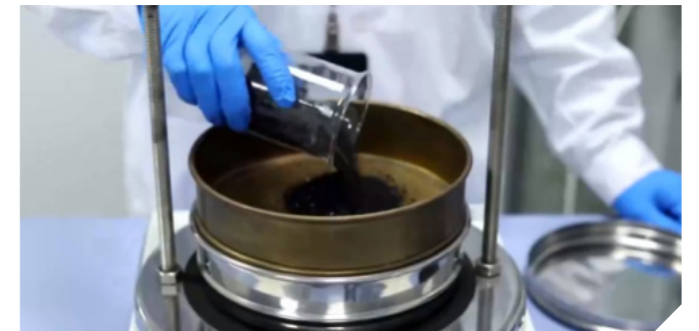
Internal Innovation

Contributions by Staff

Some of the most innovative ideas developed at Towngas come from our own ranks. By adapting or building on trends in digital technology, they have created new features for our gas facilities, bringing greater safety and convenience to our customers. If an idea submitted by our staff is considered feasible, it will be further developed with the financial assistance from our Innovation Funding programme.

Towngas Sustainability Award

To encourage our project companies to implement sustainable projects that promote environmental and social performance, we organised the first Towngas Sustainability Award. The selection committee received more than 150 projects from about 100 departments and project companies. Eight awardees were chosen by a selection committee led by the Managing Director.



One of the winners created an extended-life activated carbon filter that requires less time to replace, thereby improving efficiency and saving costs for Towngas. Another project winner collaborated with Xian Education Bureau to launch cloud lessons to improve gas safety knowledge, educating around 7.2 million people in the process.

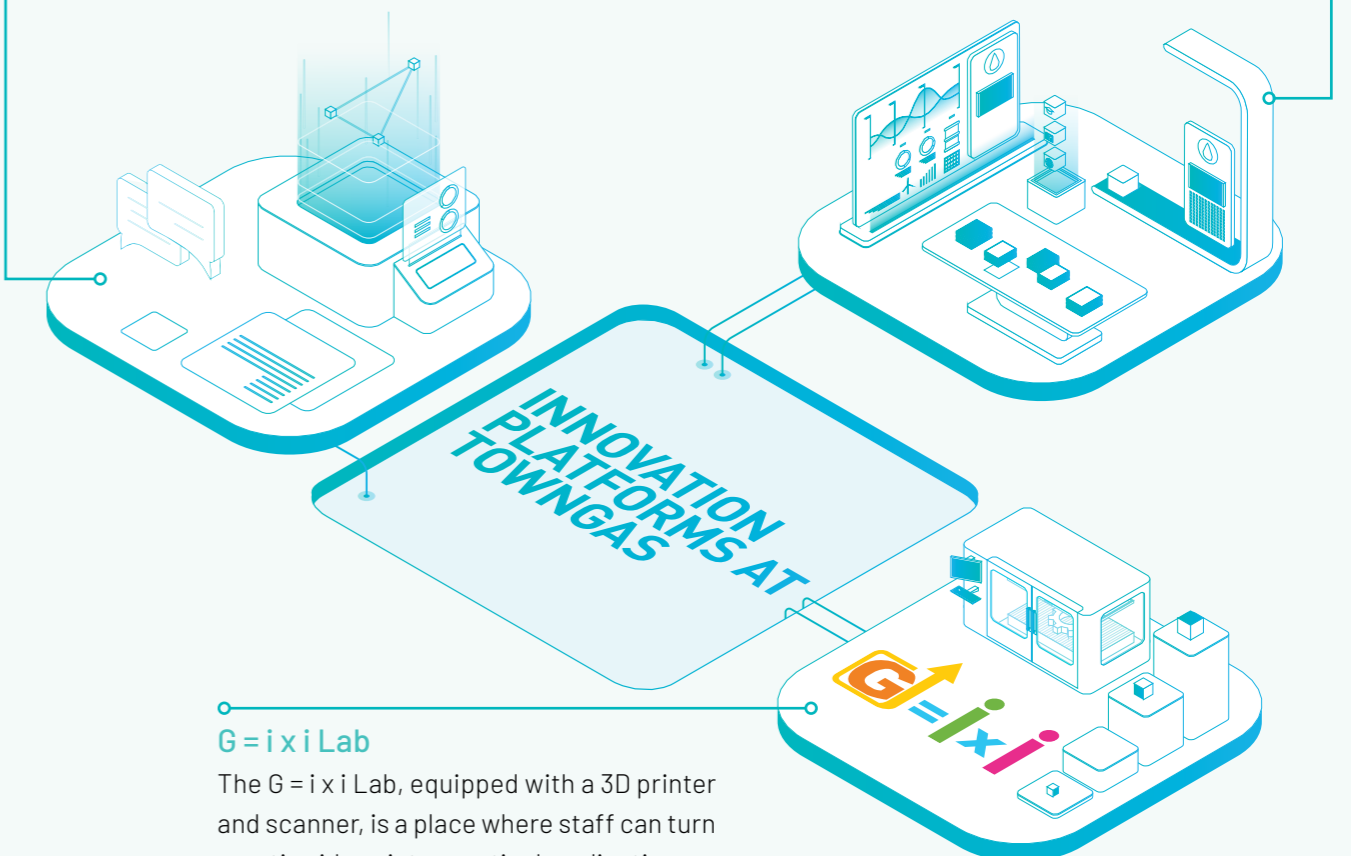
Innovation Platforms at Towngas

Dream Zone

Dream Zone is a venue conducive to creative thinking and collaboration. It provides information on various innovation tools and a relaxing space for brainstorming.

Towngas Hall of Innovation

This showcase of original concepts developed by colleagues features ideas that have enhanced Towngas' service and efficiency. In 2020 it was relocated to a larger venue where more inventions can be displayed.



G = i x i Lab

The G = i x i Lab, equipped with a 3D printer and scanner, is a place where staff can turn creative ideas into practical applications.

CASE STUDY

KEY INNOVATION PROJECTS

Integrated D-PAU

Our staff have developed two gas-powered dehumidification projects, based on an Integrated D-PAU (Integrated Primary Air-handling Unit with desiccant wheel) equipped with solar collectors. One installation has been in operation at H Zentre in Tsim Sha Tsui from June 2020 and the other at Cordis Hotel in Mong Kok from October 2021.

The system provides outstanding benefits in terms of fresh air dehumidification and sanitisation as well as better indoor air quality. Compared with conventional Heating, Ventilation and Air Conditioning (HVAC) dehumidification, the Integrated D-PAU helps save 7% to 10% energy in cooling and an additional 5% through solar energy utilisation.

The energy cost saved by both projects per year is approximately HK\$500,000, while the annual emissions reduction is around 200 tCO₂e (equivalent to the CO₂ absorption of about 8,700 trees per year).

The H Zentre project has equipped with solar collectors, which has been recognised internationally, winning the Innovative Energy Project of the Year from the Association of Energy Engineers, as well as a 2nd Runner up, Best Project Award, from the Institution of Mechanical Engineers in 2021.



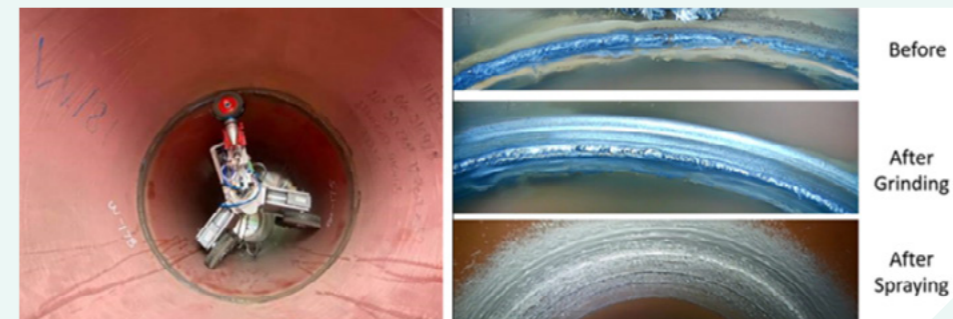
In-house Development of Mobility System by Using Microsoft Power Apps

As part of our commitment to innovation, Towngas encourages staff to apply new ways of thinking and the latest technology to improve work processes and achieve excellence. When one of our teams noticed the needs to optimise routine workflows, especially for staff working from home, they used Microsoft Power Apps to develop their first mobility system named as “e-Rejected Material Report (eRMR) System”, which facilitates the process of returning materials from frontline to the warehouse, having the online approval mechanism in place. With the launch of this internal system, work efficiency and accuracy noticeably improved. Highlights included less paper consumed due to digitalisation and a significant shortened workflow processing time by 50%.



Internal Conditioning Robot

In 2021, Towngas developed an Internal Conditioning Robot that applies surface finishes and internal pipe coatings to steel weld seams. This innovation not only enhances corrosion protection but also improves employee safety and work efficiency.



09 ENSURING HEALTH AND SAFETY

TAKING MEANINGFUL ACTION

The health and safety of our stakeholders continued to be our highest priority during the year. In 2021, we made progress towards our target of zero accidents among our staff and contractors. We also remained committed to providing our customers with a safe and reliable supply of energy and maintaining a high safety standard within our own facilities. To achieve these objectives, we have been focusing on integrating innovation into our operations in line with our corporate philosophy of “Growth = innovation x implementation”.



Occupational Safety and Health

We protect our staff and other stakeholders against work-related injuries and health risks, according to our Health and Safety Policy and OSH management system.



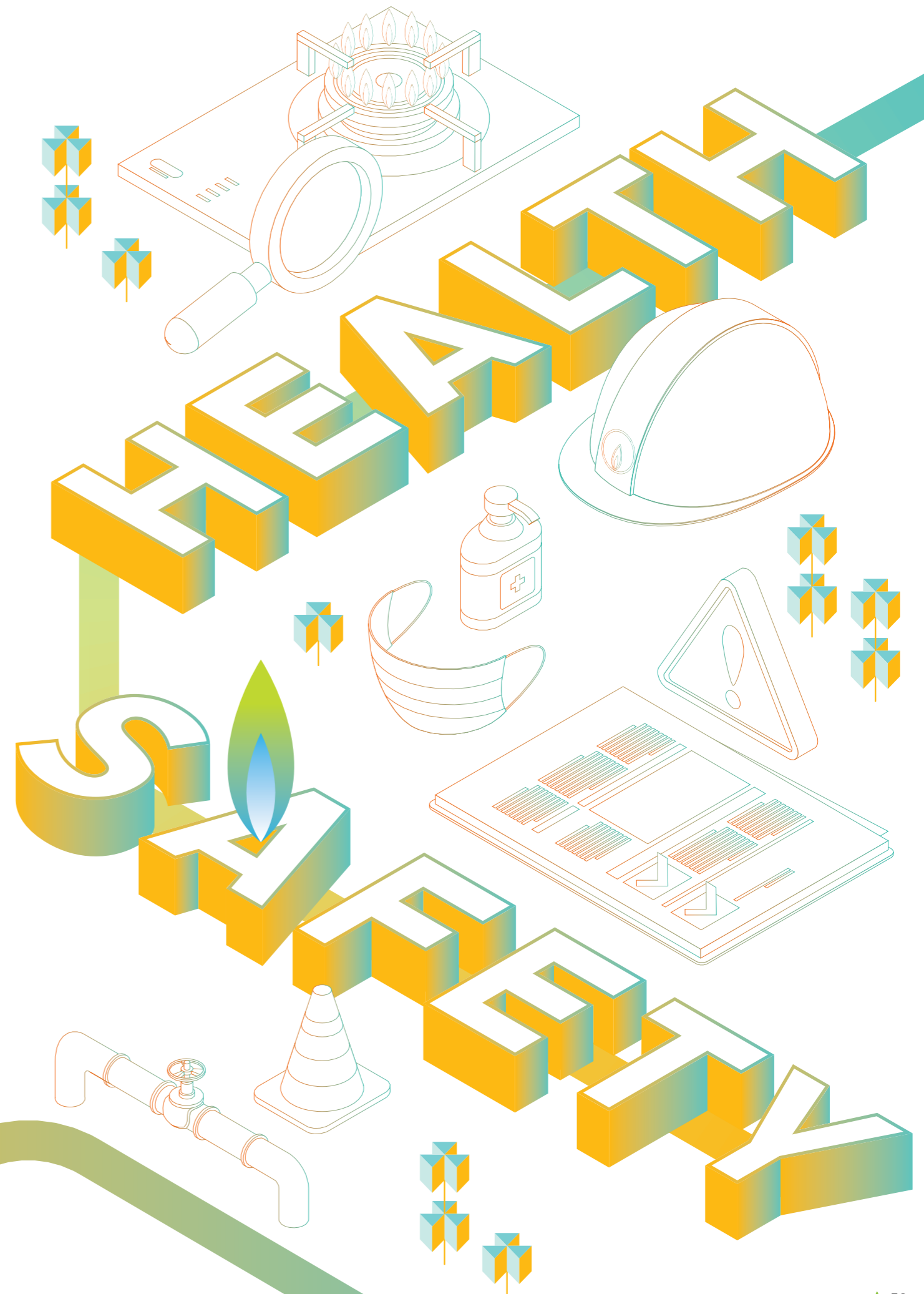
Customer Safety

To ensure the safety of our customers, we follow the latest safety and quality control guidelines when developing new products for our customers.



Public Safety

Towngas adheres to well-established design, engineering and operating principles, and stringent maintenance procedures to ensure our processes and assets are safe, reliable and in good working order.



OCCUPATIONAL SAFETY AND HEALTH

2021 Performance Highlights



Group Lost-Time Injury Frequency Rate in
Employees: **0.36**
Contractors: **0.20**
accidents per 1,000,000 man-hours



10,104 safety training hours
(Hong Kong)

1,230,136 safety training hours
(Chinese mainland)

Future Actions and Targets



Keep **zero accidents** as our target for health and safety



Continue to **monitor the COVID-19 situation proactively** and respond in a quick and accurate manner



Launch **"OSH Ambassador Programme"** to train our engineers and frontline supervisors, and organise tailor-made training to eliminate human error through the extensive use of "pointing and calling"



Instill a **safety culture** among our Chinese mainland employees

MANAGEMENT APPROACH

We are committed to protecting our staff, contractors, customers and the general public against any and all risks to their health and safety. This commitment, along with our approach to safety management, is clearly outlined in our [Health and Safety Policy](#). Apart from our zero accident target for health and safety, we also target to improve health and safety performance from the previous year.

A Corporate Health and Safety Manual is also in place to outline the framework of the occupational safety and health (OSH) management system, with standard operating procedures and detailed guidelines.

Monitoring and Reporting

The health and safety performance of the Company is monitored by the Corporate Sustainability Department and Corporate Safety and Quality Management Steering Committee. In addition to this, we have set up reporting channels and promotion schemes, including our Health, Safety and Environment (HSE) Suggestion Scheme, Near-miss Reporting Programme and Instant Messaging HSE Reporting Channel.

Training and Awareness

To minimise the risk of accidents and deepen employees' understanding of our safety culture, we organise appropriate training courses and workshops. Our contractors also receive the Towngas Contractor Safety Handbook when they begin working with us.

For our own workers and those employed by our contractors, we will provide safety briefings, training and information on any specific concerns that might be associated with a new project before a project begins.

For further details on how we protect the health and safety of our workers, please refer to our [ESG website](#).

PROGRESS AREAS

Enhancing Safety Performance and Awareness

Safety Performance and Training

By digitalising our OSH Management, we have been able to significantly improve the effectiveness of our communication with staff on safety issues and analysis of OSH trends (data) in the industry.

In recent years, we have also made progress supporting our project companies in their efforts to obtain ISO 45001 Occupational Health and Safety certification or recertification. By the end of 2021, Towngas and 56 of its project companies have obtained ISO 45001 certifications.

Under ISO 45001 and its related guidelines, we are able to continually improve the suitability, adequacy and effectiveness of our management system for preventing incidents and non-conformities while further enhancing performance. We also continually evaluate our Occupational Health & Safety Management System (OH&SMS) to identify opportunities for improvement.

In 2021, we provided training on topics such as lifting safety, fire safety, first aid, prevention of infectious diseases and managing stress during COVID-19, as well as health tips in office workstations.

For our contractors, we organised the 2021 Contractor OSH Forum and held sessions in Practical OSH Training, New Riser Contractor Safety Training and Mass

No fatalities among our employees and contractors as the result of an accident in 2021.

Communication. Towngas also organised a three-hour work safety training session for the Company's riser maintenance contractors. Using case studies, we discussed the potential risks of riser maintenance work and corresponding safety measures. The participants were thus able to understand better the risks involved in riser maintenance work and become familiar with the appropriate personal protective equipment.

In order to further improve the overall safety performance of Towngas and its subsidiaries, various safety promotion events were held across the year - such as HSE Month, HSE Quiz, Contractor Safety Programme, Seasonal Influenza Vaccination (SIV) Programme, visits etc. to enhance the corporate safety culture. The responses were favourable with the active participation of our employees and contractors.

In the Chinese mainland, we launched a new Hazard Identification and Mitigation Programme, which motivates staff to identify hidden dangers and unsafe conditions in their workplaces.

In 2021, there were no fatalities among our employees and contractors as the result of an accident.

GROUP LOST-TIME INJURY FREQUENCY RATE

| | |
|------------|------|
| Employee | 0.36 |
| Contractor | 0.20 |

*Number of accidents per 1,000,000 man-hours

CASE STUDY

IMPROVING HEALTH AND SAFETY THROUGH INNOVATION

Follow-Me Robot

Lifting heavy objects manually or by a traditional pallet truck is well-known for causing bone or muscle injuries. To protect our warehouse staff, we joined Logistics and Supply Chain MultiTech R&D Centre to develop a robot with multiple sensors and advanced computer vision. The robot follows workers closely and safely, while avoiding obstacles. The Follow-Me Robot has significantly enhanced the safety and efficiency of our warehouse operations and increased job satisfaction among employees.



Immersive VR Technology

A new light-emitting diode (LED) wall with Virtual Reality (VR) technology was installed at the Towngas Hall of Innovation to simulate different working environments for greater worker safety and reduced training costs.

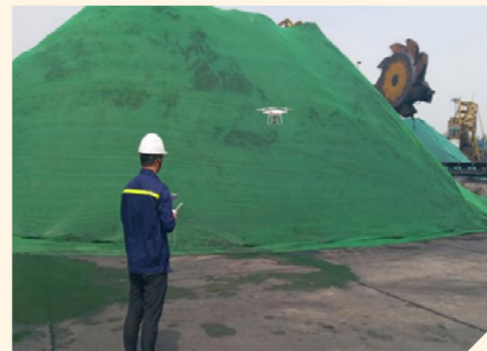
Three virtual reality scenarios are provided: risks of working at height, fire and explosion caused by third party damage, and trench work.



The technology incorporates imseCAVE technology developed by the University of Hong Kong and is equipped with high-end computers, displays and motion detectors that provide real-time position tracking so trainers can follow and record users' body positions and movements.

Drones for Monitoring Work

At ECO Environmental Investments Limited (ECO)'s Jiaxiang Port in Shandong province, drones have been deployed as a safe and effective way to monitor work progress and ensure environmental protection measures are implemented in the storage area. This method helps to minimise the need for working at height, consequently reducing the risk of falling and heat stroke among employees.



Enhancing Employee Wellbeing

As 2021 was a challenging year, we organised a range of activities designed to reduce stress and keep our staff healthy. These included pre-work stretching exercises and a work stress management and mindfulness workshop. We also held our regular Seasonal Influenza Vaccination Programme.

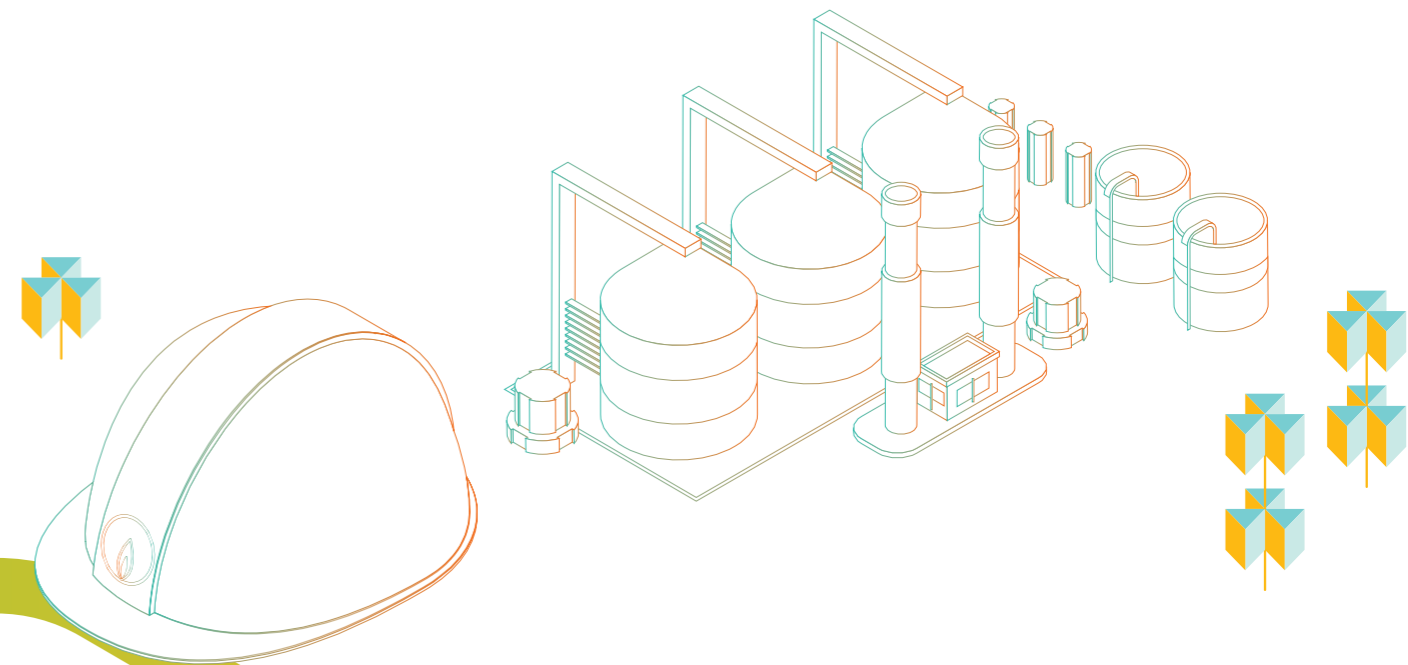
Safety During COVID-19

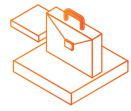
Throughout 2021, we maintained a Corporate Crisis Alarm - Level 3 due to the COVID-19 pandemic. Accordingly, we held regular meetings with the Executive Committee Members to update them on the latest developments of the pandemic and our response to the changing situation, including social distancing measures and vaccination requirements, among others.

We also developed the internal Towngas Sustainability App to disseminate the latest news and information about COVID-19. Additional measures included initiatives to encourage COVID-19 vaccination:

- Offering free pre-vaccination check-ups;
- Conducting seminars with doctors and pharmacists to provide details on the efficacy and safety of the vaccines;
- Releasing staff early on vaccination days;
- Granting two days of leave after completion of three vaccination doses.

During the year, we encouraged staff and contractors to get vaccinated. Those who could not be vaccinated due to health reasons were required to undergo regular testing. We also developed a COVID-19 Vaccination and Regular Testing Record System to track the vaccination status and testing records of all employees. As of 31 December 2021, the overall vaccination rate (at least one dose of vaccine) among employees (including part-time and temporary staff) in Hong Kong was 92.3 %.





CUSTOMER SAFETY

2021 Performance Highlights



1,157,088 RSIs (Hong Kong)



Customer-related emergency reports ↓18% in last 5 years (Hong Kong)



Launched a **smart (IoT) anti-scorch built-in hob** to enhance cooking safety

Future Actions and Targets



Continue to provide **RSIs** and **community safety talks**



Develop **smart sensors** and **remote control systems** for cooking appliances



Develop **Smart Gas Meter** for gas safety

MANAGEMENT APPROACH

To ensure our products and services meet the strictest safety requirements, our staff follow a rigorous set of internal guidelines and comply closely with all laws and regulations pertaining to safety. These guidelines cover the installation, replacement and maintenance of gas appliances and gas meters as well as gas pipes and fittings.

When developing new products for our customers, we follow the latest safety and quality control systems that

govern how we source raw materials and produce and deliver end products. Our suppliers are also required to comply with our product safety requirements.

For more information on how we develop new products with safety features, provide quality assurance and engage our customers on product safety, please refer to our [ESG Website](#).

PROGRESS AREAS

Protecting Customer Safety

Towngas takes a proactive approach to customer safety and will contact them to ensure they are aware of potential gas safety issues before they occur. In 2021, we conducted 1,157,088 regular safety inspections (RSIs) and organised two talks and ten public exhibitions on gas safety.

As the COVID-19 pandemic began to show signs of subsiding, we fully resumed our RSI service starting in March 2021.

We have achieved a declining trend of customer-related emergency reports over the past five years.

| | 2021 | 2020 | 2019 | 2018 | 2017 |
|------------------------------------|------|------|------|------|------|
| Customer-related emergency reports | 254 | 252 | 255 | 267 | 309 |

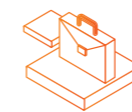
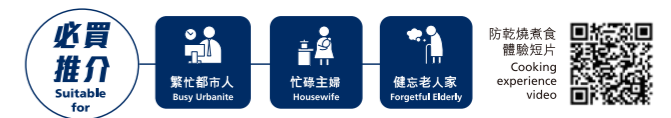
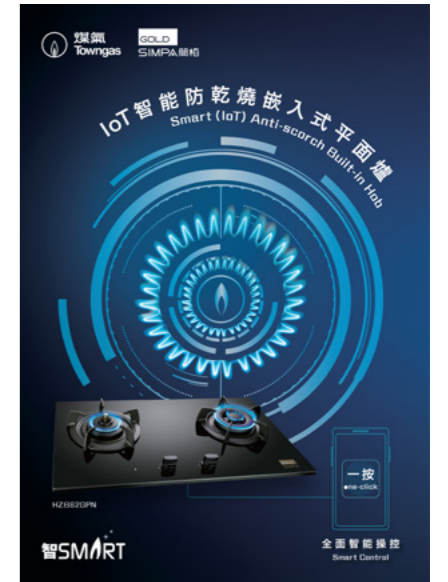
Towngas' timely response to emergencies continued to achieve a world-class standard of promptness:

| | TARGET | 2021 RESULTS |
|---------------------------------------|----------------------------------|---|
| Emergency team's average arrival time | Arrive on-site within 25 minutes | Arrived within 21.39 minutes on average |

Developing Safe Appliances and Meters

We also developed a smart appliance during the year, a SIMPA Smart (IoT) Anti-scorch Built-in Hob. This product sends alerts via a mobile app to let users know if the appliance is still operating when they leave home so they can turn off the flame remotely. To further enhancing safety and convenience, the appliance equipped with anti-scorch sensor and flame-off timer to avoid food burning or oil combustion.

Also being developed is a smart gas meter for monitoring gas safety. By adding an internal valve and intelligent control logic unit, our smart gas meters can detect potential hazards such as serious and slight gas leaks and lack of safety inspection over a prolonged period. This ensures the gas supply is automatically cut off and that Towngas is notified if any abnormalities are detected.



PUBLIC SAFETY

2021 Performance Highlights



Record low number of gas incidents achieved and reduced by 10% in last five years (Hong Kong)



No major incidents and chemical leakages at our chemical plants (Chinese mainland)

Future Actions and Targets



Further develop, collect and evaluate leading and lagging process safety metrics at our chemical facilities

MANAGEMENT APPROACH

Towngas follows well-established design, engineering and operating principles to maintain the safety of our facilities and equipment. Together with our rigorous maintenance regime, these principles enable us to ensure our processes and assets are safe, reliable and in good working order.

Our asset management system at our gas production plants and in our transmission and distribution network has been certified to the ISO 55001 Asset Management standard. A Process Safety Management (PSM) system is also in place for our chemical plants in Hong Kong and the Chinese mainland, which allows us to identify and record critical hazards and develop measures to control and mitigate risks.

Emergency and Crisis Management

We have a robust, three-tiered Corporate Crisis Management Plan that allows us to recover from an emergency situation in a timely and effective manner, while ensuring minimal disruptions to the public. In addition, we hold regular crisis management training exercises and drills so that our employees are better prepared to handle emergencies. We also conduct regular table-top exercises to enhance our management team's crisis preparedness.

Monitoring and Stakeholder Engagement

We monitor our facilities and network in real-time from our 24-hour Grid Control Centre at our North Point Headquarters in Hong Kong. Additionally, we regularly engage our stakeholders in the community and amongst our peers to enhance their safety awareness and build trust with them.

For more information on how we safeguard public safety, please refer to our [ESG website](#).

PROGRESS AREAS

Safety Performance

Hong Kong

Throughout the year, we conducted 136,103 trench inspections at 8,229 active sites and surveyed 6,333 km of pipeline in order to reduce gas incidents.

| | 2021 | 2020 | 2019 | 2018 | 2017 |
|---|-------|-------|-------|-------|-------|
| Network leaks reported by the public per 10 km of gas pipes | 0.159 | 0.092 | 0.117 | 0.145 | 0.165 |

In 2021, we completed the decommissioning of 16 km of ageing medium pressure/low pressure metal pipes. The replacement/reconditioning of corroded riser bases is in progress, which we expect to complete in 2022.

Our renovation and upgrade programme of the back-up Corporate Crisis Control Centre and Grid Control Centre was completed in 2021. Both facilities are located on the seventh floor of the Towngas Ma Tau Kok Control Centre. Essential emergency equipment at the Centre includes video conferencing, Supervisory control and data acquisition (SCADA) systems and others.

Mainland Utilities

In 2021, we undertook a total of 105 safety and risk management audits of our project companies in the Chinese mainland. Since the implementation of our audits, the safety performance of these project companies has been steadily improving.

Managers of our project companies continued to conduct in-person safety inspections of their facilities at least twice every month. Our safety and risk management team consolidated and analysed the findings of the inspections from every project company and required them to take corrective action within a specific period, with frequent follow-up inspections of key project sites.

New Energy

In 2021, we carried out 27 safety inspections of all six ECO chemical plants (100% coverage) as well as five ECO gas filling stations. In addition, PSM audits were performed at two ECO chemical plants that were in full operation. These inspections and audits ensured that all facilities were in compliance with the requirements of the Dual Preventive Mechanisms.



Training and Awareness

In 2021 we organised an experience sharing workshop on past internal incidents and near-miss cases for all ECO safety personnel. We also held a series of safety webinars every two months, focusing on safety risks in chemical plants.

During Safety Production Month in June 2021, we organised a Hazard and Operability (HAZOP) Practical Tournament at our Zhangjiagang HVO plant for all engineers and managers. For the renamed HSE Enhancement Project Campaign this year, a total of 129 submissions from ECO project companies were received. Other safety training included a safety and environmental knowledge competition which attracted over 22,000 entries from staff, and two regional HSE workshops for around 800 managers from different regions and project companies.

To raise awareness of the new Safety Production Law in the Chinese mainland, we provided relevant information and training to the staff of our project companies.



Safer Operation through Technology

We have been harnessing innovative new technology across Towngas in order to improve our safety performance.

Examples include an inspection/dewatering pit with easily removable flame retardant polyfoam that allows for rapid access during emergencies, a second-generation electric scraper for removing surface oxidation on polyethylene (PE) pipes, and new video foam pigs to inspect the interior of pipelines ranging in nominal diameter from 250-400mm.

We also devised a remote survey system for detecting exposed bridge and slope pipe leakages.

Another innovation developed by Towngas, an Internal Conditioning Robot, increases corrosion protection while also improving employee safety and work efficiency. For more details on the new robot, please refer to the [Key Innovation Projects](#) section.

We devised a remote survey system for detecting exposed bridge and slope pipe leakages.



10 PROTECTING THE ENVIRONMENT

TAKING MEANINGFUL ACTION

At the 26th United Nations Climate Change Conference of the Parties (COP26) in November 2021, delegates from around the world recognised the urgent need to reverse climate change. They pledged to move away from coal power, halt and reverse deforestation, reduce methane emissions and accelerate the switch to electric vehicles (EVs).

Towngas is committed to becoming carbon neutral by 2050 through energy transition and innovation, and has established two medium-term carbon reduction targets to reduce greenhouse gas (GHG) emissions generated within our own operations and those of our value chains.



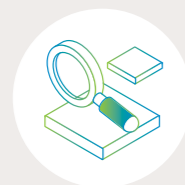
Environmental Management

Our businesses fully comply with all major local regulatory requirements and benchmark our performance against the highest international standards and codes of practice with regard to environmental protection, emissions and waste reduction, resources management and impacts on biodiversity.



Climate Change and Air Quality

We strive to minimise our emissions, including carbon dioxide, nitrogen oxides, sulphur oxides and respirable suspended particulates. We also align our reporting standard against the internationally recognised best practice - Recommendations of the Task Force on Climate-related Financial Disclosures (TCFD).



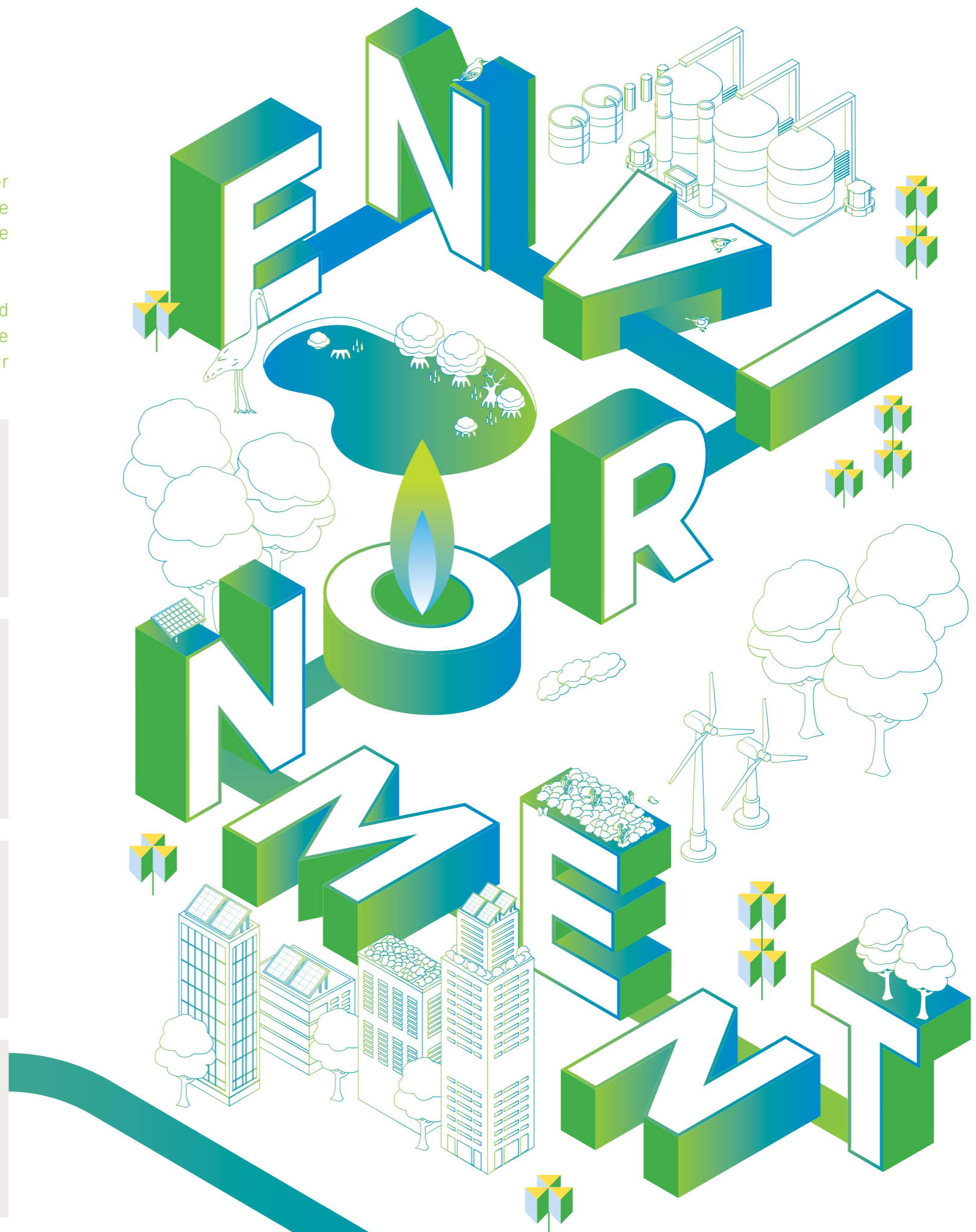
Resources Management

We conserve natural resources in our production plants, distribution network and offices and set targets for managing energy, water and waste. We work closely with our contractors, suppliers and customers to manage their resources.



Biodiversity

To minimise our impacts on the natural environment and wildlife habitats, we avoid areas rich in biodiversity, take appropriate preventive actions in our operations and new construction projects, and carry out conservation projects.





MANAGEMENT APPROACH

We have an *Environmental Policy* that guides us in how we protect the environment, use resources, reduce emissions and waste, and mitigate our impacts on biodiversity. In addition to this policy, we have a *Sustainable Purchasing Policy* to encourage the use of environmentally friendly products and services at Towngas.

We also have a Corporate Environmental Manual for our frontline staff, which sets out the standards, procedures and guidelines they should be following. Two other documents published by the Company – our Green Office Practice Guide and Green Event Practical Guide – outline the best environmental practices in these two areas.

In each of the jurisdictions where we operate, we fully comply with all major regulatory requirements and benchmark our performance against the highest international standards and codes of practice. For the new projects we undertake, we begin with an Environmental Impact Assessment (EIA) according to the local legal requirements.

Monitoring, Reporting and Engaging Stakeholders

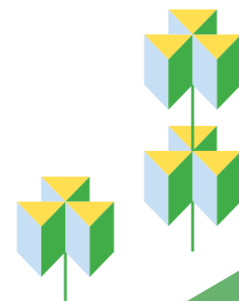
Sound environmental practices begin with good corporate governance. Our Environmental, Social and Governance (ESG) Committee is responsible for coordinating and steering our environmental initiatives as well as monitoring our environmental performance. This committee is supported by an Environmental Working Committee and the Corporate Sustainability Department.

The participation of our internal and external stakeholders is also essential to our environmental conservation efforts. We make these stakeholders aware of important environmental issues through training sessions, seminars and site visits as well as a range of other activities.

For more information on our environmental management, please refer to our [ESG website](#).

PROGRESS AREAS

By the end of 2021, Towngas and 45 of its project companies have obtained ISO 14001 Environmental Management System (EMS) certifications.



2021 Performance Highlights



Committed to become **carbon neutral by 2050** through energy transition and innovation with **two** medium-term carbon reduction targets



Conducted **physical risk assessments** under various climate scenarios for the Group to align with the Recommendation of the TCFD



Updated **Climate Change Policy**



Replaced our vehicle fleet with **14** EVs and installed **30** EV chargers at our North Point Headquarters building

MANAGEMENT APPROACH

Our *Climate Change Policy* and *Environmental Policy* outline our commitment to managing and minimising our climate change impacts and enhancing air quality management.

Most of our air emissions, which include carbon dioxide (CO₂), nitrogen oxides (NO_x), sulphur oxides (SO_x) and respirable suspended particulates (RSP), are the result of combustion of fuels. We control and monitor these emissions on a continual basis to ensure our plants comply with all local regulations.

Future Actions and Targets



Achieve 2025 carbon reduction targets and become **carbon neutral by 2050**



Advance our **climate change risk assessment**



Conduct a feasibility study on **hydrogen separation** from existing town gas pipeline



Supply **waste heat** from the Tai Po Gas Production Plant to a neighbouring food factory by Q4 2022

Carbon Management

We recognise that our operations emit greenhouse gases (GHG) that contribute to climate change. To mitigate their impact, we have reduced our direct and indirect GHG emissions by upgrading our infrastructure and strengthening our control measures. We also use low-carbon, renewable energy sources such as natural gas and landfill gas, employ energy-efficient equipment and improve our production processes. Additionally, we work continuously with our customers to help them reduce their own GHG emissions.

Climate Change Management

In the transition to a low-carbon economy, we understand the risks associated with a changing climate and have made appropriate provisions for them in our businesses.

These provisions are based on the risks we identified in a comprehensive climate risk assessment in 2015 of our Hong Kong operations under extreme weather events; in 2016, we extended this exercise to our project companies in the Chinese mainland. In 2019, we conducted a gap analysis to better align our climate change management against the Recommendations of the TCFD under Governance, Strategy, Risk Management, and Metrics and Targets.

In 2020, we also assessed our transition risks and opportunities across Towngas' energy-related businesses in Hong Kong and the Chinese mainland under various climate scenarios. Major transition risks comprise policy changes, reputational impact and shifts in market preferences, including upstream and downstream changes.

In 2021, we initiated another round of physical risk assessments for our critical facilities across the region. Supplemented by computer modelling studies, the assessment identified major physical risks faced by our businesses, such as rising temperatures and sea levels, drought and extreme weather events, all of which could have a significant impact on our operations.

To mitigate physical risk, we incorporate resilience measures at the planning and design stages. Additional measures to protect our existing operations against climate risks include installation of flood gates in our infrastructure/gas facilities, as well as enhanced maintenance and inspection programmes. We also visit our project companies' sites to understand their regional climate-related risks and to help them prepare for adverse weather events. This includes advising them on mitigation and resilience measures, as well as the provision of training in combating climate change.

We have also identified opportunities made possible by new technologies, products and services that could enable us to become more resilient and adaptive to climate change.

We will continue to align with the TCFD disclosures, not only to communicate with our stakeholders in a more transparent manner but also to ensure our business grows sustainably.

For more information on how we manage our impacts on climate change and air quality and how we measure our carbon reduction efforts, please refer to our [ESG website](#).

PROGRESS AREAS

We have been making a concerted effort to decarbonise our own operation and value chain, in recognition of the urgency of the climate change goals set out during COP26, as well as the commitment by governments, companies, individual stakeholders and non-government organisations (NGOs) across the world to meet these goals.

TCFD Update

As climate change has become a global concern, stakeholders are expecting more information on how it could affect a company's assets, business operations and financial performance.

Since 2019, we have disclosed relevant information to align with the Recommendations of the TCFD and meet stakeholders' expectations. The following is a summary of how Towngas aligns its disclosures with the TCFD recommendations.

| | |
|---------------------|--|
| Governance | • Managing ESG at Towngas |
| Strategy | • Transitioning to a Low-carbon Future • Climate Change and Air Quality |
| Risk Management | • Climate Change Management • Risk Management |
| Metrics and Targets | • Our Carbon Footprint and Targets |

Climate Transition Risks and Resilience

We conducted a comprehensive assessment of the transition risks and opportunities across our energy-related businesses in Hong Kong and the Chinese mainland under various climate scenarios in 2020. Transition risks for Towngas were identified according to TCFD's categorisations of market risk, technology risk, policy and legal risk, and reputation risk.

The study shows the resilience of our portfolio, which has been achieved by diversifying into other businesses, such as smart energy, that reduce our exposure to transition risks. In future, we will continue to explore new clean energy technologies through the research and development we carry out.

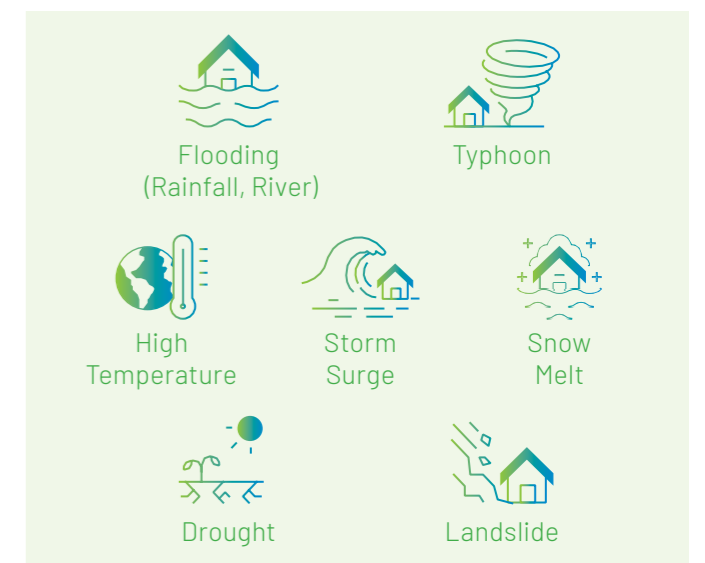
For more details, please refer to our [ESG Report 2020](#).

Climate Physical Risks and Resilience

As a public utility, Towngas is particularly vulnerable to climate risks since they may cause physical damage to our assets as well as interruptions to our energy supply or even threats to public safety. In 2021, we further assessed our climate change physical impacts to align with the TCFD Recommendations and carried out a scenario analysis to better understand our resilience against physical risks that vary over time in severity and nature.

Scenario Development

The modelled scenario included three Representative Concentration Pathways (RCP 2.6, RCP 4.5, RCP 8.5) used by the Intergovernmental Panel on Climate Change (IPCC). These pathways broadly represent comprehensive climate scenarios related to projected global average temperature increases from around 1°C to 4°C. The modelling consisted of risks related to the physical impacts of climate change driven by events (acute risks) and longer-term shifts in climate patterns (chronic risks).



The climate risks identified were modelled under different climate stressor scenarios up to 2100 using robust historical meteorological data sets from both international and local sources. This data has allowed us to accurately evaluate the physical climate risks of each asset in selected timeframes.



Impact Analysis

In our modelling, we evaluated the degree of sensitivity of our assets, and identified measures required to mitigate risks and build resilience across our portfolios. The analysis took into consideration the business nature and geographical locations of each asset. The risk level of business interruptions and/or direct damage across operations and supply chains was also assessed.

In the Chinese mainland, we have a diverse asset portfolio that includes gas facilities, urban waste treatment plants, water treatment plants, chemical plants, a logistics port and office buildings spanning 28 provincial regions. For our Impact Analysis, we conducted an asset-level assessment of 100 major assets that are prone to extreme climate hazards, such as chemical

plants; and, whose businesses could be interrupted by the physical impacts of climate change, including the likelihood of critical operational and financial impacts on our assets, such as city gas transmission facilities and water treatment plants.

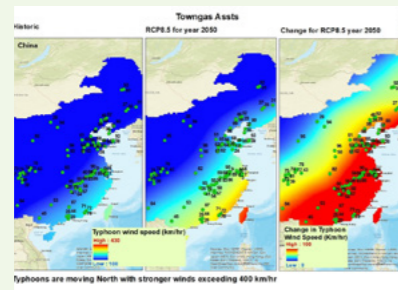
Based on the probability of hazardous events occurring and our asset exposure and vulnerability to these events, the Climate Value at Risk (which reflects the maximum amount of loss incurred over a one-year period) was evaluated. The scenario analysis identified the climate risks to which our assets are most exposed, including acute climate events such as typhoons, heavy rainfall and river flooding, and chronic events such as extreme heat. Influential risks are summarised below.

| TIMEFRAME | RISKS | IMPACT | POTENTIAL FINANCIAL-RELATED IMPLICATIONS |
|----------------------------|--------------------------------|---------|---|
| From 2030 (Medium term) | Heavy Rainfall River Floods | Acute | <ul style="list-style-type: none"> Spending to upgrade resilience measures, such as for flood gates, to avoid temporary business interruptions and damage to assets/equipment Increased health and safety hazards for staff |
| From 2050 (Long term) | Typhoons | Acute | <ul style="list-style-type: none"> Spending on more assets to upgrade resilience measures to avoid power outages and business interruptions Increased insurance premiums and claims |
| | Extreme Temperatures | Chronic | <ul style="list-style-type: none"> Increased energy consumption and costs Increased health and safety hazards for staff that affect productivity (e.g. heatstroke, hypothermia) |

A heatmap was also developed to indicate the risk level of each of our assets. We are conducting an assessment of our assets that are climate sensitive and developing a plan to enhance their climate resilience.

Typhoon risk under the Business-as-usual scenario (RCP 8.5)

Our modelling implied that typhoon wind speeds could reach 400km/hr by 2050, with more than 100km/hr increases (as compared with 2020), affecting our assets in southern China; typhoon risks will also gradually increase for our assets in northern China.



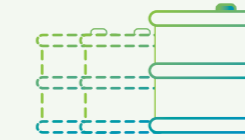
In Hong Kong, the Tai Po Gas Production Plant is considered our critical asset. Hence, we conducted a deep asset scenario analysis, taking into account the relative locations, as well as physical setting of the equipment and facilities, such as naphtha tanks, production plants and switch rooms. All of these were thoroughly modelled for three RCPs up to 2100.

The analysis showed that there is an overall low-to-moderate risk of flooding and typhoons for the Tai Po Gas Production Plant, while the remaining risks assessed were minimal. This can be attributed to the robust adaptive capacity and mitigation measures that have already been integrated into our Tai Po Gas Production Plant over the years.

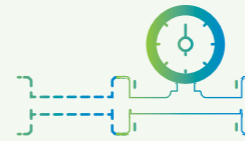
Reducing Emissions in Cities

2021 Energy Savings at our Gas Production Plants¹

Naphtha saved
110,216 GJ



Town gas saved
24,930 GJ



Utilisation of Natural Gas (2006 - 2021)

Cumulative carbon reduction

>1,200,000 tCO₂e

(equivalent to CO₂ absorption of over 50 million trees in one year)



Cumulative fuel savings to customers
HK\$18.8 billion



1. As compared with the data of a reference year before implementing the respective environmental initiative

At Towngas, we make use of renewable sources such as landfill gas, which we have been adding to our fuel mix to produce town gas since 1999. As one of the pioneers of renewable fuels in Hong Kong, we used 135,146 GJ of landfill gas in our town gas production in 2021.

We remain committed to continually increasing the proportion of natural gas and renewable energy used in our operations and for our customers. To that end, we worked closely with the potential operators of the Northeast New Territories Landfill Extension during the year on future renewable energy applications of this new landfill extension.

The amount of renewable energy generated from solar panels in our Hong Kong facilities such as those installed at Tai Po Gas Production Plant, North Point Headquarters and offtake & pigging stations reached over 306,000 kWh in 2021. We also made use of innovative technologies to maximise efficiency in capturing solar energy. The sun trackers and bifacial solar panels we installed can increase the energy yield by up to 20% and 5% respectively.

In the Chinese mainland, we continued expanding our city-gas network for coal-to-gas conversion, which further reduced emissions. In 2021, we served over 35 million customer accounts in the country.

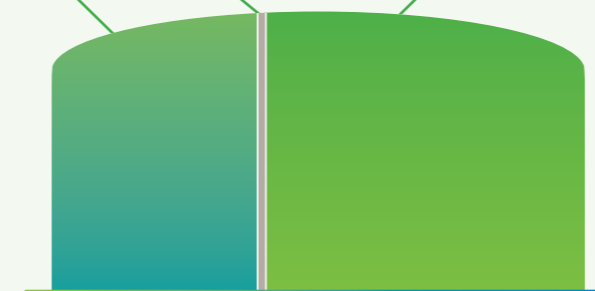
We also continued to explore the feasibility of adopting other clean energy options such as low carbon hydrogen.

Fuel Mix for Town Gas Production

Natural Gas
60%

Landfill Gas
1%

Naphtha
39%



Hydrogen Separation Pilot Project

Town gas is about 50% rich in hydrogen. To support the Hong Kong Government's Clean Air Plan for Hong Kong 2035, we have been exploring the possibility of separating the hydrogen from town gas for clean energy applications such as hydrogen fuel cells for buses. During the year, we made plans to launch a small-scale pilot project for the separation process at our Tai Po Gas Production Plant.

CHEMICAL COMPOSITION OF TOWN GAS

| | |
|---------------------|-------------|
| Carbon Dioxide | 16.3%-19.9% |
| Carbon Monoxide | 1.0%-3.1% |
| Methane | 28.2%-30.7% |
| Hydrogen | 46.3%-51.8% |
| Nitrogen and Oxygen | 0%-3.3% |



CASE STUDY

ELECTRIC VEHICLES

In recent years, climate change has had a significant effect on the transport sector, including trend of switching to EVs.

EVs have been growing in popularity because they can lower roadside emissions and create less noise. As Towngas has a fleet of more than 450 vehicles, the incentive to replace old petrol vehicles with their newer electric counterparts is huge.

To support the Hong Kong Government's One-for-One Replacement Scheme, we have formulated an EV Conversion Plan, under which we target to replace 60 work vehicles at our North Point Headquarters by 2025, with an option to increase that number if feasible. In 2021, we had purchased 14 EVs. Each EV replacement can reduce carbon emissions by half as compared to traditional petrol car.

We have also installed a total of 30 EV chargers at our North Point Headquarters building, a convenient and readily accessible location for charging our EVs.

In anticipation of more staff using the EV chargers, we are currently developing a vehicle charging management system available via mobile apps to schedule EV charging.

We also promoted EV adoption to our project companies in the Chinese mainland, one of the project companies in Suzhou city used nine EVs as emergency vehicles.



Our Carbon Footprint and Targets

To underscore our commitment to tackling climate change, in 2021 we again signed the Business Environment Council's Low Carbon Charter.

For 2021, the Group's total carbon emissions (Scope 1 and 2) were 1,503,000 tCO₂e. More details can be found in the [Key Statistics](#) section.

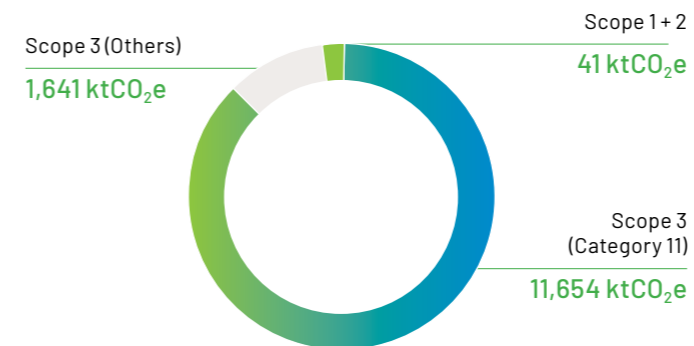
Towngas has been disclosing total Scope 1 and 2 GHG emissions for several years. Understanding our emissions along the value chain could be material and, in 2020, we conducted a review and started to disclose our Scope 3 emissions for gas production in Hong Kong. To provide a more comprehensive view of our emissions along the value chain, in 2021 we extended our Scope 3 emissions calculation to the Group's gas distribution business in the Chinese mainland.

The carbon inventory was verified against ISO 14064 - 1:2018 by a third party.

Gas Distribution Business in the Chinese Mainland

In 2021, the total emissions (Scope 1, 2 and 3) amounted to 13,336,000 tCO₂e, of which Scope 3 emissions represent around 99.7%. This indicates that reducing GHG emissions generated within our own operations and those of our suppliers and customers are both important.

2021 GHG EMISSIONS OF GAS DISTRIBUTION BUSINESS (CHINESE MAINLAND)



- Scope 1 emissions are direct emissions from owned or controlled sources.
- Scope 2 emissions are indirect emissions from the generation of purchased energy.
- Scope 3 are all other indirect emissions that occur in the value chain. Category 11 refers to the use of sold products (e.g. town gas, natural gas).

Carbon Neutrality Commitment

Towngas is committed to become carbon neutral by 2050 through energy transition and innovation, including the development of renewable energy, waste-to-energy, green hydrogen, efficiency improvement, carbon management, and other collaborative projects with universities and research institutes. To demonstrate this commitment, we obtained HKQAA Commitment to Net-Zero Certificate, which is developed with reference to PAS 2060 and other relevant national/international standards.

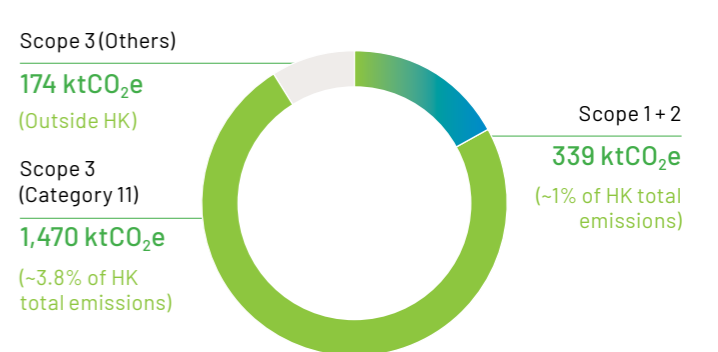
We have also established two medium-term carbon reduction targets, as follows:

- Reduction of our group operational GHG emissions by 10% by 2025 (2020 baseline)
- Reduction of 10 million tonnes of GHG emissions for the environment per year by 2025

Hong Kong Gas Production

In 2021, the total emissions (Scope 1, 2 and 3) amounted to 1,983,000 tCO₂e, of which Scope 3 emissions represent around 83%. GHG emissions from the production and consumption of town gas represent only about 1% and 3.8% of Hong Kong's total emissions respectively.

2021 HONG KONG GAS PRODUCTION GHG EMISSIONS



The carbon intensity of our Hong Kong gas production in 2021 was 0.588 kgCO₂e per unit of town gas, which was a drop of 23% as compared with our 2005 baseline.

Reducing Leakages and Methane Emissions

According to the AR6 Report released by the IPCC, the warming effect of methane as a greenhouse gas in the upper atmosphere is 28 times of carbon dioxide, which makes it one of the most important contributors to global warming. Methane leakage has received global attention, and world leaders attending the COP26 have agreed to take action to solve the problem.

Towngas, as a well-established energy and gas company, is aware of the potential for leakages in our extensive pipeline network, and has the responsibility of contributing to the reduction of methane emissions. We therefore signed the Chinese City-Gas Enterprise Methane Emission Control Proposal in 2021 on behalf of 10 city-gas enterprises in the country to support methane reduction.

Our network consists of some 3,700 km of pipelines in Hong Kong and 130,000 km of pipelines in the Chinese mainland. 98% of our pipelines are either polyethylene (PE) or steel, which are already the best materials in terms of gas leakage prevention. To ensure the healthy condition of our pipelines and to maintain pipeline integrity, we conduct comprehensive leakage surveys ranging from one to six times per year based on risk level.

We acknowledge some minor leakages may be difficult to detect, and when accumulated could contribute to a significant amount of carbon emissions. We therefore plan to conduct a methane leakage assessment of our gas pipelines with a local university to obtain a better overview of potential leakage problems in our networks, the results of which will be announced next year.

Supporting Customers to Reduce their GHG Emissions

As a company committed to innovation in the fight against climate change, we pioneered the idea of supplying waste heat from our production process to an adjacent food processing factory. With the completion of this green project in 2022 (the first of its kind in Hong Kong), we are bringing tremendous ESG value to the community.

For information on other Towngas initiatives and products we have launched to reduce customers' emissions, please refer to the [Transitioning to a Low-carbon Future](#) section.

Partnerships in Promoting Climate Resilience and Carbon Reduction

In 2021, we hosted the Towngas Innovation x Energy Transition Sustainability Conference — for industry experts and academics to share how climate change can be addressed through innovative technology. The conference attracted over 1,000 physical and online participants from Hong Kong and the Chinese mainland. Participants discussed the commitments made at COP26, new energy solutions such as hydrogen fuel cells, and smart energy management systems, including those developed at Towngas.



Towngas conducted a Vulnerability Impact Assessment of Towngas properties at risk due to climate change. The assessment was conducted using the Representative Concentration Pathway (RCP) Scenarios to evaluate flooding, storm surges and extreme waves, landslides, wind, temperatures and lightning. After the assessment, we participated in meetings with different government departments and utility companies to discuss potential impacts brought about by climate change and corresponding adaptation and mitigation measures. Technologies and climate projection data were also shared to better understand how we should prepare to deal with potential climate-related hazards.

Towngas also supported the Partnership for Sustainability Leadership in Business with other large companies in Hong Kong. The aim of the scheme is to connect large corporates and small and medium-sized enterprises (SMEs) by co-creating sustainable value chains in Hong Kong and the region. The SMEs will be evaluated on their sustainability performance using a self-check tool designed by the Centre for Civil Society and Governance of the University of Hong Kong (HKU). Based on the initial scores of the SMEs, HKU and large corporates, including ours, will share their experiences in workshops and coaching sessions in order to improve SMEs' ESG performance.

RESOURCES MANAGEMENT

2021 Performance Highlights



Electrical power consumption at Towngas' North Point Headquarters: down **2.2%** compared with 2020



Achieved BEAM Plus Existing Buildings v2.0 **Platinum**



120,498 m³ of water conserved through the reverse osmosis systems at our Tai Po Gas Production Plant



>1,600 tonnes of metal recovered under the Used Gas Appliance Recycling Program



Conducted **Water Risk Assessment** for the Group's portfolio

Future Actions and Targets



Reduce **15%** energy use for North Point Headquarters building by 2025 (2015 baseline)



Achieve **zero wastewater discharge** for our HVO plant and methanol production plant



Obtain **ISO 50001** Energy Management System Certification for our North Point Headquarters in 2022



Achieve the target of **2%** increase in the overall energy efficiency of gas appliances by 2030

MANAGEMENT APPROACH

As stipulated in our [Environmental Policy](#), we make every effort to conserve natural resources in our production plants, distribution network and office operations, and encourage our contractors, suppliers and customers to do the same.

Energy

Our buildings and other physical assets are designed to make the most efficient use of the energy we consume. Our North Point Headquarters building has attained green building standards such as BEAM Plus, while our data centres in Hong Kong and the Chinese mainland are Leadership in Energy and Environmental Design (LEED) certified.

Water and Effluents

We make a strong effort to use the water we consume more efficiently in our operations. It is utilised as a raw material, for cooling and heating and for domestic use in our offices, customer centres and natural gas stations. The water we consume comes mainly from local municipal water suppliers; in the Chinese mainland, we also use surface water in our water supply business.

Water is discharged to municipal wastewater treatment plants or into the sea after it has been treated in accordance with local regulations. We also consume recycled water where feasible.

Waste

Our waste management approach is underpinned by the “5R” principle of Replace, Reduce, Reuse, Recover and Recycle, not only within our own operations but also those of our upstream suppliers and downstream customers. We strive to reduce waste we generate and reuse or recycle to the fullest extent. We ensure all hazardous wastes are treated and collected in strict compliance with local regulations. We also monitor our waste generation on a regular basis by tracking both the solid and liquid waste that is produced and recycled at our facilities.

The waste generated in core gas business includes municipal solid, construction and chemical waste such as spent catalysts within our operations. Our upstream waste includes drilling fluids and cuttings, while downstream waste is minimal.

For our retail gas appliance business, the major waste generated within our operations and upstream is packaging. Our manufacturers and suppliers are constantly adopting new measures to reduce packaging and use the environmentally friendly packaging. With the cooperation of manufacturers, we have eliminated the polyfoam in our packaging for over 90% of our appliances imported from Asia. Used gas appliances from downstream customers are managed under our Used Gas Appliance Recycling Programme.

For more information on how we conserve energy, make efficient use of water and manage waste, please refer to our [ESG website](#).

PROGRESS AREAS

Energy Management

We have set a target to reduce 15% energy use for North Point Headquarters building by 2025 (2015 baseline). This building was the first non-residential building to achieve Final Platinum BEAM Plus Existing Buildings V1.2 with annual electricity savings of more than 1 million kWh.

The North Point Headquarters also obtained Final Platinum BEAM Plus Existing Buildings V2.0 – Comprehensive Scheme with a score of 100, and received a special award recognising our highest score on energy aspect – Outstanding Performance in Energy Use Aspect (Comprehensive Scheme).

The saving in electrical power consumption at the North Point Headquarters in 2021 was 117,949 kWh, a decrease of 2.2% as compared with 2020. The total energy intensity of our North Point Headquarters building was 0.78 GJ/m².

To manage our energy consumption more efficiently, we conducted a building energy use analysis followed by a cloud-based energy review report. We also set and achieved objectives for 2021 energy-saving projects such as enhancement of chiller plant automatic control and freight lift modernisation at our North Point Headquarters.

We are reviewing the energy efficiency of our residential cooking appliances and water heaters to achieve grade 2 or above in the Mandatory Energy Efficiency Labelling Scheme for Gas Appliance to be launched in 2023. We will continually upgrade our residential appliances in order to achieve a target of 2% improvement in overall energy efficiency by 2030.

Water Resources Management

In 2021, we commissioned the third reverse osmosis plant at our Tai Po Gas Production Plant, which is now in operation.

In 2021, there were no reportable effluent spills in any of our operations.

At our North Point Headquarters, we installed a rainwater collection tank for cleaning and irrigation use and obtained two gold ratings under the Quality Water Supply Scheme for Buildings of the Water Supplies Department.

Waste Management

Towngas has received WastewiSe Certificates at the Excellence Level for the past 20 consecutive years, with more than 40 waste reduction and recycling targets completed to date.

We also ensure that all hazardous wastes are treated in strict compliance with the Hong Kong Ordinances and via our Waste Management Plan.

To promote recycling/waste reduction, we encouraged staff to donate used food containers for reuse after Chinese New Year, collected excess food for people in need during the Chinese New Year holiday, hosted a toy upcycling workshop and engaged Eastern Community Green Station to introduce waste reduction concepts to our staff.

Welcome Pack Digitalisation

In 2021, we began sending short message service (SMS) messages to our new customers with a website link to welcome packs when a Towngas account is activated. The new method is not only faster than regular mail delivery, but also more environmentally friendly. Annual savings of 570,000 sheets of papers can be achieved this way.

As water stress continues to worsen across the globe, we have also conducted a water risk assessment for our group’s portfolio. Based on the geographical location and operational characteristics, basin and operational risks were analysed to identify those project companies with higher risks. This will help us review how water should be managed to meet future water availability and quality trends.

Waste Reduction for Customers

Through our Used Gas Appliance Recycling Programme, we collect unwanted appliances from customer premises and sell them to recycling contractors, with proceeds going towards environmental causes. We have a target of 1,200 tonnes of scrap metal recycled from used gas appliances annually, and in 2021, we recovered over 1,600 tonnes of metal, bringing the total amount of metal we have recovered since 2003 to more than 22,000 tonnes.

We have also been encouraging our more than 1.96 million customers to switch to our eBilling service, which has enabled us to achieve significant reductions in paper consumption.



By the end of 2021, all newly sold balanced flue water heaters had been equipped with a hydro-generator that utilises the power generated from water flow; this replaced the need for conventional battery cells, which are wasteful as they are discarded after use.

Conserving Resources at our HVO Plant

In the Chinese mainland, we have adopted the Zero Liquid Discharge system for our hydro-treated vegetable oil (HVO) production facility in Zhangjiagang city.

The system utilises a process with Thermal Vapour Recompression (TVR) technology to eliminate discharges of wastewater by treating and recycling the water for onsite use.

The capacity of the TVR device is 10 tonnes of wastewater per hour. The TVR process also helps reduce energy consumption, as well as hazardous waste generation, cutting the cost by RMB4,680,000 per year.



MANAGEMENT APPROACH

Recognising that our gas processing and distribution operations can disturb the land and wildlife habitats, we make a strong effort to limit our impact on biodiversity as stated in our [Environmental Policy](#).

In order to mitigate our impacts, we follow four principles:

1 Avoid Areas Rich in Biodiversity in the planning stage of our projects. We will carry out a site-specific EIA, in accordance with local governmental requirements, to address the impacts of development on wildlife and ecosystems.

2 Mitigate our Impacts through Innovation. We will also take preventive and corrective measures to minimise the possible impact of our works, including construction work, effluent discharge, and pipeline maintenance, on habitats and species of flora and fauna.

3 Use Mitigation and Offset Measures during Construction which help reduce pollution and the loss of topsoil. We also coordinate with local government bodies to preserve the greenery around our industrial sites and stations.

4 Promote Biodiversity Awareness by organising activities, such as visits to organic farms and eco tours, for employees and customers.

For more information on how Towngas handles biodiversity, please refer to our [ESG website](#).

PROGRESS AREAS

Since 2017, we have been sponsoring the Plantation Enrichment Project (PEP) organised by the Agriculture, Fisheries and Conservation Department and coordinated by The Green Earth to enhance the ecological value of plantations and enrich biodiversity in Hong Kong's country parks. We also invite the public to participate in tree care work at our sponsored planting site at Shing Mun Country Park.



At our North Point Headquarters building, we continued to manage our rooftop farm. We also developed an innovative hydroponics system in-house.

Hydroponics is the process of growing plants without soil as their roots are directly suspended in water. Our self-developed hydroponics system has the following benefits and features:

Versatility
A variety of plants such as vegetable greens, vining plants, fruits, herbs and flowers can be grown

Upcycling
Repurpose our scrap PE gas pipes

Real-time monitoring/controlling
Temperature, water levels and plant nutrient concentrations can be easily controlled

Portability
The perfect size for homes and schools

Simplicity
A small version can fit easily on your desk or windowsill

In 2013 we began the Farming for Charity project to promote more productive and sustainable land use among farmers in Hong Kong. Under this project, we have recruited internal staff and their families, university students, customers and people from the wider community to produce organic crops using regenerative agricultural methods. Since then, a total of 10,000 square feet of local farmland has been replenished, with more added each year. We have also invited university professors, industry experts and our NGO partners to visit the project and learn about its innovative approach to ecological vibrancy.

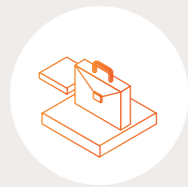


11 CONTRIBUTING TO STAKEHOLDERS

TAKING MEANINGFUL ACTION

In 2021, we looked beyond the COVID-19 pandemic and considered how we should be adapting to the “new normal”. At the same time, we continued to focus on developing a sustainable talent pipeline by directing our recruitment efforts at young people and refreshing our existing staff’s skills through training.

We also continued to provide innovative products and services to our customers and support for the community through the caring services we offer to the elderly and youth. As part of our commitment to sustainability, we maintained our environmental initiatives and worked closely with our suppliers to enhance their Environmental, Social and Governance (ESG) performance.



Employees

We build our sustainable talent pipeline by offering rewarding career opportunities in an inclusive and fulfilling work environment.



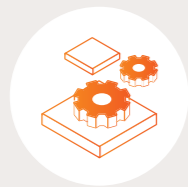
Customers

Our overriding commitment to customers is to provide them with a safe and reliable supply of energy along with reliable and efficient service.



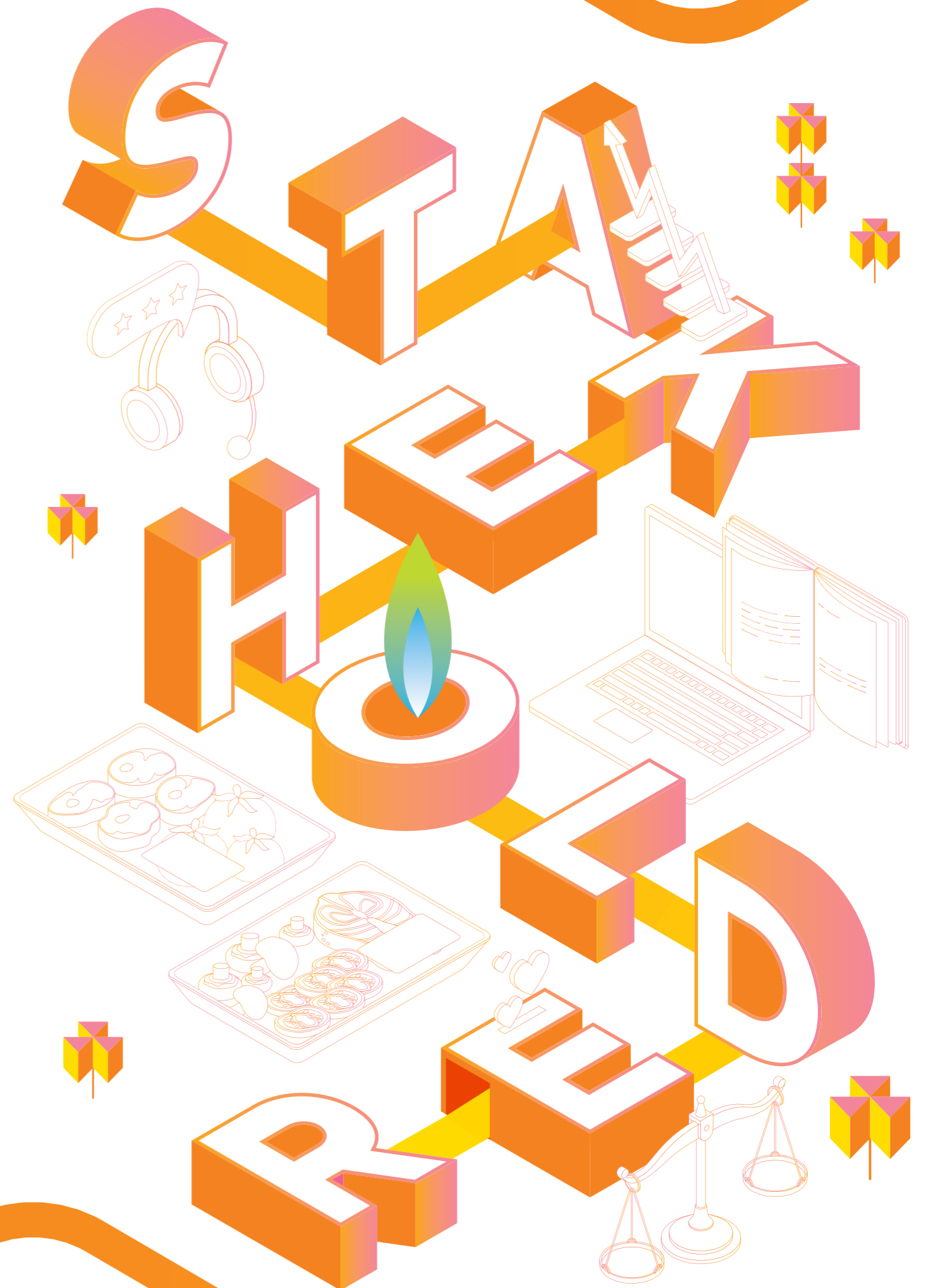
Community

We believe in contributing to the communities we serve and creating long-lasting value for society. We also work with NGOs and government officials to ensure the programmes we develop meet local needs.



Suppliers

Our supply chain management practice allows our suppliers to participate in a fair, equitable and competitive market and helps us build a sustainable supply chain.





EMPLOYEES

2021 Performance Highlights



Launched **talent development programmes** to build a succession pipeline



Developed **new training programmes** in response to energy and carbon reduction policies and the industrial environment to strengthen employees' business acumen



Total new recruits:
235 (Hong Kong)
2,193 (outside Hong Kong)



Average training hours per employee:
21.6 (Hong Kong)
51.5 (outside Hong Kong)

Future Actions and Targets



Continue to **expand our manpower channels** and **engage the younger generation** to create a sustainable talent pipeline



Continue to **enrich our talent development** and training programmes, with ESG elements and new business know-how in preparation for our business transformation

MANAGEMENT APPROACH

We are committed to providing an inclusive and rewarding work environment that leads to high engagement and enables our staff to grow and develop their potential in their careers with us. All human resources matters at Towngas are overseen by our Corporate Human Resources Department and handled according to the [Employee Policy](#), as well as Towngas Human Resources Policy Manual and Employee Handbook.

In managing our people, we take a systematic approach that spans their entire career lifecycle at Towngas.



Attracting and Retaining Staff

Towngas offers careers that are both fulfilling and rewarding, due in large part to our employment practices as covered under our [Employee Policy](#). These include family-friendly policies and competitive remuneration packages that are well above the regulatory minimum, as well as other benefits.

In turn, staff are expected to follow our [Code of Conduct](#), which sets out the standards of behaviour expected of them during their employment with us. Compliance with the code of conduct is linked to the employee remuneration through annual performance appraisal.

Employee Engagement

To keep our employees engaged and informed, we provide a variety of two-way communication channels. Our employees are guaranteed freedom of association in the workplace and may join the organisations and professional bodies of their choice, reflecting the high degree of freedom they enjoy at Towngas.

Although Hong Kong has no regulatory requirement with regard to collective bargaining, we consult our staff on employment issues through our internal communication channels. In the Chinese mainland, we comply with applicable legal obligations concerning freedom of association and collective bargaining.

Training and Development

We organise technical and non-technical training and development programmes and collaborate with outside partners to offer job-related training to our employees; subsidies are offered to staff who participate in external training. All of these training initiatives align with our commitment to developing our people's skills and competencies, as well as our broader mission of developing a learning culture and talent pipeline within our organisation.

Diversity, Equal Opportunity and Non-discrimination

We firmly believe in providing equal opportunities and eliminating discrimination in all aspects of our employment practices, as indicated in our [Anti-discrimination Policy](#). We also value diversity and make a strong effort to attract women to our industry and to develop and retain them. Additionally, we are proactive with respect to providing employment opportunities and support for people with disabilities and older workers.

Respect for Human Rights

Prevention of Child Labour or Forced Labour

In accordance with human rights principles, we strictly prohibit child labour and forced labour in our operations as stipulated in the [Human Rights Policy](#). To ensure we are legally compliant with local laws and regulations in our recruitment, we check applicants' identity including, but not limited to, their age and eligibility for employment. We also ensure that employees are given rest days and are compensated for any overtime work, as required by local regulators. Outside our own operations, we require all of our partners in our supply chain to comply with these policies, as stipulated in our [Code of Practice for Suppliers](#). For more details, please refer to the [Suppliers](#) section.

Training in the Code of Conduct (includes human rights related topics) is mandatory for all staff and is included in our induction course (approximately two hours per course) when they first join the Company. The relevant human rights policies and procedures are also readily available on our ESG website through Code of Conduct and Human Rights Policy for all employees to access anytime.

Security

We have established a [Security Policy](#) to protect our employees and company assets from harm or loss. We also ensure that all security personnel are kept abreast of legislation concerning human rights and the rule of law and that they treat people in an appropriate and respectful manner.

For further details on our employee management approaches, please refer to our [ESG website](#).

PROGRESS AREAS

In 2021, we continued to develop a sustainable talent pipeline and promote an inclusive and diverse workforce by empowering women, hiring disabled people and organising programmes to retain or rehire older workers.

Developing a Sustainable Talent Pipeline

Greater Bay Area Youth Employment Scheme (GBAYES)

To encourage young people to pursue a career in the Greater Bay Area, Towngas joined the GBAYES launched by the Hong Kong Government in January 2021. In support of this scheme, we offered various positions at our subsidiaries in the Greater Bay Area. Recruitment started shortly after the launch of the scheme, with 14 young people hired, including 8 in Information & Technology positions and 6 in General positions.



Summer Internship and Co-operative Education Programme

Towngas provides young people with learning opportunities and job exposure so they can begin preparing for a career after completing their education. In 2021, we launched the eight-week Summer Internship Programme, with 81 summer interns hired, and a one-year Co-operative Education Programme (Co-op) with 28 trainees hired. The trainees under the Co-op programme were placed in the Engineering, Commercial and Information Technology departments, where they applied knowledge and skills learned from textbooks to real-life work situations under the guidance of supervisors.



2021 Graduate Trainee Programme

To strengthen our succession pipeline, in 2021, we launched the 24-month Graduate Trainee Programme and hired five graduate trainees. During the programme, the trainees learned about Towngas' business and business strategy, corporate culture and management philosophy. Besides, we also continued to provide comprehensive gas engineering training and workshops for the trainees to meet HKIE Scheme A requirements. They can become competent engineering and management successors after graduation.



Support Youth Development Programmes

In order to reach young people from high schools and universities who might be interested in a career at Towngas, we have been partnering with various youth organisations.

With the Hong Kong Management Association, we organised the Youth Development Programme, which attracted more than 20 young people. During this event, we took students on a tour of our facilities, including the Hall of Innovation, and discussed how to get started in a career with Towngas through our graduate trainee and apprentice programmes.



Additionally, we supported the High School Programme of the Hong Kong General Chamber of Commerce (HKGCC) and welcomed 22 secondary students from Good Hope School to an online virtual visit to Towngas.

Young Towngas Leadership Competencies Acceleration Programme (YTLC+)

This young leadership programme, launched in 2017, is open to young employees across the Group with 5 to 10 years of working experience. During the 18-month programme, YTLC+ members participate in a series of training programmes, mentoring, action learning projects and company visits. Following the graduation of the first batch of 18 young employees, the programme admitted a second batch of 31 employees.

Towngas Leadership Competencies Acceleration Programme (TLC+)

Launched in 2008, TLC+ is an 18-month leadership programme for middle management with more than 10 years of working experience. During the programme, TLC+ members undergo training and mentoring, as well as taking part in action learning projects and company visits. With the latest batch of TLC+ employees who graduated this year, the total number of TLC+ graduates has reached 84.

Apprenticeship Training

We organise gas apprenticeship training schemes for our aboveground and underground apprentices in order to maintain a competent and professional workforce as part of our long-term manpower planning.

In 2021, we recruited a total of 13 aboveground and 15 underground apprentices to our two-year gas apprenticeship training schemes.

During the year, six Towngas staff joined the Diploma in Vocational Education (DVE) in the Gas Services Engineering programme, which has been accredited by the Institution of Gas Engineers and Managers (IGEM) leading to a professional EngTech MIGEM qualification. We also awarded four Towngas Scholarships to outstanding students in the DVE programme.

Gas Engineering Course at the University of Hong Kong

The gas engineering course was offered for a second time at the University of Hong Kong during the year, with 52 students enrolled in the elective course during the 2020-2021 spring semester.

There were a total of 28 Professional Diploma graduates this year, with four students receiving Towngas Scholarships of HK\$15,000 each in recognition of their outstanding performance.

EMPLOYEE DISTRIBUTION, NEW RECRUITMENT AND TURNOVER RATE

| | | HONG KONG | OUTSIDE HONG KONG |
|---------------------------|--------|-----------|-------------------|
| Number of employees | Male | 1,900 | 35,975 |
| | Female | 542 | 16,662 |
| Total new recruitment | | 235 | 2,193 |
| Average turnover rate (%) | | 8.9 | 2.6 |

Student Engagement Activities

The Towngas Engineering Academy (TEA), one of the founding members of the Corporate Tech Academy Network (CTAN), took up the role of project manager for the Vocational and Professional Education and Training (VPET) Promotion Competition 2021. The competition encourages young people to provide creative ideas for promoting VPET to their peer groups. After the final assessment, the Towngas TG Go Ko Goal team won both the Champion and Best Innovation awards.

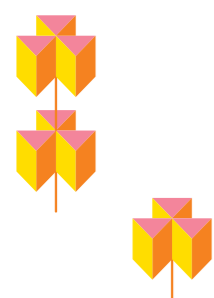
The student workplace experience programme, Career in a Nutshell, resumed during 2021-2022. Around 20 schools applied and 9 were accepted. In this programme, more than 10 career talks were completed in the schools.

Innovative Training Approaches

During the year, we organised handicraft workshops to promote our unique MasterCraft culture, which highlights the spirit of craftsmanship prevalent at Towngas, among non-technical staff.

For apprentices, we developed training modules that introduce hydrogen as a new form of energy as well as innovative tool applications in the gas industry. The aim of these modules is to inspire our apprentices to think creatively about sustainable energy and provide innovative solutions.

Our frontline technical workforce and salespeople also received training in new products, such as our smart meters, meter reporting systems and gas hobs with features that are safer and more user- and environmentally-friendly.



During the year, we again held the Towngas Management Programme (TMP), a comprehensive management training programme based on the Towngas Leadership Competency Model. Around 200 staff from Hong Kong and the Chinese mainland took five classes in the TMP - Managing Others Series, covering the following topics:

- Communication & Feedback Skills
- Social Networking, Trust Building & Goal Setting
- Interviewing Skills, Coaching Skills & Managing a Diverse Team

Together with MTR Corporation Limited, Microsoft Hong Kong Limited and PCCW Limited, we held a Learning Consortium with webinars on topics that included Bridging the Gap in the New Normal and Leading Change in an Agile Environment. A virtual visit to the Sino Inno Lab was also arranged.

Around **200** staff from Hong Kong and Chinese mainland took classes in the Towngas Management Programme.



EMPLOYEE TRAINING

| | | | HONG KONG | OUTSIDE HONG KONG |
|---|-------------------|-------|-----------|-------------------|
| TOTAL (HOURS) | | | 62,216 | 1,392,042 |
| AVERAGE (HOURS PER EMPLOYEE) | | | 21.6 | 51.5 |
| By gender (Average training hours and percentage of employees who received training) | Male | Hours | 24.3 | 51.2 |
| | | % | 78.6 | 96.6 |
| | Female | Hours | 13.5 | 52.1 |
| | | % | 68.2 | 95.8 |
| By employee category (Average training hours and percentage of employees who received training) | Senior Management | Hours | 11.2 | 45.7 |
| | | % | 79.6 | 93.2 |
| | Middle Management | Hours | 12.5 | 46.7 |
| | | % | 81.6 | 91.2 |
| | General Staff | Hours | 29.7 | 52.4 |
| | | % | 71.8 | 97.2 |

Diversity, Equal Opportunity and Non-Discrimination

Empowering women
3.5: 1 (Hong Kong)



Hiring more Females

60% of the newly hired Graduate Trainees were female

2.2:1 (Outside Hong Kong)



Rehiring Retired Employees/Hiring Older Workers

3 internships offered

Hiring the Disabled

14 people with disabilities hired

Women's Empowerment

As a company committed to creating a caring and inclusive work culture, we have a wide range of women-friendly facilities and family-friendly work practices:

- Breast feeding facilities for women to take lactation breaks and express breastmilk after giving birth
- Flexi-working hours for employees who need to take care of their children
- Maternity and paternity leave above that required in the Employment Ordinance
- Time off for employees who need to attend parent-teacher and parent education activities at their children's school.

Facilities for People with Disabilities

Towngas fully supports hiring disabled staff and provides a variety of facilities and policies to cater for their needs:

- A designated pathway is available on the ground floor to the main lobby for easy and direct access by disabled staff. Elevator buttons have been installed at a lower level inside lifts that can be easily reached by wheelchair users. In some areas, automatic doors have been installed and certain workstations can be adjusted to a comfortable height for wheelchair users.
- An automatic lighting system throughout the building makes Towngas a safer place to work for disabled employees. Other lights switch on automatically when

At Towngas, we value diversity within our workforce and make a strong effort to attract women to our industry and to develop and retain them. Our commitment to building gender-diverse teams is gradually improving:

- 25% of the Towngas senior executive staff are female.
- 60% of the newly hired Graduate Trainees were female in 2021.
- In partnership with a non-government organisation (NGO), we hire mothers of single-parent families to work as part-time customer service officers from home.

an employee enters a meeting room and can also be operated by logging on to the Towngas portal.

- Emergency lights will notify disabled employees in an emergency. Two individually-powered elevators are available for rescuing disabled employees in an emergency.
- Flexible working hours introduced in 2020 allow disabled employees to choose working hours according to the Rehabus schedule of The Hong Kong Society for Rehabilitation.

Currently, we have 14 disabled employees on staff and will continue to hire people with disabilities.

Initiatives for Older Workers

Towngas has participated in the Post-50 Internship Programme organised by the Employees Retraining Board (ERB). Through this four-week internship programme, we help retirees acquire new skills and perspectives. In 2021, Towngas offered three post-50 candidates short-term positions as a Cooking Assistant, Restaurant Assistant and Office Assistant, of which one was hired as a part-time Cooking Assistant after the completion of the internship. From 2019 to 2021, we offered 10 positions to Post-50 interns and hired six for part-time positions.

Adapting to the New Normal

During the COVID-19 pandemic, Towngas introduced a new work mode in response to the "new normal":

- Implemented an internal online learning platform with virtual classes, allowing staff to continue learning, even during work-from-home periods
- Created part-time Customer Service Officer positions for staff with schoolchildren at home due to the pandemic, enabling them to serve customers online. Two working mothers were recruited
- Offered a wide range of activities to help staff stay physically and mentally fit
- Held a workshop for department leaders themed "Leading with Agility under New Normal", with a technology entrepreneur and a business professor as speakers



CUSTOMERS

2021 Performance Highlights



Efficiency
8.99* (exceeded target)



Courteous and friendly attitude
8.99* (exceeded target)

*Exceeded target score of 8.5 out of 10

Future Actions and Targets



Continue to **explore the needs** of our customers by launching new products/services

MANAGEMENT APPROACH

We are committed to providing our customers the caring, competent and efficient service they expect. Our Customer Services Code of Conduct Policy sets out the general principles to define stringent standards and ensure service quality. Various internal policies, programmes and targets are in place to ensure customers receive excellent service.

Quality Management and Customer Services

Total Quality Management (TQM) motivates employees in their pursuit of excellence, according to the three pillars of Courtesy, Craftsmanship and Integrity.

Our Superior Quality Service (SQS) programme has helped us build our customer-centric culture in Hong Kong and the Chinese mainland. Implemented in 1992, it encourages staff to initiate new projects that help improve our operations, save costs or generate new revenue.

The Towngas Service Pledge is part of our commitment to provide customers with friendly, competent and efficient service. To ensure the highest standard of service, we work continuously towards improving our service and setting higher targets.

Responsible Communication

Our wide range of communication channels allows customers to access information on our products and services quickly and efficiently. These channels, which include customer centres, a 24-hour customer service hotline, online platforms and surveys, also enable us to collect customer feedback and better understand their needs.

As a responsible company, we ensure our marketing materials are accurate, based on substantiated information, and comply with all relevant government regulations and industry guidelines.

For further details on our approach to serving customers, please refer to our [ESG website](#).

PROGRESS AREAS

Improving our Customer Services

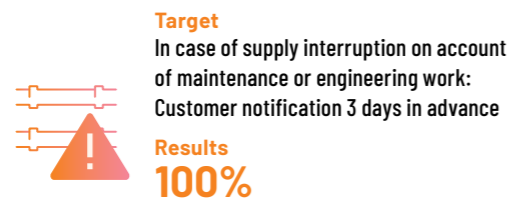
Our SQS programme, together with our corporate philosophy of “Growth = innovation x implementation”, drives our efforts to constantly improve the service we provide. In the past 29 years, we have completed over 1,800 SQS projects, resulting in improved customer satisfaction levels and savings of around HK\$600 million.

In our Towngas Service Pledge, we have set quantitative targets across six key performance areas, which are updated annually. In 2021, all our targets were achieved.

In 2021, Towngas complied with all regulatory requirements and received no substantiated customer complaints about any data loss or breach of data privacy in Hong Kong. No incidents of non-compliance were reported with respect to regulations and/or voluntary codes concerning product and service information and labelling or our marketing communications.

2021 TOWNGAS SERVICE PLEDGE

Reliability



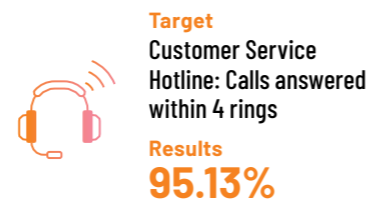
Safety



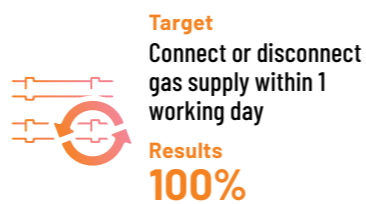
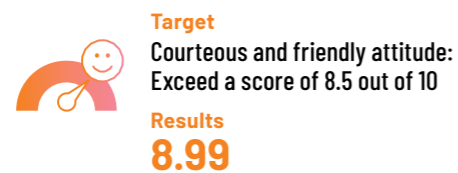
Appointments



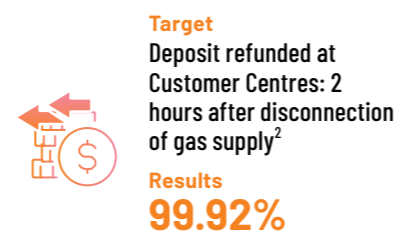
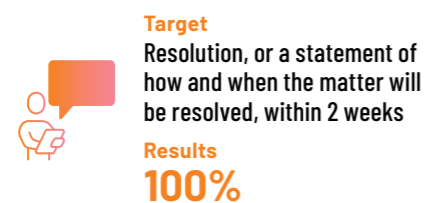
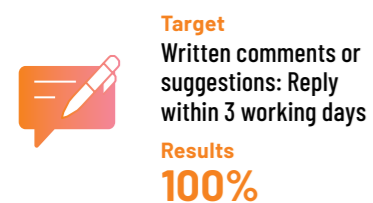
Speed and Convenience



Service Quality



Handling Suggestions



1. The result was based on the unplanned gas supply interruption to customers.
2. To enjoy this service, residential customers are advised to inform us of their requests for refunds at the time of making a capoff service appointment; the maximum refund amount is HK\$2,000.

SQS Smart Station Project



During the year, our staff developed testing equipment to diagnose the causes of defects in spare parts for gas appliances marketed by Towngas. Findings from the tests will be fed back to the manufacturers for product quality improvement.

AI Technology for Improved Customer Service



We now use artificial intelligence (AI) speech analytics technology to gather insights from the audio calls of our Customer Service Hotline.

Based on the information from speech analytics, we could see that some customers had called our hotline to verify maintenance appointments after not receiving an order or booking confirmation. We then began notifying customers via short message service (SMS) right after the service appointment was made, with appointment details provided via a link. Appointment enquiries have since been reduced.

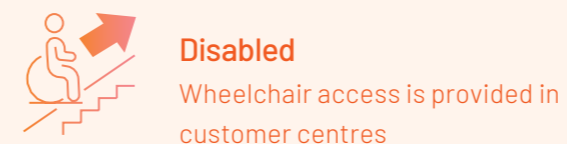
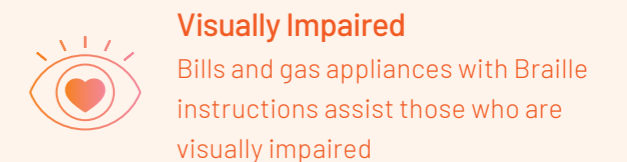
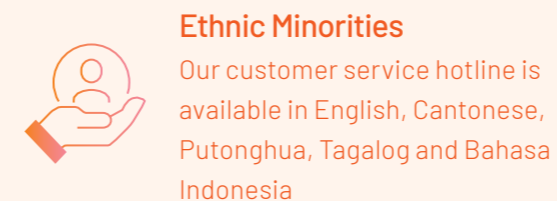
We also improved our virtual assistance by adding more integrated functions to our Towngas eService, including meter readings.

Improving Accessibility for all

Towngas closely monitors the latest developments in technology, market trends and user needs as part of our commitment to contribute towards a sustainable society.

During the year, we introduced a new-generation Wi-Fi smart metering system and automated Easy Metering service, which will be implemented in phases for customers who are visually impaired or wheelchair users.

Both innovations support our goal to make meter reporting barrier-free. With a one-time configuration, the system automatically reports the meter readings of customers who are physically challenged, thereby decreasing their dependence on family and friends or welfare organisations.







COMMUNITY

2021 Performance Highlights

-  Donated **HK\$3 million** towards community activities
-  Volunteer service hours: **14,122** (Hong Kong) **578,586** (Mainland utility businesses)
-  Conducted **various online voluntarily services** for the elderly despite of the pandemic

Future Actions and Targets

-  Develop a **systematic process** of community investment (from collecting feedback to making decisions)
-  Continue **supporting NGOs** and **identifying community programmes** that benefit society

MANAGEMENT APPROACH

As a caring, socially responsible company, Towngas believes in contributing to the communities we serve and creating long-lasting value for society. This commitment is outlined in our [Social Investment Policy](#).

By engaging with NGOs and government officials, we are able to understand the needs of local communities better and develop programmes that are appropriate to local needs. Our initiatives primarily address three areas of broad social concern: community health and wellness, the environment, and youth development.

For more information on Towngas' community initiatives, volunteer programmes and contributions to society, please refer to our [ESG website](#).

PROGRESS AREAS

We have implemented local community engagement programmes covering both operating regions in Hong Kong and the Chinese mainland. In 2021, the Towngas Volunteer Service Team (TVST) in Hong Kong had 768 staff members while Towngas Customer Volunteer Team had 244 customers registered. A total of 14,122 volunteer service hours were contributed for 299,828 beneficiaries.

We are also developing a formal mechanism that enables us to better review the feedback we collect from local communities on our volunteer services as the basis for future decision-making.

Total of **14,122** volunteer service hours were contributed for **299,828** beneficiaries in Hong Kong.

Community Health and Wellness

2021 COMMUNITY ACTIVITIES (HONG KONG)

| ACTIVITIES | OBJECTIVE | PROGRESS |
|--|--|---|
| Love on Delivery Programme (3rd phase) | To assist families with decreased income as a result of job loss or underemployment since the outbreak of COVID-19 | 830 low-income families received a total of 18,960 fresh food packs |
| Rice Dumplings for the Community | To show our care for the elderly and people in need | 100,000 |
| Mooncake for the Community | | 140,000 |
| Soup to Warm the Heart Campaign | | 44,800 |

In the Chinese mainland, we organise a Rice Dumplings for the Community programme similar to the annual event we hold in Hong Kong. In 2021, around 70 project companies within the Group participated in this programme to wrap and distribute nearly 30,000 rice dumplings for welfare groups and people in need. Festive gifts valued at over RMB200,000 were also handed out at the same time, benefiting over 7,900 people.

2021 CSR Theme: Caring for the Carers

Chef Anchor 2.0

In 2017, we held Hong Kong's first procedural cooking training programme – Chef Anchor – with a focus on Mild Cognitive Impairment (MCI) patients. The 2.0 version in 2021 included MCI patients' carers in the class, in order to address their needs and help them cope with the pressure of taking care of MCI family members.



Soft-diet Rice Dumpling Workshop for Carers

Continuing its caring tradition and catering for those with difficulties swallowing, Towngas volunteers joined the Hong Kong Sheng Kung Hui Pilot Scheme on Multi-disciplinary Outreaching Support Teams for the Elderly (Kowloon Central Cluster) in a workshop on making soft-diet dumplings.

Cooking Class with the Hong Kong Anti-Cancer Society

To raise awareness of lung cancer, now the number one killer in Hong Kong, Towngas volunteers joined the Hong Kong Anti-Cancer Society to organise a cooking workshop for the carers of cancer patients.

CASE STUDY

ONLINE VOLUNTARY SERVICE FOR THE ELDERLY

Despite of the pandemic, the TVST in February 2021 made effective use of technology to hold its first virtual Chinese New Year celebration with 400 seniors from homes for the elderly.

Although unable to celebrate physically in person with the elderly, the TVST still gave an exciting performance, including greetings from the God of Wealth, singing and prize games for a fun and warm afternoon. A similar event was held in June 2021, when TVST hosted the Dumplings with Love online Dragon Boat Festival celebration for over 400 seniors at 12 care homes.

The TVST also collaborated with the Hong Kong Housing Society (HKHS) for the first time to organise a series of events for seniors both online and offline, including the Care for Parents event, celebrating Father's and Mother's Day together with over 400 seniors, OHlympics for 100 seniors during the Tokyo Olympics, and a retro Mid-Autumn-themed activity with performances of classic songs, game booths and lantern riddles.



Youth Development

Video productions

TEA created a STEM drama series to promote gas engineering knowledge to young people, with four STEM videos already released. Documentary videos were also produced by our interns and posted to the [TEA YouTube Channel](#) as an introduction to summer internships at Towngas.



Gentle Breeze Movement

In the Chinese mainland, the Gentle Breeze Movement was launched in 2013 to improve the learning environment in schools across the country. To date, the Group has donated educational materials worth over RMB4.5 million to 43 schools in the provinces/autonomous regions of Jiangxi, Anhui, Jiangsu, Shandong, Guizhou, Shaanxi, Liaoning, Guangdong, Hubei, Fujian, Inner Mongolia, Sichuan, Heilongjiang and Chongqing. This programme was extended in 2020 to Tongling city, Anhui province.

Horticultural Therapy Programme

Towngas and St. James' Settlement co-organised a horticultural therapy programme to offer physical, mental and emotional support for students with special educational needs.

Accompanied and guided by members of the TVST, 24 students from two primary schools took part in a series of workshops led by professional therapists. The activities helped to enhance children's executive functions and social skills while fostering a harmonious bond between the parents and children.

In addition to the horticultural therapy, other activities included woodworking and nutrition workshops, as well as a visit to the Towngas organic farm.



The Environment

During the year, we utilised social media platforms to publicise a variety of Towngas green initiatives.

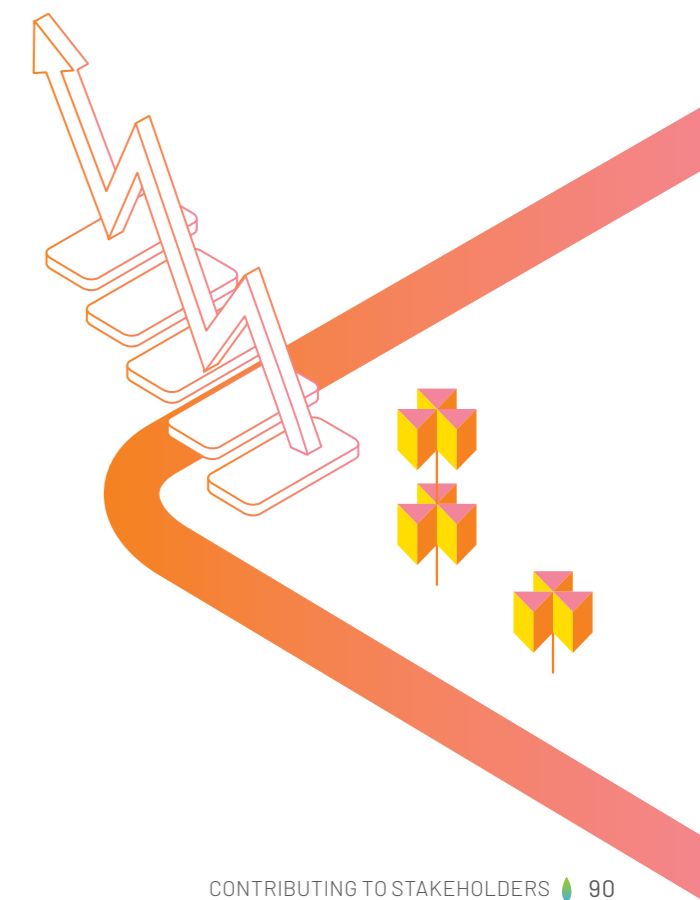
On the Towngas Low Carbon Action! Facebook page, we provided information on topics such as green lifestyle trends and recipes and organised a quiz with prizes to encourage a healthy green lifestyle. The Towngas Low Carbon Action! Facebook page currently has more than 17,000 followers. Green recipes and green lifestyle topics were also included in our official Instagram account, @towngashk.

A series of Green Flame workshops were organised to provide practical tips on a green lifestyle and promote parent-child green education. These included upcycling

classes in which children were encouraged to make good use of waste and an English class on environmental protection topics.

To strengthen our support for green groups, we launched an eBilling donation programme that will run from 1 August 2021 to 31 July 2022. For every new Towngas eBilling application, we will donate HK\$20 to one of 11 green groups chosen by customers.

In the Chinese mainland, the Group organises various low-carbon and environmental programmes under the theme of Green Nature. More than 120 of our project companies participated in the campaign and planted over 20,000 saplings across the country in 2021.





SUPPLIERS

2021 Performance Highlights



Identified **critical tier 1** suppliers



Assessed over **90%** of suppliers¹ on their CSR performance. No significant negative impact was found



Over **80%** and **70%** of our suppliers¹ have achieved ISO 14001 and ISO 45001 certifications respectively

Future Actions and Targets



Promote the **ISO 45001** standard among our suppliers



Encourage suppliers to conduct **ISO 14064** assessment

MANAGEMENT APPROACH

We are committed to building long-term business relationships with partners and suppliers for our mutual benefit and prosperity. The *Towngas Purchasing Policy* ensures that our suppliers can participate in a fair, equitable and competitive market. Five key principles (shown below) have been established as the foundation of responsible supply chain management at Towngas.



To treat suppliers equally and fairly



To promote strong buyer-seller relationships



To encourage suppliers to contribute to continuous improvement



To support green procurement practices



To offer equal opportunities to all suppliers

Supply Chain Assessment

When selecting suppliers, we consider criteria such as a company's background, quality, price, delivery of service and corporate social responsibility (CSR) performance. Preference is given to companies holding related ISO certificates and other documents pertaining to quality. An annual review is conducted to ensure suppliers on the approved list are performing at a satisfactory level.

1. Based on total purchase value of products and materials.

Managing Environmental and Social Risks

The *Code of Practice for Suppliers* sets out the CSR requirements every Towngas supplier must follow. They are assessed on their CSR performance according to the criteria of business ethics, environmental undertakings, workplace operations, community contact and marketplace activities.

Apart from a self-assessment survey to understand how suppliers align with our Code of Practice for Suppliers, selected key suppliers are evaluated through site visits. Additionally, they are provided with improvement plans to identify opportunities for improving ESG performance.

We are committed to following 6S¹ management principles for a safe and efficient workplace. These

PROGRESS AREAS

Supplier Performance and Engagement

We identified the critical tier 1 suppliers (i.e., products and material suppliers with an annual purchasing value over HK\$5 million) that have a significant impact on our Hong Kong business which have already covered more than 90% of our annual spend on products and materials.

Our new online Towngas e-tendering System (eTS) is helping us standardise workflows and increase efficiency, while also ensuring fair and open competition for our suppliers.

The requirements on our suppliers have also been tightened. They are now obligated to provide relevant certifications on ISO standards such as ISO 9001 and ISO 14001 on the eTS platform.

For our tier 1 suppliers in Hong Kong operation, over 80% of our suppliers² have achieved ISO 14001 certification, and over 70% of our suppliers² have achieved ISO 45001 certification. In addition, two tier 1 suppliers and one key logistics services provider were accredited to the ISO 14064 Standard.

SUPPLIERS' PROFILE BY GEOGRAPHICAL LOCATION (HONG KONG BUSINESS)

| | |
|------------------|---------------|
| Hong Kong | 89.5% (1,450) |
| Chinese mainland | 3.2% (51) |
| Others | 7.3% (114) |

1. 6S refers to the Japanese words Seiri, Seiton, Seiso, Seiketsu, Shitsuke (which mean Sort, Set in order, Shine, Standardise, Sustain) and Safety.
2. Based on the total purchase value of products and materials.

principles are promoted among our suppliers and support those who follow this methodology for improving efficiency, productivity and product quality, as well as reducing the risk of industrial accidents.

Building a Sustainable Supply Chain

Our *Sustainable Purchasing Policy* spells out the environmental considerations that should be taken in every purchasing decision, including procuring services and evaluating product specifications. Our procurement decisions and processes are in compliance with the ISO 20400 Sustainable Procurement Guidance.

For more information on how Towngas manages its suppliers, please refer to our [ESG website](#).

Suppliers are assessed on their sustainability practices through various tools, including self-declared questionnaires and factory audits. In 2021, we assessed over 90% of our suppliers² on their CSR performance in Hong Kong and the Chinese mainland. No significant negative impact was found.

Sustainable Procurement

Towngas is the first public utility in Hong Kong to complete the ISO 20400 Sustainable Procurement Assessment, which was verified by the British Standard Institution (BSI).

In 2021, we communicated details of the updated Sustainable Purchasing Policy and Code of Practice for Suppliers to our procurement staff. Our procurement staff also attended our training workshops on building green specifications and CIC Green Product Certification.

Additionally, we extended Life-cycle Costing to our multi-function copy machines, worked with a supplier to design a Towngas recycle bag and procured face masks manufactured in Hong Kong.

12 KEY STATISTICS

This section presents an overview of the 2021 key performance of the Group, with a focus on economic, safety, environmental, employee and social aspects. These quantitative data have been selected in accordance with the Global Reporting Initiative Standards, the ESG Reporting Guide of The Stock Exchange of Hong Kong Limited, and other key performance indicators.

ECONOMIC PERFORMANCE

| | Unit | 2021 | 2020 | 2019 | 2018 | 2017 |
|-------------------------------------|------------------------|--------|--------|--------|--------|--------|
| OPERATING | | | | | | |
| Customers(Hong Kong gas business) | Million | 1.96 | 1.94 | 1.93 | 1.91 | 1.88 |
| Customers(City-gas business) | Million | 35.0 | 31.8 | 29.8 | 27.5 | 25.4 |
| Customers(Water business) | Million | 2.62 | 2.53 | 2.38 | 2.24 | 1.24 |
| Town gas sales(Hong Kong) | Million MJ | 27,677 | 27,947 | 28,712 | 29,550 | 29,049 |
| Gas sales(Chinese mainland) | Billion m ³ | 31.1 | 26.9 | 25.6 | 23.0 | 19.5 |
| Water sales(Chinese mainland) | Million tonnes | 994 | 917 | 926 | 610 | 467 |
| FINANCIAL | | | | | | |
| Revenue | HK\$ million | 53,564 | 40,927 | 40,628 | 39,073 | 32,477 |
| Manpower costs | HK\$ million | 3,624 | 3,284 | 3,485 | 3,295 | 3,035 |
| Capital expenditure | HK\$ million | 8,387 | 7,295 | 7,053 | 6,746 | 6,141 |
| Taxation | HK\$ million | 2,155 | 1,713 | 2,290 | 1,908 | 1,750 |
| Dividends | HK\$ million | 6,531 | 6,220 | 5,924 | 5,385 | 4,896 |
| Profit attributable to shareholders | HK\$ million | 5,017 | 6,007 | 6,966 | 9,313 | 8,225 |

Hong Kong

SAFETY PERFORMANCE

| | Unit | 2021 | 2020 | 2019 | 2018 | 2017 |
|-------------------------------------|--|-------|------|------|------|------|
| EMPLOYEES¹ | | | | | | |
| Accidents - all industrial injuries | Number | 15 | 21 | 12 | 10 | 10 |
| Reportable accidents | Number | 15 | 18 | 9 | 7 | 10 |
| Accident frequency rate | Number of accidents per 100,000 man-hours | 0.22 | 0.32 | 0.18 | 0.15 | 0.15 |
| Occupational diseases rate | Number of incidents per 100,000 man-hours | 0 | 0 | 0 | 0 | 0 |
| Accident incidence rate | Number of reportable accidents per 1,000 employees | 5.1 | 6.1 | 3.1 | 2.4 | 3.4 |
| Traffic accident injury rate | Number of traffic accident injuries per 100 vehicles | 1.47 | 1.46 | 1.05 | 2.31 | 2.31 |
| Industrial injury man-days lost | Number of man-days | 1,013 | 386 | 244 | 201 | 496 |
| Fatal accidents | Number | 0 | 0 | 0 | 0 | 0 |
| CONTRACTORS | | | | | | |
| Reportable accidents | Number | 5 | 11 | 6 | 9 | 12 |
| Fatal accidents | Number | 0 | 0 | 0 | 0 | 0 |
| Accident frequency rate | Number of accidents per 100,000 man-hours | 0.12 | 0.25 | 0.14 | 0.22 | 0.30 |

1. Towngas employees and the employees of its subsidiaries only.

EMPLOYEES

| | Unit | 2021 | 2020 | 2019 | 2018 | 2017 |
|--|--------|-------|-------|-------|-------|-------|
| TOTAL HEADCOUNT | | | | | | |
| Hong Kong gas business | Number | 2,106 | 2,130 | 2,096 | 2,052 | 2,022 |
| ALL HONG KONG STAFF¹ | | | | | | |
| Full-time | Number | 2,442 | 2,495 | 2,474 | 2,418 | 2,388 |
| Part-time | Number | 113 | 140 | 118 | 112 | 94 |
| BY GENDER | | | | | | |
| Male | Number | 1,900 | 1,950 | 1,943 | 1,908 | 1,877 |
| Female | Number | 542 | 545 | 531 | 510 | 511 |
| Ratio of male to female - Senior management | Ratio | 2.9:1 | 3.1:1 | 3.3:1 | 3.4:1 | 3.4:1 |
| Ratio of male to female - Middle management | Ratio | 2.9:1 | 3.0:1 | 3.1:1 | 3.0:1 | 3.0:1 |
| Ratio of male to female - General staff | Ratio | 4.3:1 | 4.2:1 | 4.3:1 | 4.5:1 | 4.4:1 |
| BY AGE GROUP | | | | | | |
| ≤25 | Number | 130 | 147 | 139 | 124 | 123 |
| 26-35 | Number | 477 | 465 | 444 | 400 | 395 |
| 36-45 | Number | 458 | 480 | 486 | 496 | 475 |
| 46-55 | Number | 683 | 750 | 787 | 823 | 861 |
| >=56 | Number | 694 | 653 | 618 | 575 | 534 |
| BY EMPLOYEE CATEGORY | | | | | | |
| Senior management | Number | 271 | 267 | 265 | 251 | 236 |
| Middle management | Number | 901 | 918 | 925 | 889 | 843 |
| General staff | Number | 1,270 | 1,310 | 1,285 | 1,278 | 1,309 |
| TURNOVER RATE | | | | | | |
| Average turnover of workforce (Hong Kong gas business) | % | 8.2 | 3.9 | 5.7 | 6.8 | 5.7 |
| Average turnover of workforce (all Hong Kong staff) | % | 8.9 | 5.0 | 5.7 | 8.7 | 6.4 |
| BY GENDER | | | | | | |
| Male | % | 7.7 | 4.2 | 4.6 | 7.0 | 5.6 |
| Female | % | 13.1 | 7.6 | 9.8 | 15.1 | 9.3 |
| BY AGE GROUP | | | | | | |
| ≤25 | % | 25.3 | 4.9 | 12.2 | 16.2 | 19.3 |
| 26-35 | % | 13.8 | 9.2 | 10.9 | 20.4 | 13.0 |
| 36-45 | % | 12.2 | 4.3 | 7.3 | 9.9 | 7.1 |
| 46-55 | % | 5.4 | 2.7 | 2.5 | 4.4 | 2.6 |
| >=56 | % | 3.4 | 5.0 | 3.7 | 4.1 | 4.1 |

1. A revised scope was adopted in 2016. The scope includes the employees of companies with business in Hong Kong (i.e. Towngas, Towngas Enterprise Limited, ECO Stations, TGT and U-Tech). The figures have been adjusted accordingly.

| | Unit | 2021 | 2020 | 2019 | 2018 | 2017 |
|--|-----------|----------------|----------------|----------------|----------------|----------------|
| NEW RECRUITMENT | | | | | | |
| Total | Number | 235 | 203 | 250 | 270 | 198 |
| BY GENDER | | | | | | |
| Male | Number | 158 | 141 | 173 | 194 | 148 |
| Female | Number | 77 | 62 | 77 | 76 | 50 |
| BY AGE GROUP | | | | | | |
| ≤25 | Number | 68 | 50 | 51 | 44 | 53 |
| 26-35 | Number | 84 | 72 | 102 | 95 | 74 |
| 36-45 | Number | 38 | 39 | 52 | 79 | 42 |
| 46-55 | Number | 26 | 19 | 27 | 33 | 15 |
| ≥56 | Number | 19 | 23 | 18 | 19 | 14 |
| PERCENTAGE OF STAFF WHO UNDERWENT PERFORMANCE AND CAREER REVIEWS¹ | | | | | | |
| Total | % | 83.5 | 84.6 | 82.8 | 83.4 | 85.2 |
| BY GENDER | | | | | | |
| Male | % | 85.1 | 85.9 | 83.9 | 84.5 | 86.4 |
| Female | % | 78.2 | 80.0 | 78.9 | 79.0 | 80.8 |
| BY EMPLOYEE CATEGORY | | | | | | |
| Senior management | % | 81.9 | 83.1 | 79.6 | 80.5 | 85.2 |
| Middle management | % | 90.7 | 91.4 | 89.4 | 89.8 | 82.9 |
| General staff | % | 78.8 | 80.2 | 78.7 | 79.4 | 80.2 |
| TRAINING HOURS² | | | | | | |
| Total | Hours | 62,216 | 51,856 | 65,679 | 82,996 | 27,907 |
| Average (per employee) | Hours | 21.6 | 17.5 | 22.4 | 28.6 | 10.5 |
| Anti-corruption | Hours | 162.0 | 156.4 | 4,649.2 | 661.5 | 187.8 |
| BY GENDER (AVERAGE TRAINING HOURS AND PERCENTAGE OF EMPLOYEES WHO RECEIVED TRAINING) | | | | | | |
| Male | Hours (%) | 24.3 (78.6) | 19.1 (63.4) | 25.6 (93.7) | 31.2 (88.9) | 11.2 (53.3) |
| Female | Hours (%) | 13.5 (68.2) | 12.4 (58.0) | 12.3 (87.1) | 20.2 (82.3) | 7.8 (61.5) |
| BY EMPLOYEE CATEGORY (AVERAGE TRAINING HOURS AND PERCENTAGE OF EMPLOYEES WHO RECEIVED TRAINING) | | | | | | |
| Senior management | Hours (%) | 11.2 (79.6) | 7.4 (73.5) | 9.8 (85.0) | 17.1 (85.0) | 5.9 (50.0) |
| Middle management | Hours (%) | 12.5 (81.6) | 8.3 (70.4) | 13.7 (96.8) | 22.9 (89.8) | 7.9 (60.1) |
| General staff | Hours (%) | 29.7 (71.8) | 25.3 (54.6) | 30.5 (90.7) | 34.3 (86.3) | 13.2 (53.0) |

1. A revised scope was adopted in 2016. The scope includes the employees of companies with business in Hong Kong (i.e. Towngas, Towngas Enterprise Limited, ECO Stations, TGT and U-Tech). The figures have been adjusted accordingly.

2. From 2018, the figures included all training sessions conducted by internal departments and external organisations. Prior to 2018, the figures included training sessions mainly conducted by the Corporate Human Resources Department and Towngas Engineering Academy, while other training hours, such as HSE and its related CPD, were reported separately.

ENVIRONMENTAL PERFORMANCE

| | Unit | 2021 | 2020 | 2019 | 2018 | 2017 |
|--|---|----------------|----------------|----------------|----------------|----------------|
| ENERGY CONSUMPTION¹ | | | | | | |
| TOWNGAS HEADQUARTERS | | | | | | |
| Electricity | GJ | 18,959 | 19,384 | 20,252 | 20,350 | 20,921 |
| Town gas | GJ | 1,391 | 1,392 | 2,258 | 2,104 | 2,020 |
| GAS PRODUCTION PROCESS | | | | | | |
| Electricity | GJ | 164,864 | 165,304 | 164,242 | 148,134 | 137,142 |
| Naphtha | GJ | 671,774 | 665,811 | 720,641 | 671,808 | 628,760 |
| Natural gas | GJ | 5,219,173 | 5,178,927 | 5,383,668 | 5,287,475 | 5,033,398 |
| Synthetic natural gas and landfill gas | GJ | 135,146 | 124,985 | 42,038 | 325,950 | 584,126 |
| Town gas | GJ | 166,753 | 175,038 | 172,701 | 172,617 | 160,011 |
| Diesel | GJ | 1,727 | 1,300 | 1,537 | 1,480 | 1,373 |
| Total Energy Consumption | GJ | 6,359,437 | 6,311,365 | 6,484,827 | 6,607,464 | 6,544,810 |
| VEHICLE FLEET² | | | | | | |
| Unleaded petrol | GJ | 8,592 | 8,797 | 10,231 | 11,500 | 12,679 |
| Diesel | GJ | 12,012 | 11,810 | 12,017 | 11,429 | 11,316 |
| PACKAGING MATERIAL USE | | | | | | |
| Carton | Tonnes | 916 | 842 | 946 | 942 | 889 |
| Wood | Tonnes | 15.9 | 15.5 | 17.7 | 19.8 | 18 |
| Plastic | Tonnes | 1.38 | 1.41 | 0.88 | 0.45 | 0.7 |
| EMISSIONS | | | | | | |
| Carbon Dioxide (CO ₂) | Daily average in metric tonnes (Metric tonnes per million MJ of town gas) | 893 (12.00) | 884 (11.90) | 912 (11.90) | 928 (11.70) | 915 (11.64) |
| Nitrogen Oxides (NO _x) | Daily average in kg (Kg per million MJ of town gas) | 295 (4.0) | 298 (4.0) | 308 (4.00) | 317 (4.00) | 311 (4.00) |
| Sulphur Oxides (SO _x) | Daily average in kg (Kg per million MJ of town gas) | 1.1 (0.02) | 1.0 (0.01) | 1.0 (0.01) | 1.4 (0.02) | 1.9 (0.02) |
| Greenhouse gases (production equipment) ³ | Tonnes CO ₂ e | 339,068 | 344,549 | 357,060 | 347,489 | 329,741 |

1. The following conversion factors are used to standardise the units to gigajoules (GJ): Town gas (0.0486GJ/unit), electricity (0.00366GJ/kWh), petrol (0.033GJ/L), diesel (0.0366GJ/L). The conversion of naphtha and landfill gas to energy is calculated by multiplying individual monthly fuel volumetric data by their corresponding monthly average calorific value.

2. Tankers and ECO Aviation Fuel Services (EAFS) vehicles are excluded.

3. GHG inventory covers seven types of GHGs specified in the Kyoto Protocol. The global warming potential rates were from the IPCC Fifth assessment report (2014).

Emission factors of GHG emissions due to electricity consumption are obtained from two local electricity companies, while other emission factors were obtained from local governments and authorities, or other recognised sources.

Scope 1 GHG emissions were adjusted to reflect the biogenic nature of landfill gas and its associated carbon emissions during use.

| | Unit | 2021 | 2020 | 2019 | 2018 | 2017 |
|---|---|-------------------|-------------------|-------------------|-------------------|---------------------|
| WATER CONSUMPTION/DISCHARGE (GAS PRODUCTION)¹ | | | | | | |
| Water consumption | m ³ (m ³ per million MJ of town gas) | 992,022 (35.8) | 982,034 (35.9) | 995,239 (35.3) | 988,981 (34.0) | 1,094,363 (38.1) |
| Total wastewater discharged | Daily average in m ³ (m ³ per million MJ of town gas) | 275.1 (3.60) | 270 (3.50) | 306 (3.9) | 308 (3.90) | 319 (4.10) |
| Treated wastewater discharged to marine water bodies | Daily average in m ³ | 38 | 37 | 45 | 52 | 62 |
| Wastewater discharged to sewage | Daily average in m ³ | 237 | 232 | 261 | 257 | 258 |
| WASTE MANAGEMENT | | | | | | |
| NON-HAZARDOUS WASTE | | | | | | |
| Non-hazardous waste landfilled ² | Tonnes | 160.3 | 169.0 | 179.4 | 173.2 | 176.9 |
| Non-hazardous waste recycled ³ | Tonnes | 154.6 | 135.4 | 179.5 | 236.3 | 199.4 |
| HAZARDOUS WASTE⁴ | | | | | | |
| Chemical waste generated | Daily average in kg (kg per million MJ of town gas) | 132 (1.80) | 145 (2.00) | 238 (3.10) | 38 (0.50) | 193 (2.50) |
| OTHERS | | | | | | |
| Scrap metal recycled – old gas appliances | Tonnes | 1,607 | 1,626 | 1,678 | 1,785 | 1,803 |
| Scrap metal recycled – from construction and maintenance of plant and pipelines | Tonnes | 68 | 62 | 82 | 153 | 92 |
| Polyethylene (PE) pipe recycled | Tonnes | 22.0 | 24.1 | 22.5 | 25.8 | 24.8 |
| Gas appliances polyfoam packaging materials avoided | Tonnes | 1.24 | 1.10 | 1.38 | 1.50 | 1.46 |

SOCIAL PERFORMANCE

CUSTOMER SERVICE⁵

| | Unit | 2021 | 2020 | 2019 | 2018 | 2017 |
|----------------------|--------|-------|-------|-------|-------|--------------------|
| Customer compliments | Number | 6,170 | 5,814 | 5,924 | 5,912 | 5,637 [#] |
| Customer complaints | Number | 5 | 13 | 7 | 12 | 8 [#] |

[#] The data have been adjusted to include written records only

COMMUNITY INVOLVEMENT

| | Unit | 2021 | 2020 | 2019 | 2018 | 2017 |
|---|--------------|---------|---------|---------|---------|---------|
| Charitable donations made by the Group | HK\$ million | 3.0 | 7.9 | 7.2 | 4.8 | 5.1 |
| Employees participating in voluntary services | Number | 768 | 785 | 799 | 909 | 852 |
| Voluntary service hours (including employees and customers) | Hours | 14,122 | 16,633 | 87,557 | 91,628 | 86,455 |
| Beneficiaries | Number | 229,828 | 347,526 | 593,131 | 709,766 | 655,876 |

- All water is freshwater purchased and distributed by the HKSAR Water Supplies Department. All wastewater handling procedures comply with the local regulations.
- "Non-hazardous waste landfilled" refers to the refuse, wood pallets and construction waste collected from Towngas Headquarters and the Tai Po Plant.
- "Non-hazardous waste recycled" refers to the plastics, papers, paper cartons and metals collected and delivered to recycling contractors. Apart from these waste categories, we also recycle other non-hazardous waste, such as used red packets and cartridges, on a regular basis.
- All chemical waste handling procedures comply with the Waste Disposal Ordinance (Cap. 354). We also collect other hazardous waste, such as rechargeable batteries, fluorescent tubes and obsolete electronic products, and deliver them to licensed recyclers on a regular basis.
- Written records are included.

Outside Hong Kong

SAFETY PERFORMANCE¹

| | Unit | 2021 | 2020 | 2019 | 2018 | 2017 |
|---------------------------------|--------------------|-----------|-----------|---------|---------|---------|
| EMPLOYEES | | | | | | |
| Safety training | Hour | 1,230,136 | 1,158,454 | 864,759 | 836,813 | 979,628 |
| Fatal accidents | Number | 0 | 0 | 0 | 0 | 2 |
| Industrial injury man-days lost | Number of man-days | 1,072 | 955 | 1,265 | 1,667 | 2,153 |

ENVIRONMENTAL PERFORMANCE²

| | Unit | 2021 | 2020 | 2019 | 2018 | 2017 |
|---|--------------------------|------------|------------|------------|-----------|-----------|
| ENERGY AND WATER CONSUMPTION³ | | | | | | |
| Diesel | GJ | 107,864 | 85,499 | 101,709 | 79,479 | 71,848 |
| Natural gas | GJ | 903,818 | 473,302 | 396,348 | 320,536 | 324,522 |
| Unleaded petrol | GJ | 110,901 | 101,924 | 105,700 | 103,980 | 74,936 |
| Electricity | GJ | 2,876,782 | 2,726,131 | 2,696,294 | 2,155,279 | 1,600,126 |
| Others | GJ | 11,027,861 | 10,464,435 | 10,590,575 | 9,591,164 | 9,104,091 |
| Water | m ³ | 5,092,412 | 5,234,424 | 4,827,702 | 4,204,432 | 4,078,327 |
| EMISSIONS | | | | | | |
| Total Greenhouse gases (GHG) ⁴ | Tonnes CO ₂ e | 1,503,000 | 1,406,000 | 1,439,000 | 1,262,000 | 1,245,000 |
| Scope 1 emissions ⁵ | Tonnes CO ₂ e | 893,000 | 818,000 | 843,000 | 807,000 | 822,000 |
| Scope 2 emissions ⁶ | Tonnes CO ₂ e | 610,000 | 588,000 | 596,000 | 455,000 | 423,000 |
| Nitrogen oxides (NO _x) ⁷ | Tonnes | 190.0 | 223.7 | 296.1 | 223.7 | 123.7 |
| Sulphur dioxides (SO ₂) ⁷ | Tonnes | 256.6 | 258.0 | 422.0 | 392.9 | 89.2 |
| Respirable suspended particulates (PM10) ⁸ | Tonnes | 2.61 | 2.34 | 2.99 | 2.35 | 0.31 |

- Employees only. The scope includes mainland utility businesses, new energy and diversified businesses that are majority owned by Towngas.
- The scope includes mainland utility businesses, new energy and diversified businesses that are majority owned by Towngas.
- The following conversion factors are used to standardise the units to gigajoules (GJ): electricity (0.0036GJ/kWh), petrol (0.033GJ/L), diesel (0.036GJ/L) and natural gas (0.046GJ/m³).
- The reported GHG emission data cover the operations within (around 30%) and outside Hong Kong (around 70%). Data are consolidated on an equity basis. GHG emissions inventory covers seven types of GHGs specified in the Kyoto Protocol. The global warming potential rates were from the IPCC Fifth Assessment Report (2014). Regional grid emission factors were used for GHG emissions due to electricity consumption, while other emission factors were obtained from local governments and authorities, or other recognised sources.
- Scope 1 emissions – Direct emissions including fuel consumption of production plants, vehicle fleets etc. Scope 1 GHG emissions were adjusted to reflect the biogenic nature of landfill gas and its associated carbon emissions during use.
- Scope 2 emissions – Electricity consumption of production plants, offices, customer centres, gas refilling stations, data centres, etc.
- From fuel combustion and vehicle emissions.
- From vehicle emissions.

| | Unit | 2021 | 2020 | 2019 | 2018 | 2017 |
|---------------------------------------|----------------|-----------|-----------|-----------|-----------|-----------|
| EFFLUENT AND WASTE¹ | | | | | | |
| Hazardous waste (Solid) | Tonnes | 1,940 | 1,006 | 1,099 | 1,125 | 1,026 |
| Hazardous waste (Liquid) | Litres | 557,793 | 86,645 | 46,192 | 39,131 | 42,857 |
| Non-hazardous waste (Solid) | Tonnes | 321,468 | 252,542 | 239,050 | 215,425 | 202,047 |
| Non-hazardous waste (Liquid) | Litres | 41,337 | 45,683 | 50,427 | 54,912 | 69,999 |
| Wastewater discharged to sewage | m ³ | 1,241,922 | 1,204,411 | 1,355,985 | 1,090,574 | 1,847,850 |

EMPLOYEES²

| | Unit | 2021 | 2020 | 2019 | 2018 | 2017 |
|-----------------------------|--------|--------|--------|--------|--------|--------|
| TOTAL HEADCOUNTS | | | | | | |
| Employees | Number | 52,647 | 51,074 | 50,352 | 49,489 | 46,772 |
| BY EMPLOYMENT TYPES | | | | | | |
| Full-time | Number | 52,637 | 51,067 | 50,342 | 49,478 | 46,758 |
| Part-time | Number | 10 | 7 | 10 | 11 | 14 |
| BY GENDER | | | | | | |
| Male | Number | 35,975 | 34,876 | 34,069 | 33,331 | 31,386 |
| Female | Number | 16,662 | 16,191 | 16,273 | 16,147 | 15,372 |
| BY AGE GROUP | | | | | | |
| ≤25 | Number | 3,745 | 3,809 | 3,989 | 4,065 | 4,114 |
| 26-35 | Number | 18,101 | 18,181 | 16,574 | 16,733 | 16,527 |
| 36-45 | Number | 15,157 | 14,858 | 15,151 | 15,024 | 14,249 |
| 46-55 | Number | 12,907 | 11,876 | 12,225 | 11,572 | 10,124 |
| ≥56 | Number | 2,727 | 2,343 | 2,403 | 2,084 | 1,744 |
| BY EMPLOYEE CATEGORY | | | | | | |
| Senior management | Number | 1,149 | 1,082 | 1,003 | 1,002 | 971 |
| Middle management | Number | 5,380 | 5,013 | 5,750 | 5,074 | 4,506 |
| General staff | Number | 46,108 | 44,972 | 43,589 | 43,402 | 41,281 |

1. All hazardous waste and wastewater handling procedures comply with the national regulations.

2. Includes all people employed by the Group, its subsidiaries, associates and joint ventures outside Hong Kong.

| | Unit | 2021 | 2020 | 2019 | 2018 | 2017 |
|------------------------|--------|-------|-------|-------|-------|-------|
| TURNOVER RATE | | | | | | |
| Average turnover | % | 2.6 | 2.0 | 2.8 | 4.1 | 4.1 |
| BY GENDER | | | | | | |
| Male | % | 2.8 | 2.1 | 2.9 | 4.8 | 4.7 |
| Female | % | 2.1 | 1.7 | 2.6 | 2.5 | 2.8 |
| BY AGE GROUP | | | | | | |
| ≤25 | % | 5.4 | 4.5 | 6.2 | 7.7 | 4.6 |
| 26-35 | % | 4.0 | 2.9 | 4.0 | 7.2 | 6.4 |
| 36-45 | % | 1.9 | 1.5 | 2.1 | 2.0 | 2.5 |
| 46-55 | % | 0.5 | 0.7 | 1.3 | 0.8 | 2.3 |
| ≥56 | % | 0.8 | 0.8 | 1.3 | 2.6 | 3.5 |
| NEW RECRUITMENT | | | | | | |
| Total | Number | 2,193 | 1,493 | 2,736 | 3,558 | 1,196 |
| BY GENDER | | | | | | |
| Male | Number | 1,535 | 1,123 | 1,864 | 2,418 | 910 |
| Female | Number | 658 | 370 | 872 | 1,140 | 286 |
| BY AGE GROUP | | | | | | |
| ≤25 | Number | 667 | 392 | 766 | 1,186 | 216 |
| 26-35 | Number | 1,023 | 735 | 1,201 | 1,743 | 513 |
| 36-45 | Number | 361 | 281 | 590 | 487 | 285 |
| 46-55 | Number | 131 | 73 | 152 | 121 | 155 |
| ≥56 | Number | 11 | 12 | 27 | 21 | 27 |

SOCIAL PERFORMANCE

COMMUNITY INVOLVEMENT

| | Unit | 2021 | 2020 | 2019 | 2018 | 2017 |
|---|--------|---------|---------|---------|---------|---------|
| Employees participating in voluntary services (Mainland utility business) | Number | 12,923 | 11,176 | 11,487 | 11,154 | 8,013 |
| Voluntary service hours (Mainland utility business) | Hours | 578,586 | 714,300 | 264,440 | 238,000 | 135,154 |

13 VERIFICATION STATEMENT



VERIFICATION STATEMENT

Scope of Verification

Hong Kong Quality Assurance Agency (“HKQAA”) has been commissioned by The Hong Kong and China Gas Company Limited (“Towngas”) to undertake an independent verification for its Environmental, Social and Governance (“ESG”) Report 2021 (“the Report”). The scope of HKQAA’s verification covers the information on ESG performance of Towngas businesses both in Hong Kong and outside Hong Kong for the period from 1st January 2021 to 31st December 2021.

The aim of this verification is to provide a reasonable assurance on the reliability of the report contents. The Report has been prepared in accordance with the Global Reporting Initiative (“GRI”) Standards: Core option and with reference to the GRI G11 Oil and Gas Sector Disclosures. It also fulfils the mandatory disclosure requirements and “comply or explain” provisions of the Environmental, Social and Governance Reporting Guide (“ESG Guide”), under Appendix 27 to the Rules Governing the Listing of Securities on The Stock Exchange of Hong Kong Limited.

Level of Assurance and Methodology

The process applied in this verification was referring to the International Standard on Assurance Engagements 3000 (Revised), Assurance Engagements Other Than Audits or Reviews of Historical Financial Information issued by the International Auditing and Assurance Standards Board. Our evidence gathering process was designed to obtain a reasonable level of assurance for devising the verification conclusion.

In order to understand the process that Towngas adopted to ascertain the key ESG issues and impacts, the Report compilation process was discussed including stakeholder engagement and materiality assessment processes. Also, system and process for collecting, collating and reporting ESG performance data were verified. Our verification procedure covered reviewing relevant documentation, interviewing responsible personnel with accountability for preparing the Report and verifying the selected samples of data and information used for preparing the Report. Raw data and supporting evidence of the selected samples were also thoroughly examined during the verification process.

Independence

Towngas is responsible for the information collection and presentation of the Report. HKQAA’s verification activities are independent and there is no relationship between HKQAA and Towngas that would affect the impartiality of the verification service.

Conclusion

Based on the verification results, it is the opinion of the verification team that:

- The Report has been prepared in accordance with the GRI Standards: Core option and with reference to the GRI G11 Oil and Gas Sector Disclosures;
- The Report complies with all mandatory disclosure requirements and “comply or explain” provisions outlined in the ESG Guide;
- The Report illustrates Towngas ESG performance, covering all material and relevant aspects in a balanced, comparable, clear and timely manner; and
- The data and information disclosed in the Report are reliable and complete.

Towngas is endeavor to uphold the report quality in disclosing its commitments, strategies and performance in ESG matters. The Report fulfills the ESG reporting principles, it is informative and gives a true and fair view of the overall ESG performance of Towngas.

Signed on behalf of Hong Kong Quality Assurance Agency

Connie Sham
Head of Audit
March 2022

The Hong Kong and China Gas Company Limited
香港中華煤氣有限公司

YOUR FEEDBACK

If you have any questions or feedback, we would very much like to hear from you. Please fill in the [online questionnaire](#) or contact us:

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