



(Stock code: 3)





IN ACHIEVING SUSTAINABILITY, WE...

- Maintain the highest standards of corporate governance
- Consider risk governance as the top priority and establish a robust risk management system
- Follow strict internal Codes of Conduct on best practices and ethical behavior
- Ensure open, accountable and transparent communications
- Guarantee efficient, effective and reliable business practices and operational controls
- Act in the best interests of our stakeholders
- Fulfill our corporate social responsibilities to our stakeholders, the environment and our community
- () Take the lead in our industry on all of these imperatives
- Recognise the importance of our employees and our responsibility to keep them safe, engaged and equipped to undertake our mission



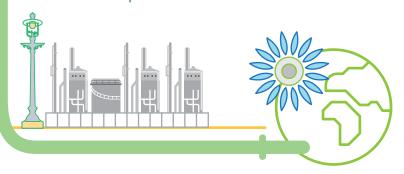




1 ABOUT THIS REPORT

As an organisation that is responsive to global challenges and the concerns of stakeholders, The Hong Kong and China Gas Company Limited (Towngas) has been reporting on its sustainability performance for more than a decade.

For 2018, we describe the progress we have made towards achieving our sustainability targets, while acknowledging areas where further improvements can be made.



Scope of the Report

This report examines the material topics that arose at Towngas and its subsidiaries (the Group), during the period from 1 January 2018 to 31 December 2018, unless otherwise stated.

Reporting Guidelines

This report has been prepared in accordance with the Global Reporting Initiative (GRI) Standards: Core option and with reference to the GRI G4 Oil and Gas Sector Disclosures. It also fulfils the "comply or explain" provisions as well as "recommended disclosures" 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.

Independent Verification

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

Major Corporate Awards and Recognitions in 2018

Governance +

Hong Kong Business Sustainability Index

by The Chinese University of Hong Kong

Towngas was ranked first on the fourth Hong Kong Business Sustainability Index



Constituent Companies of the Hang Seng Corporate Sustainability Index Series (Towngas and Towngas China)

by Hang Seng Indexes Company Limited

Safety +

The 17th Hong Kong Occupational Safety

and Health Award

- Safety Promotion Award (Gold)
- Safety Culture Award (Gold)
- OSH Annual Report Award (Gold)
- Safety Performance Award

by Occupational Safety and Health Council

Business and Service

2018 Hong Kong Awards for Industries:
"Innovation and Creativity Award

by The Hong Kong General Chamber of Commerce



Environmental -

Pacific Rim Regional Energy Project of the Year Award

by Association of Energy Engineers

The award by Association of Energy Engineers recognises Towngas for its project, the first Combined Heat and Power Generating System in hospital of Hong Kong



Social +

Industry Cares 2018 CSR Recognition Scheme

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

by The Federation of Hong Kong Industries



The 6th Asia Pacific Eldercare Innovation Awards

• Best Dementia Care Programme

by Ageing Asia

Towngas won an award in the Best Dementia Care Programme category for its Chef Anchor programme



The 9th Hong Kong Outstanding
Corporate Citizenship Awards

- Gold Award Enterprise Category
- Gold Award Volunteer Team Category

by The Hong Kong Productivity Council



Founded in 1862, Towngas was Hong Kong's first public utility. Today, we are one of the largest energy suppliers in Hong Kong, operating with world-class corporate management and leading-edge business practices. Over the years, Towngas has transformed from a small gas company supplying fuel for street lamps in Hong Kong into a leading conglomerate in Hong Kong and mainland China's energy industry.



Town gas sales:

29,550 million MJ

Customer accounts served:

>1.9 million



Sales of gas appliances:

>283,000 units (Hong Kong)

>771,000 units (Mainland China)



Natural gas sales:

23 billion m³

Number of city-gas customer accounts:

>27.5 million

Utilities



Hong Kong

- Town gas
- Sales of branded gas appliances



Mainland China

- City gas
- Midstream facilities
- Water supply and wastewater
- Sales of gas appliances, kitchen furnishings and insurance



Water sales: 610 million tonnes

Number of water customer accounts: >2.2 million



Aviation fuel:

6.76 million tonnes



Vehicle fuel:

5 LPG refilling stations (Hong Kong)

52 LNG/CNG refilling stations in operation and under construction (Mainland China)

New Energy and Diversified Businesses





- Telecommunication
- Information technology
- Civil and building services engineering
- Manufacturing gas-related products



Coalbed methane



Liquefied coalbed methane:

133,822 tonnes



Waste nil



Hydrotreated vegetable oil:

7,000 tonnes





Methanol:

>295.285 tonnes



Data centres: 7 in Hong Kong and mainland China, accommodating up to 16,000 server racks





Our approach to managing sustainability is built upon a strong foundation of corporate governance. A Sustainability Committee (the Committee) headed by the Managing Director appointed by the Towngas Board of Directors (the Board), has been set up to oversee the Company's strategies, policies and practices on sustainability matters.

The Committee is responsible for:

- Identifying and reviewing sustainability issues, risks and opportunities;
- Tracking sustainability performance and recommending strategies to improve it;
- Reviewing and evaluating the annual Sustainability Report
- Recommending to the Board/Executive Committee for its endorsement; and
- Providing updates to the Board/Executive Committee on the latest relevant sustainability matters

Towngas Sustainable Development Goals (SDGs)

In 2018, the Committee prioritised four SDGs most relevant to Towngas as the foundation of its long-term business strategy.

We will continue to supply clean energy and water to our customers, develop new environmentally friendly energy solutions, provide access to basic services, and support the building of communities.

Four SDGs













STAKEHOLDER ENGAGEMENT



How does Towngas engage in meaningful conversations with stakeholders on sustainability?

We listen to our stakeholders by engaging them in a variety of formal and informal dialogues. Through this ongoing process, we are able to identify the issues that matter most to them and improve our performance accordingly.

Peter Wong Wai-yee **E**xecutive Director and Chief Operating Officer – Utilities Business

Stakeholder engagement is important for us to understand the environmental and social impacts of our businesses and the ways that stakeholders expect us to address the issues they have identified as being of greatest concern to them.

To ensure our sustainability report addresses topics that reflect Towngas' significant economic, environmental and social impacts, we conduct a materiality assessment every year. A total of 19 issues were prioritised as material for Towngas to address and report on.

- Energy use and efficiency
- Emissions of greenhouse gases and other significant
- Discharge, handling and disposal of effluent and waste
- Employment management system
- Employer-employee relations
- A safe and healthy working environment
- Training and development
- Employee diversity and equal opportunities
- Elimination of discrimination
- Prevention of child labour or forced labour



- Customer health and safety
- Emergency preparedness
- Asset integrity and process safety
- Protection of customer privacy
- Quality management and after-sales service
- Fair and responsible marketing communication and
- Protection of intellectual property rights
- Prevention of bribery, extortion, fraud and money
- Prevention of anti-competitive practices



5 ENSURING HEALTH AND SAFETY

Key Achievements in 2018

Achieve Zero Accidents

- Upgraded our occupational safety and health (OSH) management system from OHSAS 18001 to ISO 45001
- Conducted 159 safety/loss prevention inspections in Hong Kong
 Accident frequency rate (Hong Kong)



- 0.15 accidents per 100,000 man-hours among employees
- 0.22 accidents per 100,000 man-hours among contractors

Promote Health and Safety Awareness

- Organised a series of activities:
 - (i) Occupational health promotions, such as seasonal influenza vaccination and work stress management programmes
 - (ii) Health, safety and environment (HSE) walk with over 150 joint venture companies
 - (iii) HSE Month and HSE Quiz
- Organised the Safe Foreman Award and Contractor OSH Forum to promote OSH culture
- Arranged one safety and risk management experience sharing visit and one practical firefighting and risk management training course for 24 and 19 mainland employees, respectively

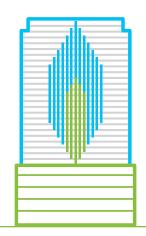


 21 community safety exhibitions and talks (Hong Kong)



- 836,813 safety training hours (Mainland China)
- 12,473 safety training hours (Hong Kong)





Provide Customers with a Safe and Reliable Supply of Energy

• Updated the Corporate Emergency Plan to the Corporate Crisis Management Plan to extend the coverage to non-operational crisis

Hong Kong



• 99.99% supply reliability rate



- 9,825 trench inspections
- 160,080 network inspections



• 1,179,089 regular safety inspections

Mainland China



• 51 city-gas business joint ventures completed safety audits and scored "Excellent" on average



- 8 safety audits of ECO Environmental Investments Limited (ECO) mainland gas refilling stations
- 2 process safety management audits of ECO mainland chemical plants



Ensuring

Safety

Health and





We understand that our reputation as a reliable, trustworthy provider of gas services and related products is only as good as our safety record.

At Towngas, we have succeeded in gaining the trust of our customers and the community by adhering to well-established design, engineering and operating principles. By combining these principles with a rigorous maintenance regime, we are able to ensure our processes and assets are safe, reliable and in good working order.

We have also developed and implemented a comprehensive, proactive safety management system throughout our operations to avoid incidents and improve efficiency. What's more, we stay abreast of changes in technology and employ innovative tools, such as autopilot drones to inspect gas pipes in remote areas, to help improve our processes and ensure safer working conditions.

Further to this, we connect with stakeholders, including our employees, contractors, customers and the public, to enhance their safety awareness and build trust.

Worker Safety and Health

We make every effort to provide a safe and healthy environment for our staff and contractors, including programmes that minimise the risk of physical and mental harm in the workplace. Promoting a culture of safety is important for embedding safe working practices at Towngas. We encourage a safety-focused culture in which everyone, including our employees and contractors, takes responsibility for their own safety as well as the safety of their co-workers.

We also recognise that the wellbeing of our employees depends not only on their physical but also their mental health. To that end, we hold workshops on work-life balance, organise extra-curricular activities for employees, and welcome their families to join a variety of corporate events and community service activities.















Public Safety

As a public utility company in Hong Kong and a leading energy supplier in mainland China, we must earn and keep the trust of millions of people in the markets we serve.

Delivering Gas Safely to Customers +

ISO 55001 standard across our gas production plants and our transmission and distribution network



- Process Safety Management System
- Six-stage Process Hazard Analysis
- Capacity Enhancement Project





- 99.99% Gas Supply Reliability
- **0.145** Gas incidents reported by the public per 10 km of gas pipes
- Emergency team average arrival time within
 25 minutes achieved
- 6,851 km of pipeline surveyed
- 160,080 trench inspections across 9,825 sites





• >5,000 real-time telemetry and data points





- 1,179,089 Regular Safety Inspections
- All gas appliances tested in an accredited laboratory



Planning for Emergencies +

Senior management commands the deployment of company resources, seeks assistance from government authorities and handles the media

Corporate Crisis Plan

Departmental Emergency/ Crisis Plan

Plant managers and key emergency personnel outline general actions to take during emergency situations Tier 3

Frontline actions tackle specific incidents

Specific Emergency Procedures



6 PROTECTING THE ENVIRONMENT

Key Achievements in 2018

Enhance Waste Management Practices

- Reviewed waste management practices and implemented improvement initiatives; published the In-house Green Event Practical Guide and recycled used lead acid batteries
- 1,800 tonnes of metal were recovered under the Used Gas Appliance Recycling Programme



 Achieved Wastewi\$e certificate for the 17th consecutive year

Improve Resources Utilisation

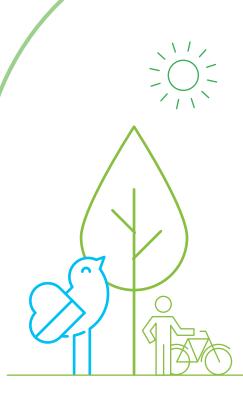


 Implemented a cloud-based Energy Management System



- Electrical power consumption at Towngas Headquarters
 - **√ 3%** compared with 2017





Adapt and Become Resilient to the Impacts of Climate Change

- Extended our climate change risk assessment to Jiangsu province
- Updated and monitored the progress of climate change adaptation measures across different premises

Climate Change Mitigation



- Group GHG emissions were
 - **1,262,000** tonnes of carbon dioxide equivalent (tCO_2e)
- Hong Kong gas production carbon intensity was 0.564 kgCO₂e/unit of town gas

 ↓26% as compared with 2005



- Over 20 distributed energy system projects
- First two batches amounting to **7,000** tonnes of hydrotreated vegetable oil sold to Europe
- Performed in-depth studies of selected Hong Kong and mainland China projects for the Chinese certified emission reduction credit scheme (CCER)





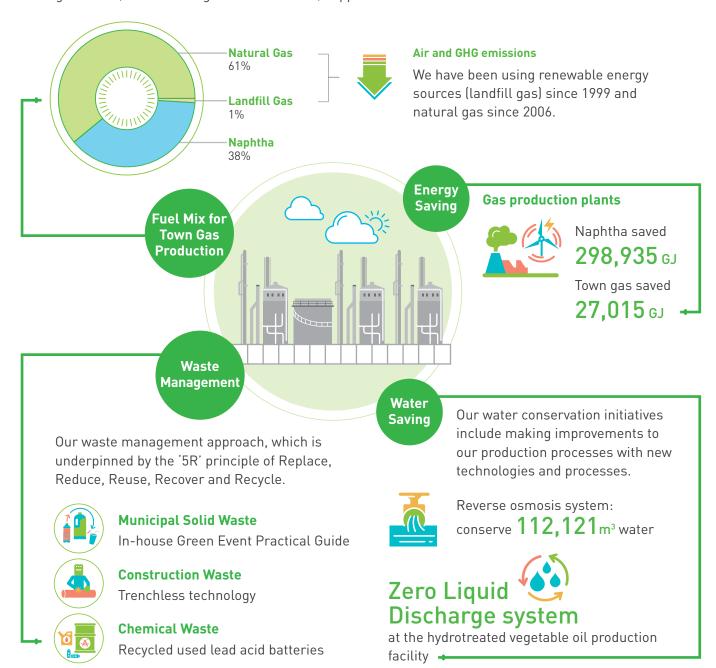
Environmental Governance

Our Corporate Health, Safety and Environment (HSE) Policy sets out the principles of our approach for responsibly managing the environmental impacts arising from our operations.

Our environmental performance and initiatives are coordinated, monitored and controlled by the Sustainability Committee with the support of the Environmental Working Committee and Corporate Health, Safety, Environment, Security and Safety Risk Department. We also have 12 Environmental Sub-committees and Green Ambassadors who help to implement various environmental projects and spread environmental messages to stakeholders.

Managing Our Resources

At Towngas, we are keenly aware of the need to conserve natural resources in our production plants, distribution network and office operations. We also seek to raise awareness of our environmental impacts among our staff, and encourage our contractors, suppliers and customers to do the same.



Responding to Climate Change

We recognise the seriousness of global warming not only for its impact on our businesses but on the environment. Our response has been two-fold:

Managing Risks

- **Legal Risks:** Performed in-depth studies of selected projects for the CCER scheme
- Market Risks: Commissioned Towngas China's Jintan Salt-cavern Gas Storage facilities to provide an even more secure supply of gas
- Operational Risks: Climate change risk assessment extended to Jiangsu province

Creating Opportunities

- Natural gas as the low carbon alternative
- From diesel and coal to clean gas
- Clean vehicular fuel supply
- New energy and unconventional energy

Mitigation—to reduce or prevent emissions of GHG





Adaptation—to upgrade our infrastructure and strengthen our crisis management to become more resilient against the impact of climate change





In 2018, our avoided carbon emissions from our landfill gas utilisation projects were more than our carbon emissions from our gas supply related operations in Hong Kong.



CO₂ emissions Per Unit of Town Gas in Hong Kong







↓ 26%

How We Responded: Typhoon Mangkhut

In September 2018, Hong Kong was hit by one of the most intense storms on record—Typhoon Mangkhut. In advance of its arrival, we took a variety of precautionary measures to reduce the impacts of the storm and ensure a safe and reliable supply of gas to the public. These included installing floodgates and auto-start submersion pumps in the switch rooms at our Tai Po Production Plant to prevent flooding, and fastening gas governors to prevent structural damage to doors and louvers.

Although Towngas suffered minor damage to several facilities, no gas leakages or personal injuries were reported. Equally important, the experience we gained dealing with Typhoon Mangkhut has taught us how to be resilient and prepare for extreme weather conditions in the future.



7 CREATING VALUE FOR THE SOCIETY

Key Achievements in 2018

Foster Employee Development



• 28.6 average training hours for employees in Hong Kong



• Over **60,000** training hours in Towngas' MasterCraft culture among our employees and related contractors



Organised 23 Continuing Professional Development (CPD) seminars,
 with 2,339 training hours

- Launched a Professional Diploma in Gas Engineering with The Vocational Training Council in July 2018, the first programme of its kind in Hong Kong
- Organised leadership development programmes for managers/potential managers at different levels

Offer Decent Work Opportunities

• Number of employees:

2,418 (Hong Kong)

49,478 (outside Hong Kong)

• Average turnover rate:



8.7% (Hong Kong)

4.1% (outside Hong Kong)

- Provided a recognised Apprentice Programme and Graduate Trainee Programme; recruited 45 trainees and apprentices in Hong Kong
- Adjusted allowances and benefits for our staff, including work allowances and leave
- Engaged staff by reinforcing our inclusive, family-friendly culture and held the Fun Living Series for the sixth consecutive year

Create an Inclusive and Supportive Work Environment



Employed 14 people with disabilities



Refine the Customer Experience

• Introduced new technology for enhanced customer service and convenience:



Smart metering



Virtual assistant



 Augmented reality (AR) application for cooking appliances



• Faster Payment System

- Launched new products such as a Regenerative Electric Energy Module (REEM) hotplate, low noise commercial and industrial wok range and Heat Recovery Dishwasher; organised a second collaboration with the HELLO KITTY brand
- 5,912 customer compliments were received in Hong Kong

Engage the Local Community to Enhance Quality of Life, Create a Sustainable Environment and Support Future Generations



- Donated HK\$4.8 million for community activities
- Volunteer service hours:



91,628 (Hong Kong)

238,000 (Mainland utility business)

- 709,766 people benefited from our volunteer services in Hong Kong
- New community programmes:



• Green Flame



- Pilot Scheme on Corporate Summer Internship on the Mainland and Overseas
- Established the Towngas Chef Anchor Volunteer Team, a first-ofits-kind programme, serving elderly people with Mild Cognitive Impairment (MCI)







At Towngas, we are committed to creating value not only for our investors but for all of our stakeholders and the communities in which we live and work.

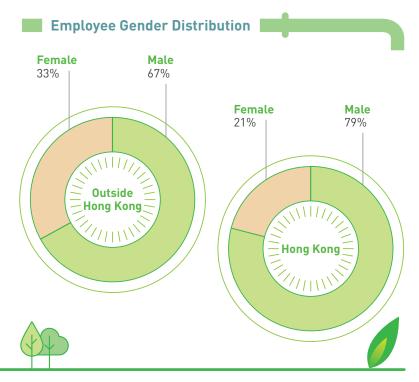
We create value for employees by providing an inclusive and engaging work environment that allows them to reach their full potential. As stated in our human resources policy, we go beyond compliance with local laws and regulations to ensure equal opportunities, diversity in the workplace, anti-discrimination and the fair treatment of all staff through transparency.

To create greater value for our customers, we have established a Superior Quality Service (SQS) programme, which together with our Service Pledge helps us to provide first-class customer service. Ongoing innovations such as our online customer service channels have also become an integral part of our customer-centric culture.

In the community, we help to create value by participating in fundraising events and supporting sponsorship programmes in collaboration with non-governmental organisations (NGOs). Our staff members take part in these initiatives by joining the volunteer team that enable us to forge stronger links with the communities we serve.

Creating an Inclusive and Engaging Workplace

In recognition of the importance of diversity and inclusion, we ensure new staff are integrated into our workforce and made to feel welcome as valued members of the Towngas team. Although we make a strong effort to hire both men and women for various positions, the nature of our business means that the balance of our workforce has traditionally tilted towards male employees. We are attempting to redress this situation by taking steps to attract women to our industry and developing and retaining them within our ranks.



How We Responded: Breaking Gender Stereotypes

The role of a Towngas technician has traditionally been regarded as a male-only occupation because of the heavy physical demands of the job.

As Towngas encourages diversity, we were delighted to welcome the first female mechanical technician apprentice, Cheng Kit-yee, at our Tai Po Production Plant in 2017. Although she often received offers of help from her male colleagues, she had already proven that women have the ability to handle physical work. After passing her first year apprenticeship in 2018, Kit-yee is looking forward to a rewarding career as a technician at Towngas after graduation.

To keep up the momentum, in 2018 we successfully recruited another female mechanical craft apprentice for our Tai Po Production Plant and plan to continue hiring more women for our workforce.

In order to create a sustainable workforce, we listen closely to the concerns of our employees, as part of our commitment to creating a harmonious work environment.

Received over 200 submissions through various channels on how to enhance work processes and customer service





Strategy Ambassador Club with more than 70 staff representatives meet regularly to keep our workforce up to date on business developments and new opportunities for the Company.

Succession Planning Along our Supply Chain

To meet the challenges of an ageing society and our business expansion, we understand that the best approach for resolving these issues is to establish our own talent pool.

Towngas has its own professional training funtions: the Towngas Engineering Academy in Hong Kong and training centres set up in strategic regions of mainland China.

Training sessions cover technical/engineering subjects as well as non-technical ones such as corporate culture, leadership development and interpersonal skills.



We also cooperate with various educational institutions to offer training programmes that help advance the gas industry while also creating a pipeline of future workers for the Company.

Professional Diploma in Gas Engineering -

Hong Kong's first Professional Diploma in Gas Engineering course, launched in 2018. This professional diploma course, which has been accredited as a Qualifications Framework Level 4 programme, will give students the expertise they need to pursue a career in the field, benefiting not only Towngas but the gas industry as a whole.



煤氣



How We Responded: Technology for an Ageing Workforce

The ageing of the labour force, along with the demand for more efficient construction methods, has spurred the development of new high-tech tools that are changing the face of construction.

Our worksites have benefited from the introduction of robotic devices such as the Little Swan mini excavator, pneumatic suction machine and mechanical arm, to reduce the amount of physical labour required, while lowering our reliance on manual labour.

We have also developed a mobility application, which allows our technicians and contractors to carry out services systematically and helps the new generation of workers become familiar with established procedures.





Delivering Value to Customers

Protecting Customer Data Privacy +

Customers of Towngas can be assured that we are protecting their data privacy in our communications with them. We not only comply with all regulatory requirements, including the Personal Data (Privacy) Ordinance, but have also established a Privacy Policy Statement that sets out our standards for handling customer information.

Data Privacy Standing Committee

· Well-established guidelines and procedures to guide our employees and contractors on how to collect, access and use customers' data.



- Isolate sensitive information from the internet
- Third party consultant to monitor cyber incidents around the clock
- Cyber security incident response process

Cyber Security Committee

Serving Our Customers +

In 2018, we managed more than 29 million gas customer accounts across Hong Kong and in mainland China, including industrial and commercial customers, and residential households. Over the years, Towngas has transitioned from a supplier of gas into a one-stop solution for our customers through the introduction of gas-powered domestic appliances and premium Mia Cucina designer kitchen cabinets.

Our philosophy, Growth = Innovation x Implementation, encourages innovation and creativity at Towngas by focusing on research and development and inviting employees to propose new ideas.



Towngas innovatively developed to online virtual assistant - Tinny - a new chatbot that helps customers access services such as eBilling, meter reading reports, appliance maintenance and more. Introduced in 2018, Tinny provides instant responses on gueries regarding Towngas residential services.







Introduced an augmented reality application to assist Hong Kong customers shopping for our flame cooking appliances. The application gives customers a preview of how these appliances might look in their own kitchens with a 3D model that can be rotated to show different product sizes, product features and operating instructions.

Contributing to the Community

We support and develop programmes in response to community needs, with a focus on enhancing quality of life, creating a sustainable environment and helping future generations to succeed.



Youth Development

Community Health & Wellness

Empowering People with Disabilities

We donated HK\$200,000 to LOHAS Florist, a business established by the SAHK to provide job opportunities for people with disabilities.

Meeting the Needs of an Ageing Society

We joined Hong Kong Sheng Kung Hui Welfare Council Limited and the Institution of Dining Art to run the second year of the We Can Cook programme for people who have retired at a young age—the 'young olds'. Since 2016, a total of 24 cooking classes featuring international cuisine have been conducted with over 500 young olds.

Helping People with MCI

The Chef Anchor Programme provides cognitive training through cooking for elderly people with MCI. In 2018, we added a new feature to the programme — Hong Kong's first cognitive training cookbook, *I Can Cook*, and set up our first corporate volunteer team with the aim of alleviating MCI symptoms and the pressure on their families and caregivers.

Care for the Elderly and People in Need

Programme highlights (Hong Kong):



50,150 servings of soup distributed

400,000 rice dumplings ingredients given out

245,000 mooncakes delivered







Around **HK\$420,000** raised for the Mad Dog Café charity programme

273 electrical washlets installed

178 thermo ventilators donated



Over 45,000 households from Towngas Concession Schemes benefited from concessions totalling HK\$25.7 million

The Environment

Environmental Education for the Next Generation

We organised activities such as Low Carbon Cooking So Easy 2018 to promote a healthy, low-carbon lifestyle to students and their families, and the Towngas Governors Beautification Project for students to beautify the community with innovation and green messages.

We also launched Green Flames Projects — Inter-School VR Games Design Competition with Hong Kong Education City Limited to raise eco awareness and inspire digital creativity among students. A total of 83 entries were submitted under three key themes — Battle Against Climate Change, Reduce Waste/ Convert Waste to Treasure, and Nature Conservation.





Protecting Biodiversity

Towngas sponsored The Green Earth's 5-year Plantation Enrichment Project and organised a tree planting day with about 100 employees and customers at Clear Water Bay.

In mainland China, we organised various low-carbon programmes for our Towngas China's environmental protection campaign. To date, Towngas and its project companies in mainland China have planted over 100,000 saplings across the country.

Youth Development

Developing Young Talent in Hong Kong

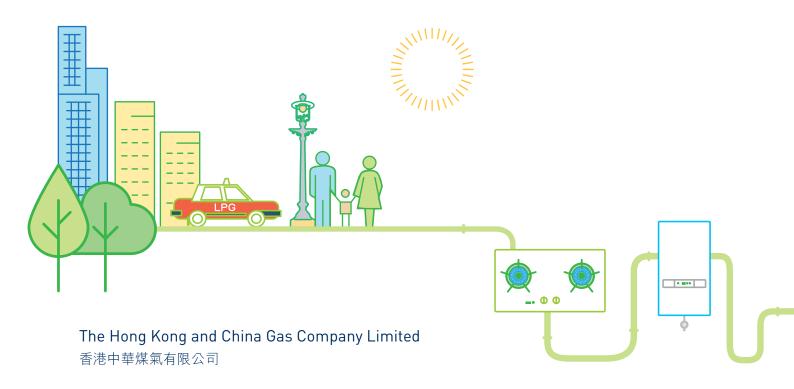
In support of the Government's Pilot Scheme on Corporate Summer Internship on the Mainland and Overseas, we offered a total of 17 internship opportunities for Hong Kong undergraduate students in mainland cities.

We also launched the Career in a Nutshell programme to give secondary school students a taste of working life, as well as moral, social, intellectual, physical and aesthetic education. A total of 38 students were selected from three schools during the 2018/19 academic year.

Improving Access to Education

Since the inception of our Gentle Breeze Movement in 2013, Towngas has donated materials worth over RMB3.5 million to improve the learning environment at nearly 40 schools in mainland China.







If you have any questions or feedback, we would very much like to hear from you. Please fill in the <u>online questionnaire</u> or contact us:

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