



**CORPORATE
SOCIAL
RESPONSIBILITY**

Caring

Our third landfill gas initiative, the South East New Territories (SENT) landfill gas treatment plant, was commissioned; it is expected to reduce annual carbon emissions by around 56,000 tonnes.

Towngas launched its first Green Bond to finance green projects, such as the SENT landfill gas project and waste conversion projects in mainland China.



Community



We launched the Chef Anchor cooking programme, Hong Kong's first procedural learning method through cooking, to help alleviate Mild Cognitive Impairment (MCI) symptoms.



Our Gas Craft Apprentice Training Scheme, the first gas training scheme in Hong Kong, celebrated its 50th anniversary.

CORPORATE SOCIAL RESPONSIBILITY

Our businesses touch the lives of millions of people in communities across Hong Kong and mainland China, as well as among our own staff. We acknowledge our obligations to these stakeholders with our commitment to safe, responsible and ethical behaviour at all times throughout our operations.

Care and Conservation

Our unwavering commitment to environmental protection is reflected in the way we conduct our businesses. As an energy supplier, we strive to minimise our carbon footprints while developing clean energy for homes, businesses and vehicles, with the ultimate goal of creating a more sustainable future.

One of the highlights in our quest to become a green industry leader was the introduction of our first 10-year Green Bond in November 2017 through a HK\$600 million and a JPY2 billion transaction. We are the first energy utility to issue green bonds in Hong Kong. Proceeds from the Towngas Green Bond will be used to finance waste-to-energy initiatives, such as our landfill gas project at the SENT landfill site and other eligible green investments.

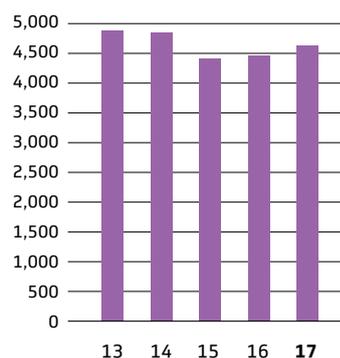
In line with mainland China's Thirteenth Five-Year Plan, we have been promoting coal-to-gas conversion to reduce coal

consumption. Our gas refilling stations and distributed energy projects also help meet the national goals of raising energy efficiency and reducing carbon emissions. To explore energy and resource alternatives, we have made a considerable effort in the research and development of new technology for converting waste into clean energy and useful chemical products.

In Hong Kong, we remained focused on developing renewable energy from waste. In November 2017, we made significant progress on our landfill gas initiative with the official commissioning of our

Revenue per Employee

Company (HK\$ thousand)



In the Plantation Enrichment Project, 100 employees and customers joined in to plant tree seedlings at the Tiu Yue Yung Country Trail in Clearwater Bay.





third landfill gas utilisation project. Together with our landfill gas utilisation projects in Shuen Wan and the North East New Territories, the output of all three projects is expected to account for around 5 per cent of our total fuel mix. It is also projected to reduce carbon emissions by 87,600 tonnes annually, equivalent to the carbon absorption of 3.8 million planted trees per year.

The feedstock we use in Hong Kong, which includes a mix of natural gas, naphtha and landfill gas, is clean and has thus enabled us to reduce the carbon emissions per unit of town gas produced by over 20 per cent compared with 2005. In fact, in 2017 our greenhouse gas emissions were already below

1 per cent of all emissions in Hong Kong. Our plan is to further reduce our carbon footprint, with a 30 per cent target reduction in the carbon intensity of our Hong Kong gas production by the year 2020, as compared with 2005.

To improve the effectiveness of our environmental initiatives, public education is essential. In 2017, we have carried out a range of activities to share our environmental experience with stakeholders. These included promoting the concept of waste-to-energy through exhibition panels and a Virtual Reality game we designed for students, and introducing waste reduction and our utilisation of landfill gas at our renovated education centre at the SENT landfill site.

To help our customers reduce their carbon footprints, we collaborated with The Hong Kong Polytechnic University in a research project to develop practical cooking tips on reducing gas consumption and associated carbon emissions, as well as selecting healthy cooking methods and ingredients. We then promoted these tips through social media platforms and promotional leaflets, as well as a drawing competition for students.

We also continued to support the environmental efforts of green groups in the community. One of the initiatives we carried out during the year was the five-year Plantation Enrichment Project, managed by The Green Earth,

The Chef Anchor cooking programme, the first of its kind in Hong Kong, was designed to help elderly people alleviate the symptoms of MCI through a procedural learning method.



to increase biodiversity and the ecological value of country parks. To increase public awareness of nature conservation, we hosted a tree planting day for around 100 Towngas employees and customers at our planting site at Tiu Yue Yung Country Trail in Clear Water Bay.

For employees, we organise an annual carbon reduction competition in Hong Kong and mainland China. Since 2010, a total of 209 project submissions have been received in this competition, leading to a total annual reduction in carbon emissions of about 299,200 tonnes in our own operations.

In recognition of our environmental efforts, we have received the BOCHK Corporate Environmental Leadership Awards – Gold Award (Manufacturing section) for two consecutive years, as well as the Belt and Road Environmental Leadership Recognition Award 2016.

Our Community Spirit

As a socially-responsible company, we firmly believe it is our obligation to give back to the communities in which we operate. Our Towngas Volunteer Service Team was established in 1999 to deliver a wide range of caring services. The staff members of this team have generously contributed their time and skills to help those in need. At the end of 2017, we had put in a total of 86,455 service hours on 282 community service projects in Hong Kong.

One of the major themes of our community service activities in Hong Kong is caring for the elderly. In 2017, we cooperated with Hong Kong Sheng Kung Hui Welfare Council to launch the Chef Anchor cooking programme. Designed by occupational therapists and Towngas Cooking Centre instructors, this programme offered cooking classes for elderly people suffering from MCI. Of the 90 participants in the first phase

of this programme, 90 per cent showed improvements in self-confidence, cooking skills and cognitive abilities. We will further expand the programme in local communities to include more beneficiaries in future.

To enable the elderly and patients suffering from dysphagia to enjoy mooncakes with their families, we joined St. James' Settlement to create Hong Kong's first Warming Mooncake series, developed by registered dietician and chef. The mooncakes were made in a way that allows patients to overcome difficulties in swallowing solid food, while retaining its original flavour. Warming Mooncakes were delivered to those in need and also made for charity sales. All proceeds went to St. James Settlement in support of their work and public education on dysphagia.

During the year, we received the Business for Social Good Award by Our Hong Kong Foundation in recognition of our landfill gas

utilisation project at Alice Ho Miu Ling Nethersole Hospital, which can create social and environmental benefits through profit-making businesses.

In mainland China, we continued to carry out a wide range of caring initiatives. These included the Gentle Breeze Movement programme for students from poverty-stricken families. In 2017, we rolled out the initiatives under the programme in Yangjiang, Guangdong province and Binzhou, Shandong province by donating teaching equipment and school supplies for more than 800 teachers and students. Since the launch of the Gentle Breeze Movement programme in 2013, we have donated RMB3.2 million to nearly 40 schools in provinces of Jiangxi, Anhui, Jiangsu, Shandong, Guizhou, Shaanxi, Liaoning, Sichuan, Guangdong and other provinces. The donations were used for refurbishing school buildings and constructing Towngas China

Charity Libraries, as well as for buying uniforms, learning equipment, computers and other materials for improving the learning environment.

As an ongoing supporter of the Firefly Project run by the Shanghai Soong Ching Ling Foundation – BEA Charity Fund, we donated desks, chairs, computers and internet facilities for the 420 students of a primary school in Anqing, Anhui province.

Human Resources

A Culture of Innovation and Quality

Towngas recognises that maintaining a culture of innovation and quality is critical for helping the Group to prepare for future challenges, maintain its competitive position in the marketplace, and lay a foundation for its ongoing success. This approach has been embedded in our principle Growth = Innovation x Implementation (G=ixi),

which has stimulated many creative initiatives followed by practical solutions by our staff that continue to benefit our business.

During the year, we offered Innovation Series training workshops on topics such as multi-perspective thinking and leading change. We also encouraged employees to exchange ideas through social media platforms and internal forums. Our Managing Director's Award competition was especially popular this year, attracting over 100 creative proposals.

In 2017, we celebrated the 25th anniversary of our Superior Quality Service programme. With the enthusiastic participation of employees, the programme succeeded in generating a total of 1,486 projects for streamlining workflows and improving services. This programme has become integral to our quality culture, the cornerstone of our success



Rural school children in mainland China are benefiting from the teaching equipment we donate under the Towngas Gentle Breeze Movement programme.

over the years. Following our MasterCraft Award competitions in 2016, which focused on design and installation of gas system, in 2017 we promoted craftsmanship in our kitchen solution business as we believe that quality of installation is key to the success of this product line.

Staff Development

We continued to build a competent talent pool that will enable us to keep pace with the growth of our businesses. During the year, we developed a set of career development schemes for providing staff with continuous professional learning as well as opportunities for vertical promotion and horizontal job rotation. One of the new programmes launched in 2017 was the two-year Network Supervisor Trainee Programme, which provided network technicians with technical and supervisory skills training as well as mentor guidance to prepare for future promotion.

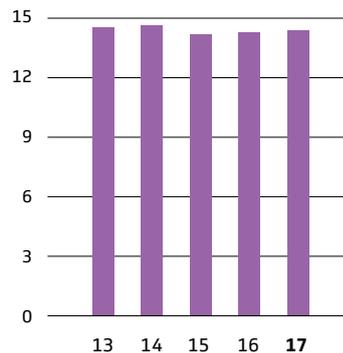
In addition, we initiated the Young Leadership Competence Accelerated programme designed to develop young talent as the future leaders of the Group. Twenty-three intakes from different businesses across geographical locations will participate in the two-year programme, which includes courses in mentorship,

management training by external institutes such as Tsing Hua University, and benchmarking visits to other companies.

Through the Towngas Engineering Academy, we have built up the technical competence and professionalism of Towngas employees throughout their careers with us. Towngas is the first and, until now, only gas company in mainland China to provide gas engineers with dedicated training schemes accredited by the Hong Kong Institution of Engineers (HKIE) and the UK based Institution of Gas Engineers and Managers (IGEM).

In Hong Kong, we worked with the Vocational Training Council (VTC) to launch the Diploma of Vocational Education in Gas Services Engineering – the first

Town Gas Sales per Employee Company (million MJ)

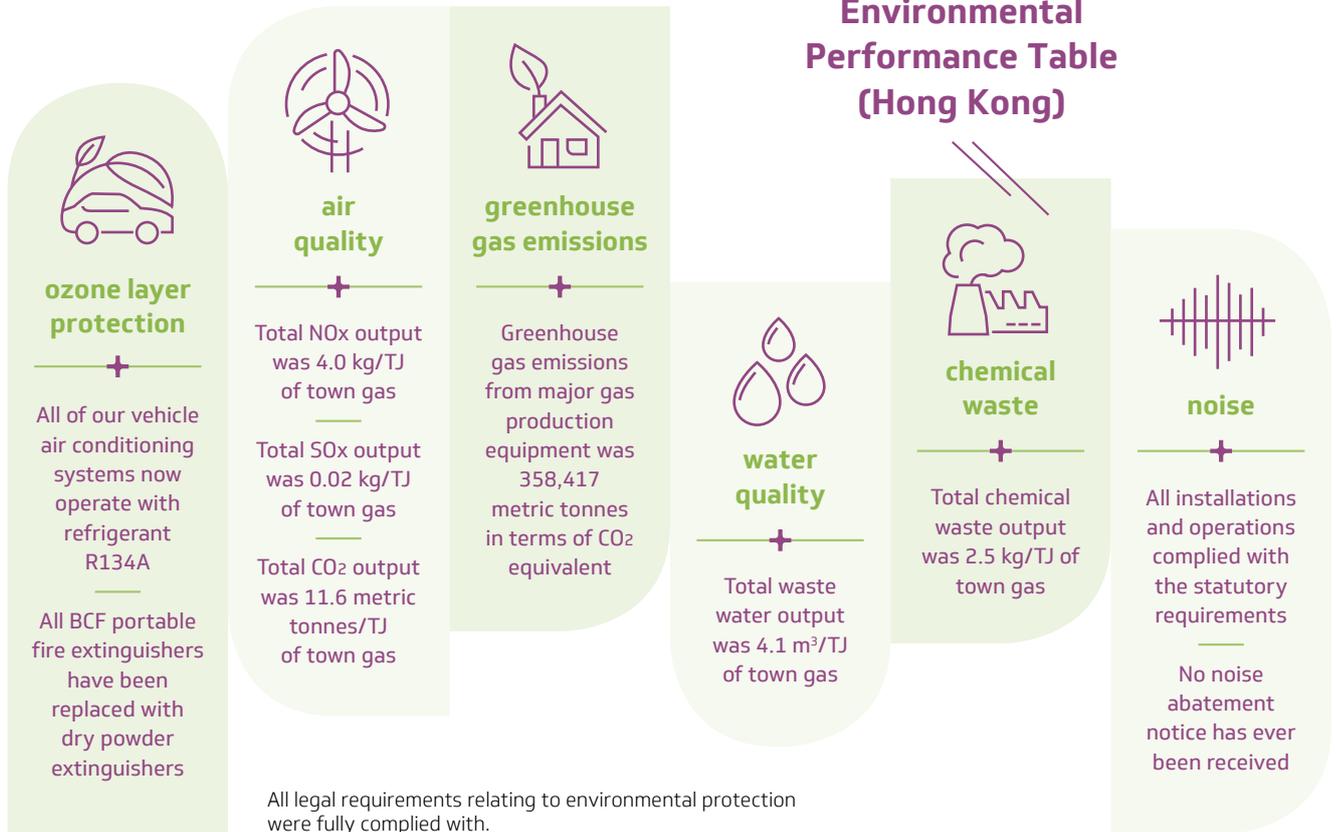


diploma programme in Hong Kong directly related to the gas industry – and the first batch of students graduated in 2017. We are now planning to roll out a Professional Diploma in Gas Engineering with VTC in 2018. This programme will pave the way for our employees and related trade practitioners to become professional engineers in the gas industry.



Avid young readers at a new Towngas China Charity Library, one of our caring initiatives in mainland China.

2017 Environmental Performance Table (Hong Kong)



Graduates of our Gas Apprentice Training Schemes are the backbone of our technical and management workforce, ensuring gas safety, efficient operations and the successful growth of the business. The year 2017 marked the 50th anniversary of the launch of the first scheme, the Gas Craft Apprentice Training Scheme. Following its success, two more training schemes, the Gas Technician Apprentice Training Scheme and Gas Network Fitter Training Scheme, were established in 1977 and 1982 respectively. Over 1,200 technical professionals have graduated from these three schemes so far.

In collaboration with the University of Technology in Sydney, Australia, we also offer a Master of Engineering Management degree, which is widely recognised in the engineering industry and the first of its kind in mainland China. Engineering staff participating in this 15-month programme, which integrates theoretical coursework and practical projects, will be able to earn a master's degree and become eligible to apply for membership in IGEM. To date, seven postgraduates have become Member Managers under this programme.

Supporting our Staff

We recognise the importance of providing an environment for our staff that is conducive to productivity and enables them to lead fulfilling lives both at work and at home. We also regularly review and upgrade staff benefits to accommodate changes in social conditions and keep up with market trends.

As an example of how we do this, at our headquarters building in Hong Kong we provide a library, fitness facilities and a clinic where staff can enjoy free medical services and medicines for the

We launched a sign language singing competition to promote inclusion in the workplace.



treatment of illness. We also have a Mother Care Room, which was doubled in size during the year, to give breastfeeding employees a clean and quiet space to prepare and store breast milk.

During the year, Towngas was named one of the HR Asia Best Companies to Work for in Asia 2017 by *HR Asia*, an authoritative HR publication in Asia. We also won the Friendly Employment Award under the Talent-Wise Employment Charter of the Labour and Welfare Bureau, recognising our commitment to employ people with disabilities.

Supplier Relationships

Towngas not only encourages innovation in our own work but also among our suppliers, who are invited to come forward with ideas on how to effect improvements throughout the supply chain.

Issues covered can include raw materials selection, product design and packaging methods.

In 2017, we saw more suppliers in mainland China adopting the 6S methodology, a quality management approach that has helped them improve their performance by eliminating waste and optimising processes. Their feedback has been positive, and many successful cases show that the approach can lead to a safer, more efficient and effective workplace. The concept has since been expanded to include shop floor supervision among our suppliers.

Our Corporate Social Responsibility compliance audit was extended to cover the suppliers of our mainland businesses, and we are now carrying out a self-assessment survey and audits to ensure their compliance with our rules, regulations and laws.

Occupational Health and Safety

Making sure our employees return home safely from work every day is our first priority at Towngas.

To ensure site works are carried out as safely as possible, we have developed innovative methods and tools that minimise the risk of injuries and occupational health illness to our employees and contractors. During road works, for example, we have a set of tools that include a self-assembled mechanical support arm to reduce the weight of a hydraulic breaker, an easy-to-control electronic trolley with hydraulic cylinders for lifting buckets, and a braking system to avoid tipping trolleys. We also have a pneumatic soil remover to reduce the harmful effect of repetitive actions in traditional soil removal work. The equipment is adjustable to fit the height of workers to ensure healthy posture.

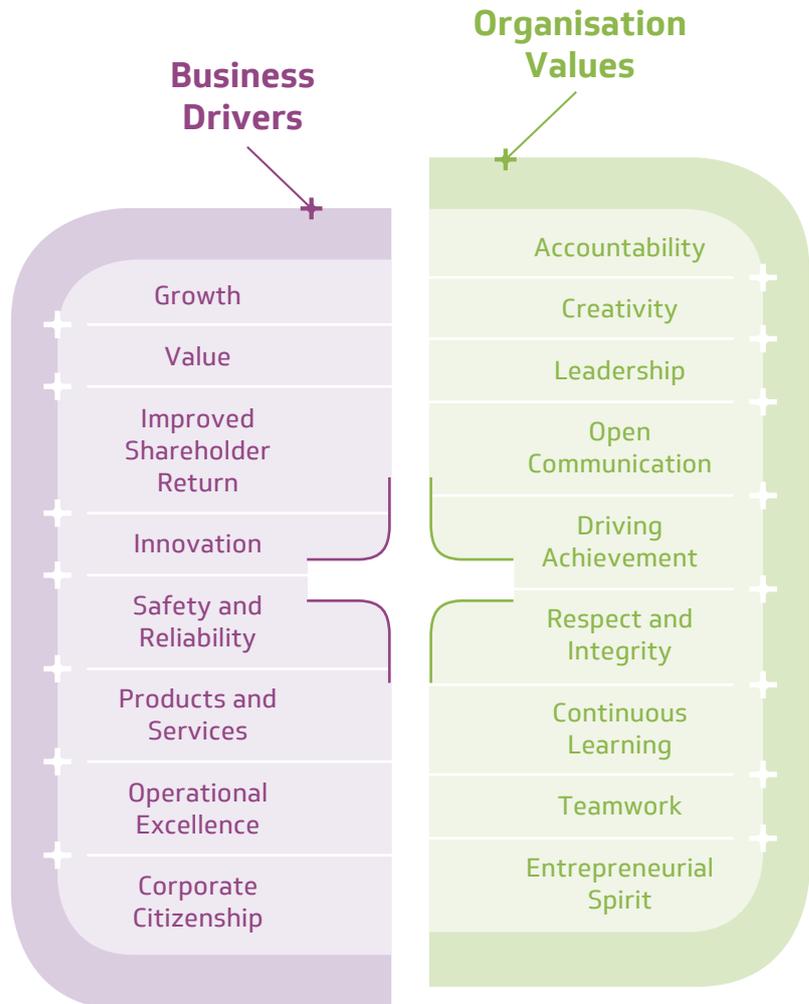
In late 2017, we organised Health, Safety and Environment (HSE) month and HSE day to promote safety among our staff and contractors. This activity featured experience sharing sessions and corporate visits as well as seminars on occupational safety and health, fire safety, security and environmental protection. We also carried out regular briefings and safety drills to prevent industrial accidents.

In recognition of our performance, we won numerous awards in Hong Kong during the year, including two Gold awards and one Silver award at the 16th Hong Kong Occupational Safety & Health Award, as well as one Excellence award at the Joyful@Healthy Workplace Best Practices Award.

Driving Growth and Building Long-term Value

Since our business has a significant impact on communities and the environment, we believe it is essential to behave in a socially-responsible manner and to set the highest possible ethical standards for our staff, contractors and peers in the industry. This, we believe, is the foundation of our business and continuing success.

In order to fulfil our responsibilities, we are committed to living by our corporate values of quality, innovation, courtesy and environmental awareness.



In practice, this means working for the betterment of society, protecting the environment and ensuring a sustainable future for the next generation.

To achieve these aims, we introduced a new vision statement during the year: “To be Asia’s leading clean energy supplier and quality service provider, with a focus on innovation and environmental-friendliness.” The statement was widely promoted

within the Group as well as in our subsidiaries and joint ventures.

We also updated our management theme, which now calls on us to examine our past successes and to recognise how we can build on them for the future. This aligns with our long-term vision and reinforces our commitment to set the standard in the public utilities industry as a caring provider of clean energy.