



Corporate Profile



Vision

To be Asia's leading energy supplier and service provider, with an environmentally-friendly focus.

Mission

To provide our customers with a safe, reliable supply of energy, and the caring, competent and efficient service they expect, while also working to preserve, protect and improve our environment.



Expanding New Horizons

Founded in 1862, The Hong Kong and China Gas Company Limited (Towngas) is one of the largest energy suppliers in Hong Kong, operating with world-class corporate management and leading-edge business practices. For more than 150 years, Towngas has been growing with Hong Kong, evolving from a simple gas company supplying fuel for street lamps to a leader in the energy industry providing an uninterrupted gas supply to the residential, industrial and commercial sectors throughout the territory.

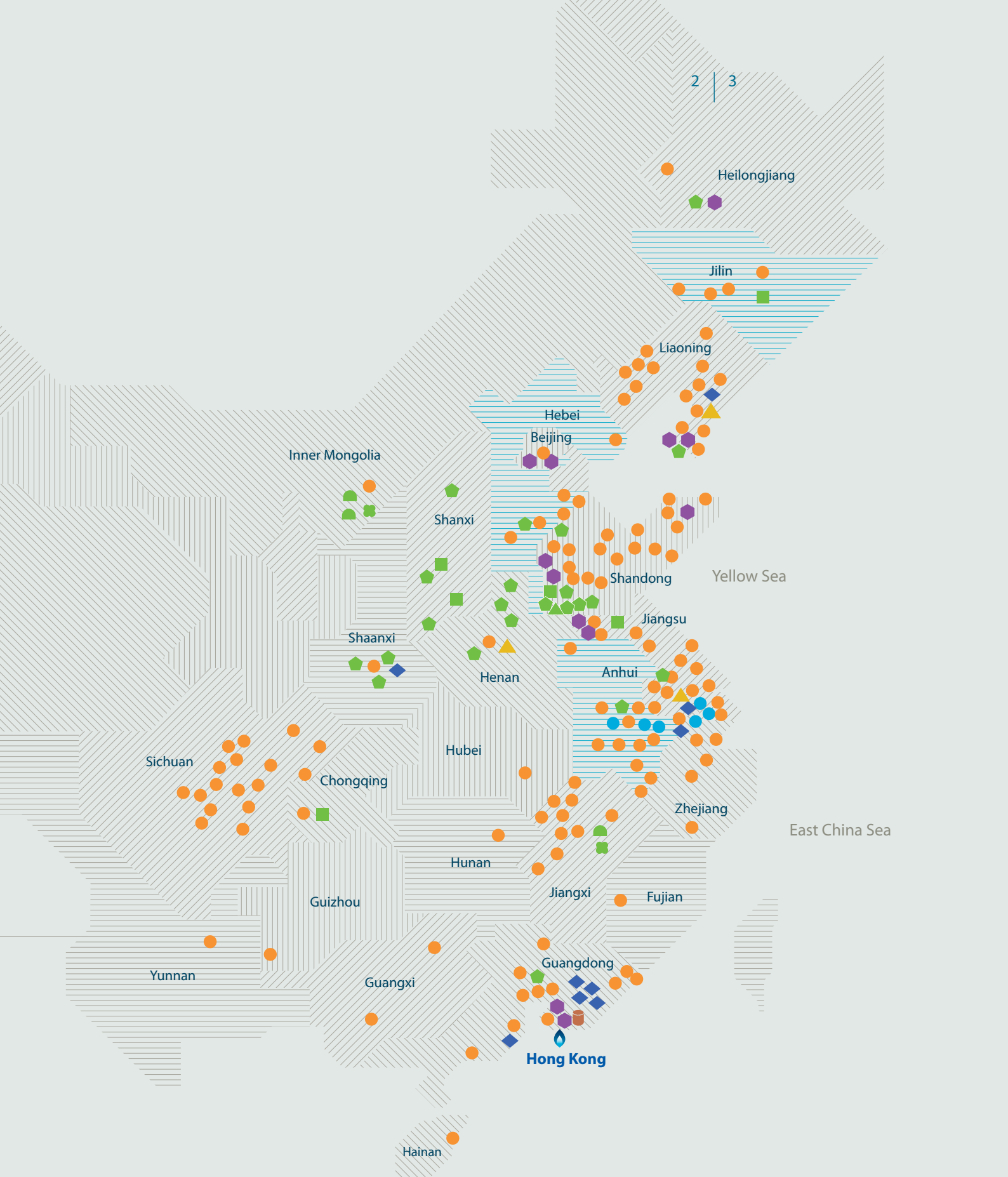
China's rapid economic development has resulted in tremendous demand for clean energy. Fulfilling this need with both determination and enthusiasm, Towngas has not only developed a thriving piped city-gas business in the country in the early 1990s, we have also introduced clean energy and advanced safety and environmental management systems. Our activities are improving living standards on the mainland, while reducing air pollution and protecting the environment.















Building on these solid foundations in the gas industry, we have diversified our business, moving into eco-friendly energy, water projects, building services engineering, and telecommunications infrastructure, enabling us to grow more vigorously towards a brighter future.

TOWNGAS' BUSINESSES

As our businesses advance, we continue our transformation into a nation-wide and eco-friendly energy supplier, providing piped gas, new energies, water, information technology, telecommunications, engineering services and other related facilities. Based in Hong Kong, our portfolio includes a total of 195 projects on mainland's 24 provinces, municipalities and autonomous regions, and in Thailand.





-  Towngas Group Hong Kong headquarters
-  Piped city-gas projects
-  Liquefied natural gas receiving station
-  Provincial natural gas pipeline network
-  City high pressure pipeline network / Underground gas storage
-  Water projects
-  Telecommunication projects
-  Coal mining
-  Coal-based chemical processing
-  Compressed natural gas / liquefied natural gas filling stations
-  Upstream projects
-  Coal logistic project
-  Oilfield project
-  Other projects

(as at September 2014)



HONG KONG BUSINESS

Our core business in Hong Kong consists of the production and distribution of gas, its marketing and sale, the sale of gas appliances, as well as comprehensive after-sales services. Currently, with a more than 3,500 km-long pipeline network, we supply town gas to over 1.8 million customers in the territory.

99.99%

Our customers today enjoy a supply continuity rate of over 99.99%, one of the best in the world



quality products

We developed a range of quality gas appliances under our own TGC and SIMPA brands



one-stop services

Our customer service centres not only offer a friendly face and one-stop services, they showcase our total gas lifestyle concept



The Tai Po Plant, covering an area of 11.71 hectares, has a maximum supply capacity of 9.6 million standard cubic metres of gas a day



Gas Safety

As an energy company, safety is of paramount importance in everything that we do. We are therefore constantly enhancing our safety management to provide a safe and reliable gas supply for our customers.

Currently, we supply town gas to over 1.8 million customers in Hong Kong. Gas is provided through a pipeline network of more than 3,500 km, supported by our Grid Control Centre, which monitors the network 24 hours a day. Regular pipeline inspections ensure a reliable gas supply, and our Emergency Teams are on alert around the clock.

We provide a comprehensive maintenance service for our customers. Additional preventive measures include Regular Safety Inspections, with our dedicated inspection teams calling on all residential customers at regular intervals to carry out routine safety checks on gas risers, installations and appliances.

Innovative Products

Providing one-stop services, we continue to develop a range of innovative gas appliances for the market. At the same time, regular market research helps us learn more about customer requirements, enabling us to introduce efficient products with stylish contemporary designs and innovative functions that meet their evolving needs.

Residential Market

We provide a wide range of quality products for the residential market. Apart from our diverse series of hotplates and water heaters, we provide gas dryers, multi-function cookers, built-in hobs, ovens as well as range hoods to serve the many different needs of modern lifestyles.

We have launched two in-house appliance brands in Hong Kong: TGC, in 2001, and SIMPA, in 2003. TGC, which targets the upscale and mid-scale markets, offers innovative and stylish products tailored for Hong Kong's homes. SIMPA, the second brand, offers more economical products with simpler designs that still feature comprehensive functions meeting different user needs. In our continued quest to make cooking more convenient, we introduced a timer function on several of our TGC built-in hob models.

Our Towngas Cooking Centre, which has promoted flame cooking for 37 years, continues to serve as a platform for cookery lovers to experiment with new cooking techniques and share their enjoyment of flame cooking.

Since their debut, our Towngas Avenue lifestyle concept stores have become focal points for people who love to cook and those with a passion for design. This lifestyle shopping concept, blending the pleasures of gourmet dining with modern lifestyle products, has gained wide acclaim.

With over 10 years of experience in supplying stylish kitchen cabinets for new residential projects and our expertise in flame cooking and gas appliances, we expanded our kitchen design business into the retail sector in 2010, launching our own brand, Mia Cucina. Our design team imports top-quality cabinet materials and accessories from Europe for our Mia Cucina kitchen cabinet series. Designs are tailored according to each customer's unique requirements. In line with our customer-oriented service culture, our professional and thoughtful design service focuses on meeting customers' all-round needs, from consultation to product selection, design and installation, and after-sales services.

Commercial and Industrial Markets

To address the needs of Hong Kong's different industries, Towngas has introduced gas products and application systems with comprehensive functions and high energy efficiency. Our aim is to serve as an effective business partner, helping our clients to enhance their competitive edge.

We have launched an array of energy-efficient gas appliances for restaurants, including steam cabinets, food steamers, cooking ranges, and stock pots. We have obtained patents for some of our technologies such as the residual heat recovery technology adopted in our energy-efficient food steamers.

Popular among customers ever since their launch, our condensing water heaters are 30% more energy-efficient than traditional water heaters. The heaters are installed in premises that require large quantities of hot water, such as hotels, hospitals and indoor swimming pools.

Our gas dehumidifiers are widely used in shopping malls, commercial kitchens and wet markets to improve indoor air quality. Major customers include the Hong Kong Convention and Exhibition Centre and the Hong Kong Film Archive.

In addition, the "Towngas Green Kitchen" was set up at Towngas Showcase in North Point to serve as another channel of communication between the company and the catering industry. Industry practitioners are able to experience the impressive functions of Towngas' business cookers and exchange ideas on energy conservation and environmental protection.

Customer Services

"Customers Come First" is a core principle at Towngas. We provide caring and competent services to meet customer needs and offer greater convenience. Our "Six-star Service" provides a 24-hour hotline while installation and maintenance services are provided within one working day.

Bringing customers greater flexibility in time management, we have increased the number of maintenance service time slots available from Monday to Saturday to 11 time slots per day since 2012. The earliest of these one-hour time slots is 8am-9am.

Direct communication with customers and prompt responses to their feedback help us enhance our services. In addition to commissioning regular customer surveys, our Customer Focus Team visits public and private housing estates regularly, gathering customer opinions on our products and services, while also promoting gas safety.

Every year, we receive a large number of compliment letters from customers on our quality services. In 2013, we received more than 5,600 such letters, driving us to provide even better services.

natural gas

The cleanest fossil fuel currently available



green kitchen

We offer a wide range of energy-efficient appliances to the catering industry



6

Our "Six-star" customer services offer customers a 24-hour service hotline and same day services for installation and maintenance



Environmental Protection

Towngas fully supports environmental protection, seeking to ensure a better living environment and to promote the sustainable development of our planet. We apply a sound environmental management system that plans, coordinates and supervises all work systems to ensure that our operations proceed smoothly, efficiently and with minimum impact on the environment. We also support and sponsor different activities held by green organisations to raise the environmental awareness of our employees and the public.

Making sure that we operate to the highest global standards, our production plant has been certified to the internationally acclaimed ISO 14001 standard. The use of clean feedstock is essential in the production of town gas. In the early 1970s, we made the switch to producing town gas from cleaner naphtha fuel instead of heavy oil and coal. In 2006, we moved forward again, introducing natural gas as part of the feedstock in our production of town gas. This dual use of natural gas and naphtha as feedstock has significantly reduced carbon dioxide, nitrogen oxide and sulphur oxide emissions.

31,200

nutritious fresh food packs have been distributed to underprivileged single-parent families



low carbon

Our Low Carbon Action! campaign was launched to encourage people to lead a greener life

We also now utilise landfill gas from the Shuen Wan and North East New Territories landfill sites as heating fuel in the production of town gas. Using landfill gas as an energy source not only conserves natural resources, it also reduces the emission of greenhouse gases and thus improves air quality.

Maintaining our commitment to conserve resources and manage waste, we put the 5R concept – Reduce, Replace, Recover, Recycle and Reuse – into practice in our daily operations. Our “Used Gas Appliance Recycling Programme” recycles the metal from discarded appliances, conserving natural resources. We use the revenue raised through this programme to support green educational initiatives.

467,000

hours of community service have been completed by our volunteers since 1999

In 2008, we became one of the first of the Hong Kong Government’s “Carbon Audit Green Partners” to endorse its Carbon Reduction Charter. As a Green Partner, we pledge to audit our carbon emissions within the Company, while at the same time taking measures to reduce these emissions. We have already completed the first carbon audit for our Hong Kong operation. Our carbon inventories were verified under ISO 14064-1 specifications.

Contributing to the Community

Hong Kong is our home, and we seek not only to provide quality services and products to our customers, but also to do our best to give a helping hand to those in need in our community. We encourage our employees to participate in voluntary social services, and provide resources and support for our "Towngas Volunteer Service Team" which was formed by our employees to care for the community.

Extending these services, Towngas customers and retirees are invited to join our "Towngas Customer Volunteer Team". In 1995, we launched our "Elderly Concession Scheme" offering special benefits for qualified senior citizens. These benefits include a waiver of their account deposit, monthly maintenance charge and monthly minimum charge, together with a 50% discount on the first 500 megajoules of gas consumed as well as free maintenance services for their gas appliances. Since then we have expanded the programme, launching further concession schemes for people with disabilities as well as single-parent families and low-income families, to help lighten their economic burden.

Since 2000, we have organised an annual charitable event, "Rice Dumplings for the Community" during the Dragon Boat Festival. Towngas Volunteer Service Team members are joined by students, legislative councillors, district councillors and other members of the community to wrap healthy rice dumplings for the elderly and people in need, bringing them warmth and care while also raising funds for charity.

We also visit elderly people who live alone during important Chinese festivals, such as the Mid-Autumn Festival, to deliver mooncakes and share the festive spirit. On a more day-to-day level, we show our care for the elderly through free photo-taking and hair-cutting services, free installation of safety rails at their homes, and free check-up services for their Personal Emergency Link which "links" them to emergency services in case of need. Our volunteers also deliver long-boiled soup to

the elderly who live alone. In 2014, we started a charity project by donating intelligent electrical toilet seats to elderly care homes to enhance the ability of the elderly to take care of themselves and lessen the workload of the staff.

Committed to the needs of Hong Kong's children, we launched the "Cooking for Fun" English learning workshop in 2006. With the support of the Social Welfare Department, Towngas volunteers organise workshops for children from underprivileged families throughout the territory, to learn English through cooking.

We also offer assistance and support to social enterprises. In conjunction with the Tung Wah Group of Hospitals, we unveiled the first of its kind "COOK EASY" food pack delivery service in 2007. Based on special recipes created by our Towngas Cooking Centre, Tung Wah's "Take a Break" catering service creates "COOK EASY" food packs for customers. The service provides employment opportunities for the mentally handicapped and others with special needs.

Towards the end of 2012, Towngas launched Hong Kong's first food assistance programme for single-parent families receiving comprehensive social security assistance from the government. The "Towngas Warmth and Care Fresh Food Aid Programme" offers fresh, nutritious food packs to 150 families twice a week.

Further strengthening our ties with the community, we established a "District Council Focus Team" in 2000. By participating in and organising activities in local districts, we are able to communicate directly with members of the community, enabling us to better understand their needs and provide more direct and thoughtful services.

UTILITY BUSINESSES IN MAINLAND CHINA

Our mainland operations are now spread across 24 provinces, municipalities and autonomous regions. The number of residential, commercial and industrial customers we serve has risen from less than 5,000 to more than 18 million at present, with annual gas sales exceeding 13.4 billion cubic metres and a supply network extending more than 68,000 km. The Group is now the largest city-gas enterprise on the mainland.

18.26 million

We are serving
18.26 million
customer accounts



safety first

All-round safety and risk management audits are also regularly conducted



174 projects



Our joint ventures include city-gas projects, city-water projects, wastewater treatment, natural gas pipelines, telecommunications and the production of gas-related materials and devices



No.1 in China

The Towngas Group operates a network of 68,067 km of gas pipe, with a sales volume reaching 13.4 billion cubic metres

The Group now has more than 100 city-gas joint ventures in cities including Nanjing, Wuhan, Xi'an, Jinan, Chengdu, Changchun and Shenzhen. Our operations spread across 24 provinces, municipalities and autonomous regions in eastern, central, northern, northeastern, northwestern, southwestern and southern China.

Towngas China

In mainland China, we mainly invest and engage in piped city-gas projects. Our mainland gas business operates under Towngas China. We made our first foray into the mainland market in 1994, investing in several piped city-gas projects in southern China's Pearl River Delta region. With the launch of national clean energy policies favouring natural gas, the Group moved on to develop piped city-gas business in the Yangtze River Delta in eastern China, and later extended its reach to central, southwestern and northeastern China.

Regular Safety Inspections

To promote safety across our mainland operations, the Group has developed and distributed Safety and Risk Management System Templates, Corporate Risk Management Guidelines for Mainland Joint Ventures, and Guidelines for Safe Operation in Confined Spaces. In addition, we have established regional safety committees in many regions and provinces, such as Sichuan, Shandong and northeastern China, enabling our joint ventures to work together to establish and implement safety and risk management systems and share information and experience. All-round safety and risk management audits are also regularly conducted, ensuring all joint ventures meet our stringent safety requirements.

Committed to ensuring continued customer safety and delivering quality after-sales and comprehensive maintenance services, Towngas China has implemented a Regular Safety Inspection programme for its joint ventures. Qualified gas technicians pay regular visits to customers' homes to check their gas appliances and pipes to ensure the gas facilities are operating properly. We also have a 24-hour emergency hotline. Our professional emergency teams are well trained and highly experienced. They are on call around the clock, and stand ready to reach a site within the shortest possible time to ensure customer safety.

Building on the Group's 150 years of experience in operating a gas business, Towngas China has established Grid Control Centres and Geographical Information Systems (GIS) at its joint ventures to ensure the safety of gas delivery; together with our regular inspections of customers' gas facilities and various forms of proactive safety education, we work ceaselessly to maintain our proven track record of world-class standards of gas supply safety and reliability.

Customer Service

Towngas employees' guiding principle is that "Customers Come First". In addition to regular customer surveys, our Customer Focus Team meets customers periodically to seek their opinions on our products and services and promotes gas safety in the community.

Towngas is committed to providing gas appliances that suit the most stylish lifestyles. In Hong Kong, we have launched our TGC and SIMPA brands, while our Bauhinia brand targets the mainland market. All our appliances feature modern, innovative functions and superior performance besides being energy-efficient. Our "Six-star Service" is all-inclusive and available around the clock. In addition to a 24-hour service hotline and same-day installation and maintenance services, our Customer Centres and Cooking Centre provide the latest information to help our customers enhance their quality of life.

the brand

Our Bauhinia appliance brand has reached a record-high accumulated sales of 2 million units



Towngas China has established more than 200 Customer Centres across China. These one-stop-shop centres provide a full spectrum of services ranging from bill payment and account opening to selling gas appliances, technical consultations and after-sales services. We are the only gas supplier in China that sells both gas appliances and gas applications. For gas appliances, we even have our own "Bauhinia" brand. Our Customer Centres showcase a variety of multi-function gas appliances, modern water heaters and gas-fired heating systems. Visitors can experience how the use of gas brings about a comfortable and modern living environment.

We launched our Bauhinia gas appliance brand on the mainland in 2005, where it quickly became a leading appliance brand. In 2013 the brand's cumulative sales passed 2 million units. The Bauhinia line has been designed with the benefit of the Group's 150 years of experience in gas safety management and expertise. All products are inspected by both China's quality assurance authority and the Towngas Technology Centre, which adheres to international inspection standards. With regard to products, 2013 marked the notable development of our proprietary gas cooking stove, the Taiji Gas Stove, which is compatible with China's Class 1 National Energy Efficiency Standards.

customer oriented

"Customers Come First" is always our culture to provide caring services



223 centres

Our 223 customer service centres offer customers a truly inviting one-stop experience



clean energy

The market for clean energy is buoyed by economic development, urbanisation and infrastructure investment



reaching out

We continue our Book Donation with Love and Care Programme and set up 22 book corners in nine provinces



Helping to promote the Bauhinia's quality brand image, products exhibiting special design were also developed. In adherence to the brand's mission – "Rendering a Peaceful Mind at Home with Professional Services", we engaged in the active research and development of cutting-edge firewall technologies during the year to seek ongoing improvements in the safety standards of products supplied to customers. Besides, complying with national policies in environmental protection, we were committed to the research and development of highly efficient burners (with a heat efficiency of up to 60%) at a low cost to sustain the competitiveness of our products.

Clean Energy

As a socially and environmentally responsible energy supplier, we are committed to protecting and improving the environment while promoting the sustainable development of our energy business and expanding our clean energy business.

414 million tonnes

2013 annual sales of city-water increased by 5.5% to 414 million tonnes

According to international research, natural gas is the cleanest fossil fuel given its low emissions. By adopting natural gas for the majority of its piped city-gas projects, the Group has played, and continues to play a key role in China's transition from a coal-based economy to one relying increasingly on natural gas. We support the pursuit of a higher standard of living in mainland cities by lifting the standards of local public utility services. To cite just one example, Yixing, the city in Jiangsu province known as the "Pottery Capital of China" had long been known for its smog due to the use of coal in the city's thousands of pottery kilns. Since the establishment of Yixing Hong Kong and China Gas Company Limited in 2002 to promote the use of natural gas, the sky is once again blue over Yixing, a city with a priceless historic cultural and artistic heritage.

Towngas China Volunteer Service Teams Care for the Communities

The Group has more than 100 joint-venture or wholly-owned enterprises on the mainland, and more than 70% of them have set up volunteer service teams. The teams, comprising several thousand members in total, reach out to their communities through services targeting groups such as the elderly, children and low-income families. The teams have volunteered more than 100,000 hours of service over the years, winning the appreciation of local communities for their caring actions. Many of the teams have also received awards from local governments.

In March 2013, we founded our own charity label, the “Gentle Breeze Movement”. Activities by the Group and Group companies such as our energy conservation and environmental protection campaigns, tree planting schemes, “Towngas Rice Dumplings for the Community”, charity libraries, disaster relief and poverty aid schemes, now all fall under the Movement’s umbrella. In 2013, a number of donations for educational purposes were made under the “Gentle Breeze Movement”. These included the renovation of teaching blocks for seven schools in Xiushui, Jiangxi and Jiangbei District in Maanshan, Anhui; the building of charity libraries and e-classrooms; as well as donations for teaching, everyday facilities and sporting equipment. To date, 22 Towngas China Charity Libraries have been built across the country. Additionally, scholarships jointly donated by Towngas and the Group were awarded through the Sichuan Youth Development Foundation to help 100 outstanding but financially underprivileged students from the counties of Lushan, Baoxing and Tianquan in the quake-struck Ya’an district. Having passed their 2013 university entrance examinations and received offers for full-time programmes at tertiary institutions, the scholarships enable the students to fulfill their dreams for university education.

During the year, we were pleased to have won the “Enterprise with the Best Corporate Social Responsibilities 2013” title jointly presented by China News Service and China Newsweek,

as well as “Five Stars Outstanding Corporate Citizen in China 2013” title, jointly presented by the Committee of Corporate Citizenship under the China Association of Social Workers, the CCTV Financial Channel and the Tencent Foundation. At the same time, our “Gentle Breeze Movement” also received the “Outstanding Project of Corporate Citizen in China 2013” award.

Hua Yan Water

In addition to investing in gas ventures, we are also involved in developing water infrastructure projects in mainland cities. We have established a subsidiary, Hong Kong & China Water Limited (Hua Yan Water), to manage our investments in the water business on the mainland. In 2005, to tap into synergies with our piped gas projects we established water businesses in Wujiang, Jiangsu province; Wuhu, Anhui province; and Suzhou Industrial Park in Jiangsu province, marking our initial forays into the mainland water sector. Hua Yan Water now owns six public water supply and wastewater treatment projects. It serves 920,000 customers and has a daily water supply capacity of 2.12 million tonnes. The quality of all raw water, processed water and piped water is stringently monitored and scientifically analysed to ensure that customers receive clean and hygienic tap water.

Following the rapid expansion of the mainland Chinese economy, demand for clean water has grown steadily. A natural complement to our city-gas business, our water supply and wastewater operations concurrently enjoyed another successful year as annual sales of city-water increased by 5.5 per cent to 414 million tonnes in 2013.

Respected for our reliability and high quality service, we have been able to forge close ties with provincial and local authorities. In 2013, we won contracts covering two new water supply projects in Anhui province, including Zhengpugang Xin Qu in Maanshan and the starting area of Jiangbei Concentration Zone in Wuhu. We are now in a good position to capture more quality city-water projects in other provinces.



NEW ENERGY BUSINESS

Established in 2000, ECO Environmental Investments Limited (ECO), a wholly-owned subsidiary of Towngas, is engaged primarily in developing new energy business and technology innovation. Backed by the Group's century-old expertise in gas technology and world-class management, ECO focuses on exploring business opportunities in clean and efficient energies and turning them into viable businesses in line with its goal of becoming a leader in the green industry.

In support of China's energy policies and consolidation in the energy sector and in response to the rapid growth in global demand for energy and the challenges posed by climate change, ECO's business focus in China is the development of new energy projects that minimise emissions and pollution. In many cases, scientific innovations are involved to turn low grade resources into high value energy. Examples are liquefaction of coalbed methane; development and application of non-conventional energy sources; development of coal chemicals; biomass conversion, as well as provision of eco-friendly logistics services and energy infrastructure development. In Hong Kong, ECO's businesses include liquefied petroleum gas (LPG) vehicular filling stations, landfill gas utilisation projects and an aviation fuel storage facility while in Thailand, ECO expanded its business to an onshore oilfield exploration project.



2%

Landfill gas currently accounts for about 2% of our fuel consumption in Hong Kong

Committed to environmental protection and continuous innovation, ECO works persistently to expand its green energy portfolio and invests in the development of new technologies. ECO collaborates with Chinese and overseas research institutions to develop clean energy technologies and extend their applications, contributing relentlessly to society's sustainable development by offering an ever wider choice of clean energies.

Landfill Gas Utilisation

When organic substances in landfills decompose, they produce significant amounts of landfill gas. If emitted directly

250 million m³

With an annual production capacity of 250 million m³, our CBM liquefaction plant is the largest of its kind in China



into the air, landfill gas (in which methane is the major component) aggravates the greenhouse effect, which is already a serious environmental threat. Treated landfill gas, on the other hand, can be converted into clean energy and used as heating fuel in town gas production.

In 2004, ECO designed and constructed a landfill gas treatment plant at the North East New Territories Landfill in Hong Kong and commissioned in 2007. The treated landfill gas, or synthetic natural gas, is transported to Towngas' production plant in Tai Po, Hong Kong via a pipeline and used as heating fuel in town gas production. The treatment plant now supplies 8,000 cubic metres of synthetic natural gas



per hour. It enables our production plant in Tai Po to curtail naphtha consumption by 40,000 tonnes while reducing emissions of carbon dioxide by up to 135,000 tonnes annually.

Liquefaction of Methane

Coalbed methane (CBM), predominantly composed of methane, exists in coal mines. The gas is formed when biochemical pyrogenation takes place in the coal under high temperatures and high pressure. By extracting CBM before mining activities commence, we can help prevent gas incidents, enhancing the safety of coal miners and also reducing pollution.

Using the latest cryogenic technology, the extracted CBM can be liquefied on site. Liquefied coalbed methane (LCBM) has a temperature of about -162°C and the application of constant pressure reduces its volume to 1/625th of the original size. The resulting LCBM is a new form of safe, clean energy with high energy density that is easily transportable, cleaner burning and less expensive to produce.

Taking advantage of the abundant CBM supplies in Shanxi province, ECO, in cooperation with the Shanxi Jincheng Anthracite Mining Group, established a liquefaction plant in Jincheng, Shanxi province, to convert CBM into LCBM. The plant is currently the largest CBM liquefaction plant on the mainland with an annual production capacity of 250 million

cubic metres of LCBM. Phases I and II of the plant were completed in late 2008 and March 2011 respectively, boasting a combined daily production capacity of up to 900,000 cubic metres. This project was not only a major milestone for ECO, it was also a pioneering initiative for the industry, as the first project on the mainland not only to utilise CBM on a commercial scale but also help satisfy energy needs in surrounding communities. Furthermore, the project provides an additional source of gas for the ongoing development of ECO's vehicular fuel supply network. In addition, ECO accelerated the development of coke oven gas factories to refrigerate liquefied natural gas (LNG). Two new coke oven gas comprehensive utilisation projects are now located in Xuzhou, Jiangsu province and Juye, Shandong province.

Upgrading Methanol

As China's domestic supply of petroleum and natural gas is insufficient to meet its needs, the country has to rely heavily on imported resources to meet demand arising from the rapid pace of development. However, given its abundant coal resources, China can compensate for the inadequate supply of petroleum and natural gas by speeding up the development of coal chemical technology, laying the foundation for the development of a petroleum-substitute fuel industry in the long term.

ECO is currently exploring coal resources and engaged in a coal chemical project in Erdos, Inner Mongolia. A coal-based methanol plant in Inner Mongolia was fully operational in the end of 2013 with an annual capacity of 240,000 tonnes. With the use of coal resources to produce high value methanol, it could be used as vehicular fuel and chemical feedstock. Moreover, ECO not only invested in coal chemicals projects in Erdos, Inner Mongolia and Jiangsu province, but also researched into the utilisation of coke oven gas from the emission of coking process and the possibility of turning agricultural waste into feedstock to produce methanol.

ECO started a project in Inner Mongolia which will upgrade 140,000 tonnes of methanol to clean gasoline-type chemical products. The project is expected to be commissioned in the end of 2014.

Vehicular and Marine Fuel

In support of the Hong Kong Government's initiative to improve air quality, ECO has designed, constructed and operated LPG filling stations in Hong Kong since 2000. The five LPG filling stations run by ECO provide 18,000 LPG taxis and most LPG minibuses in Hong Kong with a 24-hour service. The stations sell approximately 65,000 tonnes of LPG a year, accounting for about 30% of Hong Kong's auto LPG market.

With a wealth of operational and safety management experience, technical expertise and a reputation for excellent customer service, ECO has extended its gas filling station business to the mainland market. Meanwhile, ECO planned to provide LNG filling stations services for heavy-duty trucks and vessels in the port that links upstream railway with the nearby downstream Beijing-Hangzhou canal in Jining, Shandong province. ECO currently have 32 vehicular fuel stations in operation, under planning or construction on the mainland. ECO will continue to expand its gas filling station network in strategically important provinces and regions while seeking to widen its business scope by actively exploring the application of natural gas in the maritime sector, contributing further to emissions reduction and an ever better living environment.

ECO's Aviation Fuel Facility

In 2002, ECO signed a 40-year franchise agreement with The Airport Authority Hong Kong to design, construct and operate an Aviation Fuel Facility (AFF) supplying fuel for aircraft at the Hong Kong International Airport. The project consists of eight tanks with a gross aviation fuel storage capacity of 264,000 cubic metres and a jetty with two berths. Berth No.1 accommodates vessels from 10,000-80,000 dwt while Berth No.2 accommodates vessels from 10,000-50,000 dwt. The aviation fuel is transported from Tuen Mun to the island where the airport is located via two undersea pipelines.



clean coal energy

The methanol plant by ECO in Inner Mongolia has an annual production capacity of 240,000 tonnes



264,000 m³

Our AFF consists of eight tanks with a gross aviation fuel storage capacity of 264,000 m³



The project commenced operation in 2010 and is now a major logistics base for aviation fuel in Hong Kong, supplying approximately 6 million tonnes of fuel a year.

Research and Development

Established in September 2009 in the Hong Kong Science Park, the ECO Environmental Energy Research Institute is ECO's research subsidiary. The institute underpins ECO's clean energy business development on the mainland and overseas by providing technological consultations and service support. It develops ECO's core technologies, technical feasibility analyses and technology development planning. With an open and innovative research model, the institute maintains close contact with domestic and foreign scientific research organisations and academic institutions, with which it cooperates extensively. The institute is engaged in several collaborative projects on the mainland and in Hong Kong, involving clean energy, eco-friendly new energy and energy efficiency. Some of the projects have entered into the interim testing stage and we are awaiting good news.

Corporate Social Responsibility

ECO's LPG filling stations in Hong Kong and its compressed natural gas filling stations on the mainland which provide vehicular fuel for heavy duty trucks can help reduce vehicular emissions of suspended particulates by 6% and nitrogen oxides by 25%. This can significantly improve air quality and protect the environment. ECO's supply of natural gas or liquefied gas as vehicular fuel reduced emission of carbon dioxide by approximately 41,400 tonnes in 2012, equivalent to the amount removed by 1.8 million trees annually.

ECO utilises landfill gas as fuel for the production of town gas. The project can reduce naphtha consumption for town gas production by 40,000 tonnes and mitigate the emission of carbon dioxide by 135,000 tonnes a year, equivalent to the amount removed by 5.8 million trees annually. Furthermore, ECO has built a liquefied coalbed methane plant in China's Shanxi province, which can reduce emission of coalbed methane by 250 million cubic metres per annum.



DIVERSIFIED BUSINESSES

Towngas Telecom

Towngas Telecommunications Company Limited (Towngas Telecom), a wholly owned subsidiary of Towngas, is one of the Hong Kong's premier fixed telecommunications network operators. As a carrier-neutral telecommunications service provider, by leveraging on Glass-In-Gas and Glass-Along-Gas technology, Towngas Telecom has created a fibre network providing high-end telecommunication infrastructure services and quality network solutions offering substantial synergies and economies of scale for telecom carriers, service providers and large corporations.

Towngas Telecom has three main businesses which are network connectivity, data centre and cloud services. In Hong Kong, the ever-growing demand for IT sourcing and "cloud computing" has driven the rapid growth in Towngas Telecom's data centre business. Despite Towngas Telecom Hong Kong Data Centre 1 in San Po Kong, our Data Centre 2, with a floor area of around 22,000 square metres in the Tseung Kwan O Industrial Estate, Phase I of this world-class facility is completed and started operating.

Towngas Telecom has also expanded its business into the mainland since 2007. It has now established 14 joint ventures to provide superior telecommunications infrastructure and world-class data centre services to telecom operators and broadcasters. In addition to optical fibre projects in three provinces (Liaoning, Shandong and Jiangsu), we set up our first modern data centre in Jinan. Towngas Telecom Jinan Data Centre 1 was officially launched in 2011 and has become one of the mainland's leading data service providers. We are now constructing three data centres in Dongguan, Dalian and Harbin. In the near future, we will continue to develop data centre and telecom business.



14 JVs

Towngas Telecom has established 14 Joint Ventures to provide telecommunications infrastructure and data centre services



U-Tech

U-Tech Engineering Company Limited (U-Tech) employs mainly trenchless technology in its operations in Hong Kong. Since U-Tech does not need to excavate roads when laying underground pipelines, it greatly reduces the environmental impact and the inconvenience to the general public. The company's business and areas of expertise have steadily expanded, and it now undertakes a variety of projects, including building services, liquefied petroleum gas projects, civil works, water works and other pipeline infrastructure projects. During the year, we completed the electrical installation at a new residential complex of 2,500 flats in Yuen Long. Another electrical installation project covering 2,000 flats across phases two and three of a residential development

metering solutions

M-TECH as the brand for our smart gas meters and metering system



in Lok Wo Sha, Shatin also made good progress. Furthermore, we participated in the construction of infrastructure for the Kai Tak Development Area and also began laying a 2 kilometre-long main water pipe in Tai Po, due to be finished at the end of 2016. These projects, once completed, will continue to enhance our reputation as a leading one-stop utility contractor for gas, water, drainage, sewerage, telecommunications and building services projects in Hong Kong.

Manufacturing Business

As part of our commitment to maintaining the highest standards of safety across the supply chain, we design and manufacture polyethylene (PE) fittings and jointing parts for both gas and water systems. This year, G-Tech Piping System

(Zhongshan) Company Limited, our wholly-owned subsidiary, began to supply piped gas operators with quality PE pipes manufactured under a stringent quality control system. We also established logistics hubs and regional warehouses in Jiangsu and Liaoning provinces to support the expansion of the business and supply to our customers across a diverse geographical network. The business has been supported by GH-Fusion Corporation Limited, our joint venture with the British Fusion Group, which develops additional PE fittings to more comprehensively serve the mainland China gas market.

In 2011, we established M-TECH Metering Solutions Company Limited (M-TECH) to develop and offer new smart metering solutions that have been well received in the market. In the past year, over 60 of our mainland ventures have purchased the Micro-Electro-Mechanical Systems meters, the first of its kind in the gas metering industry, and we have also been granted a licence to produce industrial meters. These smart meters can help reduce unaccounted gas losses due to ambient temperature and pressure fluctuations. M-TECH will also release a new series of products to replace the traditional diaphragm meters currently used by small commercial businesses. At the same time, we are actively looking into entering the European market and preparing for the launch of our new residential meters to capture the vast markets in mainland China and abroad.

MAJOR AWARDS

Family Council: 2013/14
Distinguished Family-Friendly
Employers – Corporations
Category (2014)



Hong Kong Awards for
Industries: Productivity and
Quality Grand Award (2008)

Institution of Gas Engineers and Managers and
The Energy and Utilities Alliance:
Company of the Year Award (2014)



Hong Kong Awards for Industries:
Innovation and Creativity
Grand Award (2013)



Hong Kong Awards for
Industries: Customer Service
Grand Award (2009)



Towngas won 10 awards at the
13th Hong Kong Occupational
Safety & Health Award (2014)



Asian Make Award
(2014)

Environmental Protection Department and Environmental Campaign Committee: Hong Kong Awards for Environmental Excellence (Public Organisations and Utilities) Gold Award (2012)



Federation of Hong Kong Industries: Hang Seng Pearl River Delta Environmental Awards – Silver Award (2013)



Towngas China was awarded the Hong Kong Corporate Governance Excellence Awards 2013 – Category for Hang Seng Composite Index Constituent Companies (2013)



QQ.com and Quamnet: Top 100 Hong Kong Listed Companies (2012)



Social Welfare Department: Champion of Highest Service Hour Award (Private Organisations – Best Customer Participants) (2007-2012)



Towngas has been one of the seven current constituents in the Hang Seng Index for 50 years



The Hong Kong Council of Social Service: Total Caring Award (2008)

Business Management Awards

Yazhou Zhoukan: 1000 Worldwide Chinese Companies and Awards of Oil and Energy (2014)

The Knowledge Management and Innovation Research Centre of The Hong Kong Polytechnic University:
Top winner of the Hong Kong Most Admired Knowledge Enterprise Award and
the Best in Knowledge Culture Award (2014)

Office of the Government Chief Information Officer: Hong Kong ICT Awards –
Best Business Solutions (Application) Award – Gold Award (2014)

Yazhou Zhoukan : Global Chinese Business 1000 ranking at number 38 (2013)

CIO Summit: IT Excellence Awards 2013 – The Best Deployment Emerging Technology Award (2013)

QQ.com, Quamnet and Hong Kong Economic Journal: Top 100 Hong Kong Listed Companies (2013)

Financial Times Global 500, United Kingdom (2012)

Economic Digest: Towngas China was awarded Hong Kong Outstanding Enterprise Award (2011)

The Wall Street Journal: Asia 200: 8th in Top Hong Kong's Most-admired Companies (2010)

Institution of Gas Engineers and Managers, United Kingdom: Company of the Year (1999 and 2006)

Environmental Awards

U Magazine: U Green Awards – Public Utilities (Excellence Category) (2014)

MetroBox: Prime Awards for Eco Business (2014)

CAPITAL Entrepreneur: Green Enterprise Awards (2013)

Wen Wei Po: Green China Environmental Achievement Award – Distinguished Enterprises (2011 and 2013)

Hong Kong Green Awards 2012: Corporate Green Governance Award – Grand Award
and Corporate Green Governance Award – Corporate Leadership (2012)

Hong Kong Green Awards 2011: Green Management Silver Award (Corporation) (2011)

Hong Kong Green Awards 2010: Green PurchaswiŞe Award – Platinum Category (2010)

China Environment News: Towngas China was awarded The Best Enterprise for
Corporate Social Responsibility Award (2010)

China Environment News: Towngas China was awarded The Environmental Excellence Business Award (2009)

Hong Kong Awards for Industries: Environmental Performance Grand Award (2004 and 2007)

Hong Kong Eco-Business Grand Award: Green Office (Large Organisations) (2002)

Social Service Awards

Employees Retraining Board: 5th ERB Manpower Developer Award Scheme "Manpower Developers" (2014)

The Home Affairs Bureau and the Social Enterprise Advisory Committee:
Friends of Social Enterprise 2013 (2013)

Steering Committee on Promotion of Volunteer Service of the Social Welfare Department:
Volunteers with 10,000 Service Hours Award (2011 and 2013)

The Home Affairs Bureau and the Social Enterprise Advisory Committee:
Outstanding Friends of Social Enterprise 2011 (2011)

Family Council: Distinguished Family-Friendly Employers Award (2011)

The Hong Kong Council of Social Service:
Age Friendly Hong Kong Appreciation Scheme 2011 – Bronze Award (2011)

The Community Chest: President's Award (2001-2014)

The Hong Kong and China Gas Company Limited
363 Java Road, North Point, Hong Kong
www.towngas.com

