

# REVIEW OF OPERATIONS

Towngas has had an exciting year. The Group's principal objective was to enhance market sentiment by building on proven strengths and developing innovative strategies. Overall, there were some exceptional high points throughout the year, underpinned by steady growth and solid core business initiatives.

Town gas consumption rose by 2 per cent to 26,564 million megajoules. This was modest compared to previous years, partly due to Hong Kong's sluggish economy adversely affecting commercial gas sales to hotels and restaurants, and partly due to the consistently warm weather throughout the year.

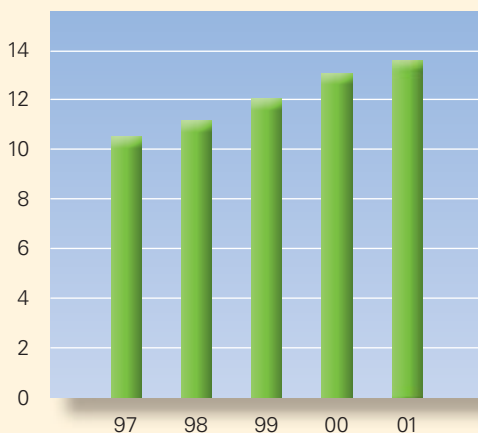
Nevertheless we have made excellent headway in developing new businesses in both the residential and commercial sectors. Our 2-in-1 washer/gas dryer has proved to be a popular and profitable addition to our stable of existing appliances, while service enhancements have

realised greater customer convenience and new trends in concept shopping for household products.

To meet Hong Kong's demand for town gas in the coming years and to ensure safety and reliability of supply, we have continued to invest in our pipeline infrastructure. Network expansion to strategic locations is essential for expanding urban development as well as to ensure sufficient capacity is available for major business load such as the Cyberport and Science Park, both currently under construction.

Innovations to reduce pipeline damage during road opening work, apart from enhancing safety of the general public, have generated better use of resources enabling safety efforts to move from emergency repair to preventative maintenance. We have also made the environment safer by lessening global warming through aggressive pollutant reduction emission policies. In turn, this has shaped new business opportunities such as recycling carbon dioxide for bottling carbonated soft drinks and making dry ice, and developing an efficient electrostatic mist extractor to lessen cooking fumes discharged to the streets from commercial kitchens.

**Town gas Sales per Employee**  
*Company (million MJ)*



# INNOVATION



Towngas Avenue incorporates the latest appliances, kitchen and bathroom accessories in an attractive display of a modern home-life setting.

*Our well-trained workforce  
is now a cornerstone for  
our push into the mainland.*

We recognise that to ensure the extended success of our business we must have people capable of delivering higher productivity, and value-added performance. This year our human resource focus has been on developing a knowledge-based ethos underpinned by a culture of lifelong learning. One result of this, is that our well-trained workforce is now a cornerstone for our push into the mainland.

In 2001, the Group has been able to build on its reputation for quality, reliability and technical capability by forming partnerships with several large international consortiums and local gas producers. We are now in a good position to meet China's accelerating need for natural gas infrastructure and application commensurate with her entry into the World Trade Organisation (WTO) and winning of the 2008 Olympic Games.

Other new business ventures are also bearing fruit. Our ECO LPG filling stations are gaining from the move to a greener commercial motor fuel economy. Meanwhile, leveraging its gas pipeline track record, U-Tech Engineering Company Limited has metamorphosed into an integrated utility contractor for water, drainage, sewerage, electricity and telecoms, as well as gas installations. And iCare, riding high on Towngas' customer base and innovative ideas, is now well placed to benefit as a cost-effective quality Internet and IDD service provider.



## RESIDENTIAL MARKET

Hong Kong's high housing completion and occupancy rates in 2001 helped the Company gain 78,036 new residential customers, an impressive 5.9 per cent addition to the previous year's customer base. This, together with sales of appliances to customers replacing older units, contributed to over 274,600 new residential appliance installations, substantially improving our overall penetration rate.

A key focus of our business strategy has been to secure a valued place in the minds of our residential customers. Through an aggressive campaign backed by an innovative, practical and captivating product range, we have, for the first time, successfully created a unique brand personality – TGC – for Towngas home appliances. This new brand, focusing on the mid- to upper-end product range, has helped to differentiate us from market competition, boosting sales at the retail level.



*The world's first 2-in-1 washer/gas dryer offers many unique benefits to the modern family.*

We have been particularly pleased with the successful launch of our 2-in-1 washer/gas dryer – a strategic product for Towngas and a totally in-house development aimed at enhancing gas demand. Though new to the market, more than 3,400 units have now been sold, each contributing an additional 40 per cent to every household's gas consumption. Together with our best-selling stand-alone clothes dryer, which continues to have a growing reputation among consumers, our total household clothes drying sales this year have exceeded the 20,000-unit mark for the first time.

Underscoring the Company's emphasis on safety, convenience and functionality, and our sensitivity to ever-changing customer needs, a number of other innovative products were also unveiled during the year. These included programmable hotplates with timer functions to ensure better cooking results, a range of new digitally-controlled temperature modulating water heaters, and a dishwasher connected to a gas water heater.

The Superbowl (a two burner hotplate with built-in rice cooker) continues to be very popular, with 26,000 units sold in 2001. Product developments such as the Superbowl, 2-in-1 washer/gas dryer and gas-heated dishwasher are the result of constantly listening to what our customers need. By creating a range of appliances that are particularly suitable for the compact home environment in Hong Kong, we have positioned ourselves to compete directly with electricity products and, in so doing, increase gas consumption.



*A special built-in rice cooker in the Superbowl hotplate is an example of our innovative design.*

Not content with sitting on our laurels however, during the period under review, we also launched several new hotplates and built-in hobs specifically for the LPG market sector. These are aimed at developing positive LPG user sentiment towards the Company, providing today's non-Towngas consumers with an opportunity to experience our excellent service and quality product reputation, while increasing our overall market share in gas appliances.

## COMMERCIAL AND INDUSTRIAL MARKET

Towngas' carefully formulated strategies protected our commercial and industrial market both from the worst effects of the economic slowdown, and from keen electricity suppliers' competition. By developing new applications, and creatively marketing existing products, we were able to sustain gas sales levels despite weak consumer sentiment.

The popularity of our desiccant dehumidifier continues to strengthen among industries which require a controlled indoor climatic environment such as shopping malls, bakeries, food factories, wet markets, commercial kitchens and medical laboratories. A strong interest in energy saving has also benefited sales of our high-efficiency gas



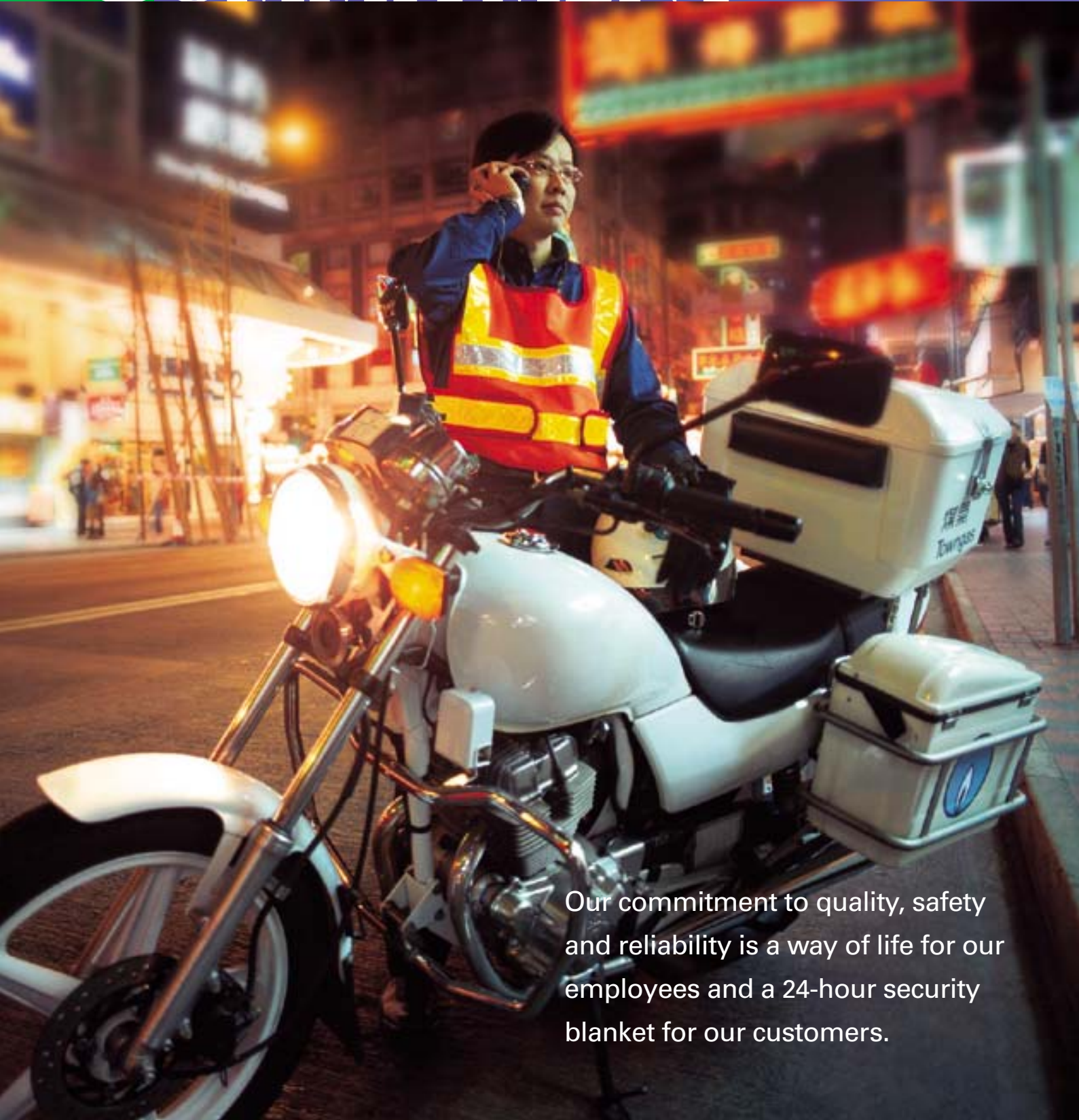
*High-performance gas steam boilers are now in service at Queen Elizabeth Hospital.*

condensing boiler, particularly to several major hospitals in Hong Kong. As this kind of equipment gains increased market acceptance, our drive to compete directly with electricity in the commercial sector is clearly beginning to bear fruit.

We have also put effort into developing a higher profile for our existing commercial product range. Building on the success of our Perfect Ten 2000 campaign, which highlighted ten different popular Chinese cooking methods, we held "The Best of the Best" Competition jointly with the Hong Kong Tourism Board in 2001. As restaurant chefs demonstrated their skills using Towngas appliances, this competition helped raise awareness of the benefits of cooking with gas as an energy source, and the advantages of instant flame control.



# COMMITMENT



Our commitment to quality, safety and reliability is a way of life for our employees and a 24-hour security blanket for our customers.

*There is no end to customer service*

*– it's a journey.*

## CUSTOMER SERVICE

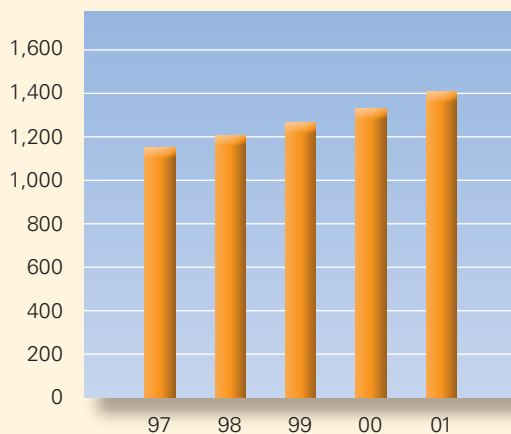
There is no end to customer service – it's a journey, a journey that goes to the heart of service delivery embracing customer care, convenience and safety. Customer care means ensuring all our staff have the knowledge and skills to provide customers with a level of service satisfaction that is second to none. A key factor here has been to intensify and extend our level of training. Over the past year, we have substantially raised our customer service and sales training hours by 21 per cent in our determination to constantly energise and refocus our employees' performance at the customer interface.

We know our customers are busy people, and that convenience is an important aspect of service quality. Our Automatic Meter Reading (AMR) system, developed in-house, became fully operational in 2001. The technology provides not only better tenant security and less disturbance as home visits are unnecessary, but also greater billing accuracy. We also want to make it easy for our customers to deal with our Company, so this year we established more channels for settling gas bills including post offices and selected banks. Moreover, an Internet billing enquiry service has recently been launched.

Always striving to exceed our customer expectations, we continually seek to address both their ever-changing tastes as well as the needs of an upcoming generation of consumers. In December 2001, we pushed our frontiers forward in service provision when we opened a concept store called Towngas Avenue. Towngas Avenue is about projecting a way of living, showing our branded kitchen and bathroom gas appliances in attractive settings, providing a contemporary cafe in which to relax, a book corner for browsing in, and periodic cooking exhibitions by master chefs,

**Number of Customers**

*Company (thousand)*



## TOWNGAS SERVICE PLEDGE

May 2000 to April 2001

WE PLEDGE		WE ACHIEVED
<b>Reliability</b>	Uninterrupted gas supply	99.997%
	Restoration of gas supply within 24 hours	99.97%
<b>Safety</b>	Emergency Teams arrived on site within an hour <sup>1</sup>	99.83%
<b>Appointments</b>	Availability within 3 working days	1.14 working days on average
	Keeping appointments <sup>2</sup>	95.78%
<b>Speed and Convenience</b>	Customer Service Hotline	
	– Calls answered within 5 rings – Less than 1 minute to get access to our staff	98.18% 94.52%
<b>Service Attitude</b>	Courteous and friendly <sup>3</sup>	8.43 (maximum score:10)
<b>Handling Suggestions</b>	Handled written comments or suggestions within 3 working days	100%

1 Average 20.83 minutes.  
2 The percentage was based on results of monthly surveys conducted between May 2000 and April 2001.  
3 The result was based on monthly surveys conducted between May 2000 and April 2001 by an independent research company.

as well as offering the full range of customer services. This is lifestyle shopping for discerning customers. Although very new, the rapid growth of the store's popularity would seem to augur well for the future.

Town gas is one of the safest forms of energy now available but we know our customers still have concerns about using it. So we geared up our Regular Safety Inspection programme in 2001, and in so doing reduced the number of on-demand service requests by 4 per cent which in turn decreased the number of calls to our Customer Service Hotline by 2.6 per cent.

We feel that our successes in 2001 are due not only to the care, convenience and safety we offer customers, but also to our courtesy, sincerity and competence. Our thinking is holistic. Our forward-looking strategies are always seeking to pre-empt customer wants, likes and needs; but on the other side of the coin are the benefits that accrue internally to the Company as a result of our proactive policies. So for example, an increase in AMR installations and fewer hotline calls has seen a noteworthy improvement in productivity in the year under review, due to the reduction in the number of employees needed for meter reading duties and maintenance visits.



Towngas continued to invest in the *expansion* of its pipeline network so as to ensure *capacity* can meet *future demand*.

## GAS SUPPLY AND PIPELAYING PROJECTS

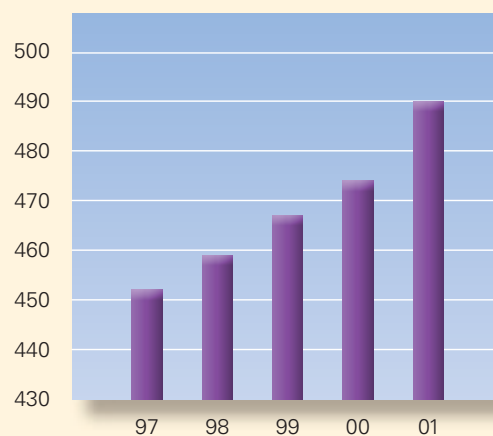
Towngas continued to invest in the expansion of its pipeline network so as to ensure capacity can meet future demand as new developments come on stream, and confidence in the safety of the gas system is not compromised. On-going investment also guarantees a sizeable gas storage reservoir, thereby enhancing network reliability and better load-site accessibility for businesses in newly-developed districts. With the completion of another 73 km during 2001, our total pipeline network now stands at 2,994 km.

Several substantial strategic gas projects are currently under construction in the New Territories. Pipelaying to the Science Park alongside the Tolo Harbour will finish in 2002, while the 24 km 3,500 kPa 750 mm-diameter Eastern Transmission Pipeline, essential for ensuring adequate future supply capacity for the entire network, is on target for completion in 2006.

Enhancing gas supply reliability for Hong Kong Island is an equal priority. Planning and design work on a 600 mm-diameter 700 kPa

submarine pipeline across Western Victoria Harbour is underway. Meanwhile in February 2001, construction commenced on a 2.6 km pipeline extension to the high-tech Cyberport complex at Telegraph Bay, on the southwestern side of the Island. This pipeline will supply gas to a premier working, social and living environment embracing both IT industries and some 2,700 quality residential units.

Number of Customers per km of Mains *Company*





*A regular maintenance check on one of our newly-designed underground gas governors.*

Towngas is also working closely with the relevant government authorities to ensure the pipeline network on Lantau Island for the Hong Kong International Theme Park is on schedule for completion in 2004. This theme park, resort hotel, retail, dining and entertainment complex is expected to attract over 5 million visitors in the first year of operation, mostly from the mainland and other Asian countries, and will be a valuable, long-term generator of revenue for the Company.

In 2001 we have also put a lot of emphasis on innovative teamwork. One group re-engineered our road opening workflow processes for underground gas installations, thereby shortening average project time by up to 30 per cent in 2001, reducing inconvenience to the public and ensuring better use of resources. Another team designed a compact underground pressure regulator, freeing up valuable development site land,

and simultaneously improving the visual environment by removing unsightly above-ground structures. In other words, we have not forgotten that strategic positioning is not just about extending the network, but also about advancing efficiency and adopting a proactive stance towards our public service obligations.


## SAFETY

Safety in the home, safety on site, and safety at work is a given for our Company. We see the promotion of consumer safety as part and parcel of our core business responsibilities. Therefore, in 2001, Towngas proactively conducted or sponsored 73 safety exhibitions or talks, and readily participated in the Government's Electrical and Mechanical Safety Campaign.

Occupational safety is a key concern and we are pleased to report that our Accident Frequency Rate was at a record low of 1.0 for every 100,000 man-hours worked during 2001, representing an overall improvement of 32 per cent compared to the previous year. Indeed, in the last three years we have reduced the number of unwelcome gas work-related incidents by more than half, thereby enhancing the safety of site workers as well as members of the public. In 2001, we also rationalised our inspection visits to work sites, improved methods of locating underground pipes



# RELIABILITY



We are committed to providing customers with an uninterrupted gas supply. Over the years, we have maintained a reliability rate as high as 99.997%.



# ENVIRONMENTAL PROTECTION

to avoid damage by non-gas related utility or roadwork construction, and implemented extensive education programmes for contractor operatives. These efforts have paid off with the number of gas leaks decreasing by 15 per cent and third party damage by 11 per cent in the past year.

Maintaining the safety of our own employees is also an issue we take very seriously. We were therefore especially proud to win two Gold Awards in the 2001 Occupational Safety and Health Enhancement Forum. Our “Transport Safety Improvement Programme”, focusing on reducing the number of traffic accidents, was recognised as an important contribution towards developing better safety awareness among our employees.

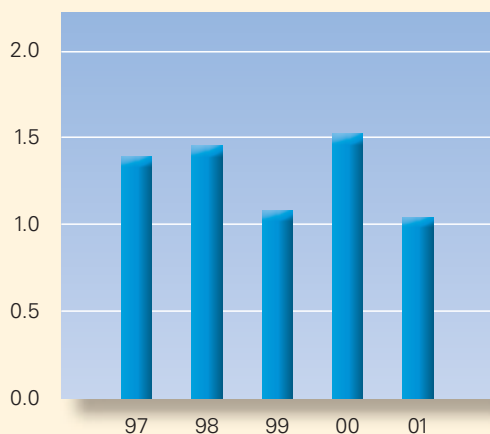
Towngas has an excellent safety record; we are not about to compromise in any way on that reputation. To that end, as an integral part of expanding our China operations in 2001, we have also been very careful to instigate strict safety guidelines, training programmes and stringent work procedures.

Towngas is totally committed to a policy of conserving energy and reducing pollutant emissions. In 2001, we harnessed some 8.23 million cubic metres of landfill gas from our first project of its kind at our Shuen Wan site. This application allows us to not only eliminate the burning of landfill generated methane to the atmosphere, so contributing to a reduction in global warming, but also reduce our consumption of naphtha and therefore help to conserve the earth’s limited fossil fuel resources. Based on our successes in this area, we are now actively looking for other suitable landfill sites in order to further expand our role in environmental protection on a larger scale.

Whilst we are unequivocally dedicated to minimising our operations’ impact on the environment, we are always seeking to combine this with ways to generate commercial value as well. In 2001, we recycled almost 9,000 tonnes of global warming carbon dioxide waste from our gas production process for making dry ice, becoming a key supplier to the market, and for distribution to carbonated soft drinks manufacturers. We also introduced EcoVent, an electrostatic precipitator, onto the market. This helps reduce oil pollutant emissions discharged as a by-product of intensive cooking in commercial kitchens. Initial market response has been extremely encouraging, and this product has also received a warm welcome

### Accident Frequency Rate

*Company (Number of accidents per 100 thousand man hours)*



While minimising our operations' impact on the environment, we seek to generate commercial value as well.

from the Government's Environmental Protection Department as part of its campaign targeted at restaurant operators.

We also recognise the importance of shifting from fossil fuels to renewable energies in our determination to achieve energy savings and better environmental conservation. We are therefore especially pleased to be able to report that the green schemes using solar energy for

instrumentation and control purposes, implemented at 17 major district pressure reduction and pipeline inspection stations, look extremely promising in our efforts to reduce electricity consumption.



*The first Towngas Environmental Report validates our efforts towards environmental protection.*

Towngas takes accountability very seriously, and we have always sought to keep the community informed of our performance and achievements. So the publication of the first Towngas Environmental Report in 2001 was an important step in validating the Company's efforts towards environmental protection. This and future reports will highlight how our research, development and strategic policies generate opportunities for the people of Hong Kong to enjoy a lifestyle in surroundings that create less damage to the environment.



*Enthusiastic Towngas volunteers contributed to a very successful corporate effort by planting 10,000 seedlings.*

## ENVIRONMENTAL PERFORMANCE TABLE

### OZONE LAYER PROTECTION

98% of our vehicle air conditioning systems now operate with refrigerant R134A.  
60% of BCF fire extinguishers have been replaced by dry powder ones since 1995.

### AIR QUALITY

Total NO<sub>x</sub> output was 8.91 kg /TJ of town gas  
Total SO<sub>x</sub> output was 0.20 kg /TJ of town gas  
Total CO<sub>2</sub> output was 15.04 metric ton /TJ of town gas

### WATER QUALITY

Total Waste Water Output was 9.35 m<sup>3</sup> /TJ of town gas

### NOISE

Regular noise survey of every gas offtake station was conducted. All of them met the statutory requirements.  
No abatement notice has ever been received.

### CHEMICAL WASTE

Total chemical waste output was 0.98 kg /TJ of town gas

*All legal requirements relating to environmental protection were fully complied with.*

We are exceptionally determined in our support for local awareness and outreach activities such as the Corporate Afforestation Scheme, clean-up campaigns and recycling programmes, so it was with particular pleasure that we received the Business Environment Council's Environmental Performance Award for 2001. Our commitment to environmental protection however, extends not only into the heart of the community, but also into the culture of the Company. This year, our steadfast efforts to reduce wastage of paper and

recycle computer equipment and containers were well rewarded when we gained a Gold Logo in the Government-sponsored Wastewi\$e Scheme organised by the Environmental Protection Department.



Gold Wastewi\$e  
卓越明智減廢