Four Keys to the Future Growth Potential of Tokyo Gas



Fact 1 GROWTH POTENTIAL

Until February 1995, city gas suppliers in Japan were allowed regional monopoly supply for all of their customers, but were subject to various regulations, such as supply obligations and rate controls. However, against a background of deregulatory initiatives and the introduction of the principle of competition in Japan and overseas, the deregulation of the gas supply industry was commenced in stages from March 1995, with the objectives of promoting competition among suppliers, increasing management efficiency, and expanding the energy choices available to customers. As a result, the growth opportunities available to suppliers expanded.

Gas and Electricity Deregulation Schedule and Share of Total Volume in Deregulated Fields



In the gas industry, the scope of deregulation was extended to customers with annual contracted volumes of more than 2 million m³ a year in 1995 and those with annual contracted volumes of more than 1 million m³ a year in 1999. Figures for share of total volume are based on fiscal 2007 data. (Source: The Japan Gas Association) In the electricity industry, meanwhile, the scope of deregulation was extended to customers with annual consumption of more than 2,000 kW in 2000. (Source: Agency for Natural Resources and Energy, the Market Monitoring Subcommittee 1st Report, April 2005)



Growth in the Deregulated Sector

In addition to the deregulation of the city gas supply industry, the electric power industry was also deregulated at the same time. The deregulation of both gas and electric supply made it possible for other companies to supply gas in our service area. On the other hand, it also enabled Tokyo Gas to supply gas and electricity to customers in the service areas of other companies. In this setting, the Company's growth is supported by new operational pillars. These include the power generation business, which draws on existing infrastructure, and cogeneration systems, which use gas and supply heat and electricity. The Company will aim for sustained growth as an integrated energy business that supplies energy and heat in addition to its core business—the supply of city gas—in the Tokyo metropolitan area and the Kanto region.

EXPECTING 18% growth IN GAS SALES VOLUME DURING THE NEXT 5 YEARS

Fact 2 ENVIRONMENTAL FRIENDLINESS

In comparison with other fossil fuels, the combustion of natural gas produces limited emissions of carbon dioxide (CO₂) and nitrogen oxide (NO_x), and no emissions of sulfur oxide (SO_x). Natural gas is a form of energy with an extremely low environmental burden. Accordingly, the Company believes that its operations—promoting the use of natural gas by extending pipelines and expanding markets—contribute to the development of environmentally friendly society.



Forecast for Global Energy Supply Under Various IEA Scenarios



ACT Map 2050 scenario: Atmospheric concentration of CO₂ in 2050 is reduced to 550 ppm or lower Blue Map 2050 scenario: Atmospheric concentration of CO₂ in 2050 is reduced to 450 ppm or lower

According to the Intergovernmental Panel on Climate Change (IPCC), to prevent a variety of adverse factors leading to climate change on a global scale, the atmospheric CO₂ concentration needs to be reduced to less than 450 ppm (IPCC Fourth Assessment Report).

CO2 Reduction Effect from Using Natural Gas for Industrial Furnaces



Strong Demand for Clean Energy

Under the Blue Map 2050 scenario announced by the International Energy Agency (IEA) calling for CO2 emissions to be cut in half by 2050, the use of environmentally superior natural gas is expected to increase. In recent years, companies have announced their own energy-saving and CO2 reduction targets, and there is a notable trend toward the aggressive introduction of energy-saving/new energy facilities. The shift toward the use of natural gas as a fuel has begun to support the Company's growth. With a focus on methods of using new energy in a low-carbon society, the Company is developing and promoting highly efficient appliances that use city gas. We are also nurturing technologies to realize a reduced environmental burden. These have led, for example, to our achievement of a world first with the market introduction of "ENE-FARM," a residential-use fuel cell.

CO2 EMISSIONS FROM GAS CAN BE REDUCED TO 55% LESS THAN CO2 EMISSIONS FROM OIL

Fact 3 SERVICE AREA

Even among Japan's city gas suppliers, who all handle the same environmentally friendly natural gas, Tokyo Gas has a key strength in its location in the Kanto area. This is the market with the highest energy demand in Japan and a region that is expected to continue to grow in the years ahead. Supported by this strength, Tokyo Gas is positioned to achieve continued growth in both number of customers and gas sales volume in the future.



Japan Total: 32,097 million m³

Source: The Japan Gas Association web site, (Gas Sales Volume JGA Newsletter)

Substantial Latent Demand and Growth Potential

There are a large number of city gas suppliers in Japan—about 210—but the three largest account for approximately 80% of the total city gas sales volume. Tokyo Gas has a market share of 43%, the largest share of any of these companies.

The location of a supplier's service area has a significant influence on its operational scale. The Kanto area is Japan's largest economic region, accounting for about 40% of Japan's GDP, and even though Japan faces population decline overall, the Kanto area is one of the few regions in Japan that is expected to benefit from inward migration. Moreover, a key geographical feature of the Kanto region is that it is relatively easy to extend pipelines out to the peripheral industrial regions. In the future, we will make full use of this geographical advantage as we work to uncover potential demand that exists in the area extending 200 km from Tokyo and to provide gas to more customers.

KANTO AREA: 40% of JAPAN'S GDP

Fact 4 COMPREHENSIVE STRENGTH

We are leveraging the business opportunities stemming from a deregulated competitive environment, environmentally friendly natural gas, and our promising operational base in the Kanto region. Moreover, we are drawing on the strength of our global LNG value chain, extending from upstream to downstream, and providing customers with a wide range of value and services related to energy. Moving forward, as the No. 1 gas supplier in Japan in terms of gas sales volume, Tokyo Gas will also strive to be No. 1 in comprehensive strength.



People Supporting the Comprehensive Strength of the Tokyo Gas Group

1 Procurement / Transportation

Safety inspection on an LNG tanker. Using our own fleet of seven vessels, we have increased our procurement capabilities. We obtain more than 10 million tons of LNG a year from regions such as Australia, Malaysia, and Brunei, representing the second-largest LNG import volume in Japan.

2 Transport of city gas through pipelines

Maintenance and management of high-pressure gas pipelines. Supporting the foundation of safe gas transport. The pipeline network of Tokyo Gas extends to 57,000 km.

3 Engineering

Introducing gas facilities and conducting combustion tests at the plants of customers who have converted to the use of natural gas as a fuel. In the industrial sector, we provide total solutions that extend from proposing gas facilities to operating, maintaining, and upgrading them.

4 Gas appliance installation and inspection

A Tokyo Gas LIFEVAL employee inspects gas appliances at a customer's residence. Tokyo Gas LIFEVAL is the integrated point of customer contact for our efforts to carefully meet diverse customer needs in the residential sector.

Providing Strong Benefits through Our LNG Value Chain and Sales Capabilities

Tokyo Gas conducts an integrated energy business, with natural gas as its core energy source. The Company leverages its comprehensive strengths at each stage of the LNG value chain. In LNG procurement, we have created a portfolio that supplements 10 long-term projects with short-term and medium-term projects, and this way we have achieved stable procurement that can respond flexibly to future changes in the operating environment. With a focus on future growth, we are aggressively expanding terminals and pipeline networks.

We have established a sales system in the residential sector that is based on close links to local communities and provides one-stop solutions to meet increasingly diverse and sophisticated customer needs. In the commercial and industrial sectors, we are working to expand gas demand through multi-energy supply, which involves combinations of electricity and other forms of energy, centered on natural gas; advanced energy engineering capabilities; and energy services, including optimal utilization of facilities and maintenance.

No.1 in comprehensive strength