# **Earth-Oriented Environmental Activities and Social Contribution**

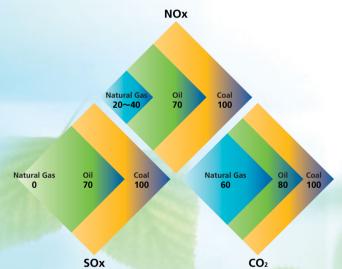
As a leader in environmental management, Tokyo Gas has established a policy that promotes the use of resources and energy in harmony with the environment. The Company actively works to develop technologies that reduce environmental impact, promotes the efficient use of energy, and discloses environmental data. In addition, Tokyo Gas contributes to society as a good corporate citizen.

### **Environmental Conservation**

## **Natural Gas: A Clean Energy Source**

Natural gas, the main feedstock for city gas, is a very clean energy source. Compared to other fossil fuels, natural gas combustion emits less carbon dioxide (CO<sub>2</sub>), which is the main cause of global warming, and less nitric oxide (NOx), a source of air pollution. It also emits no sulfur oxide (SOx). The Tokyo Gas Group has positioned natural gas as the core element in its corporate growth.

#### ■ Composition of Emission Levels (Coal = 100)



Source: IEA Natural Gas Prospects (1986), Natural Gas Prospects and Policies (1991)

### **Measures to Prevent Global Warming**

Tokyo Gas has established its own Global Warming Prevention Guidelines, and is promoting energy conservation in its business activities. We also undertake activities to reduce CO<sub>2</sub> emissions by city gas customers. Cogeneration systems using natural gas can play an important role in curtailing CO<sub>2</sub> emissions. These systems feature overall energy efficiency of 70-80 percent, which effectively suppresses CO<sub>2</sub> emissions.

# **Reducing Waste and Promoting Recycling**

Our "Reduce, Reuse, Recycle" promotion guidelines contribute to the creation of a recycling-oriented society, and promote reduction in the amount of waste produced in the course of our operations. In addition to reducing the amount of waste paper generated, which accounts for most of the trash produced in our offices, we have set targets for the final disposal rate of industrial waste and are energetically working to achieve them. Moreover, Tokyo Gas is working to reduce the amount of residual soil derived from operations such as gas pipeline installation.

We are also vigorously promoting reduction, reuse and recycling of waste among customers. Tokyo Gas was quick to incorporate environmental protection into the design of its products, working to limit emissions from the design phase. The Company also developed and now uses the Saving Recycling Innovative Model System (SRIMS), a proprietary system for the efficient recovery, recycling and disposal of gas appliances, pipeline materials and other industrial waste. Furthermore, Tokyo Gas began collecting and properly disposing of discarded residential gas air conditioners and other appliances in response to the Home Appliance Recycling Law, which went into effect in April 2001.

#### **Head Office Obtains ISO14001 Certification**

Tokyo Gas is working to acquire ISO14001 certification, an international standard for environmental management systems. The Company's three LNG terminals, and the Shinjuku and Makuhari District Heating and Cooling Centers\*, have received ISO14001 certification, and the head office received this certification in October 2002. Tokyo Gas is aiming to achieve certification companywide by the end of fiscal 2004.





#### **Disclosure of Environment Information**

Tokyo Gas publishes an annual Environmental Report and discloses environmental information on its website. In addition, we introduced environmental accounting in fiscal 2000 to monitor the benefit of environmental protection by calculating the total investment and expenses allocated to it. The Company also publishes and distributes booklets that feature helpful information on conserving energy, such as the Ultra Energy-Saving Reader.

http://www.tokyo-gas.co.jp/env/index\_e.html

### **Preventing Air Pollution**

Tokyo Gas has formulated NOx Reduction Guidelines to encourage the use of natural gas, which produces low emissions of NOx, a cause of air pollution, as well as the development of low-NOx combustion technology and the popularization of more efficient water heaters and cogeneration systems. In particular, there is growing interest in natural gas vehicles (NGV), an environmentally friendly vehicle that not only produces significantly less NOx emissions compared to diesel engines, but also does not emit any suspended particulate matter (SPM) or SOx. Promoting the spread of NGVs is an important part of our environmental protection activities. At present, there are approximately 6,700 NGVs, including city buses, in the Tokyo Gas service area.



Natural gas vehicles, which produce reduced NOx emissions, include this city bus.

# **Contributing to Society**

Committed to social harmony, Tokyo Gas contributes to society in a number of ways under the three types of communication outlined below.

### Lifestyle and Culture Communication

Tokyo Gas offers a range of participatory activities centered on food and home that are designed to enrich people's lives. Examples include co-sponsoring the "Mini-University," a series of seminars for housewives, and promoting "Eco-Cooking." Eco-Cooking is based on the concept of using familiar items to learn about environmental issues. Tokyo Gas promotes environmentally friendly ways of shopping, cooking and tidying up after meals.

### **Environmental Communication**

Recognizing that the global environment closely affects daily life, Tokyo Gas sponsors a variety of activities to provide a chance for people to play a part in its protection, such as the "EARTH VISION Global Environmental Film Festival," acorn-planting and "green" fund raising. Acorn-planting aims to increase environmental awareness through the activities of gathering acorns, raising them into seedlings, and then transporting them to the mountains for planting. Tokyo Gas has been carrying out this activity since its start in 1993 with the help of an environmental non-profit organization.

#### Children's Educational Communication

For children, Tokyo Gas provides an opportunity to learn and explore by utilizing its know-how, technology and facilities. The Company has been holding pottery contests and a soccer training school for elementary and junior-high school students. It also operates the Gas Science Center, the Energy and Earth Exploratorium and other facilities. As part of an initiative to support education on energy and the environment, since 2002 Tokyo Gas employees have been visiting elementary schools to distribute supplementary materials and conduct hands-on activities.

#### **Volunteer Activities**

In addition to the above communication activities, Tokyo Gas provides its employees with useful information and support for activities to promote volunteerism and a sense of social responsibility. The Company has established the Tokyo Gas Volunteer Network, an employee network for volunteer-related information and support, and also offers leaves of absence for volunteer activities.



#### **Eco-Cooking Book**

Since 1995, Tokyo Gas has held approximately 700 Eco-Cooking sessions, attracting more than 30,000 participants. The Company continues to develop the program, publishing a collection of recipes in March 2003 and launching a dedicated website.

(Eco-Cooking is a registered trademark of Tokyo Gas.)



#### School Visits

Thirty Tokyo Gas employees responsible for supporting education visit schools to teach classes on eight different topics including cryogenic energy, Eco-Cooking and natural gas vehicles.