

Osaka Gas Group

Energy Business



G1: Osaka Gas and Gas Business Group

Procurement and transportation/distribution/supply of natural gas, housepipe installation, and gas appliance sales



G2: Liquid Gas Group

Supply and sales of fuel gas, production and sales of industrial gases



G3: Nissho Iwai Petroleum Gas Group

Import, wholesaling and retailing of LPG



G4: Gas and Power Investment Group

IPP and ESCO operations, electricity retailing and heat supply, investment in energy business (domestic and abroad)



G5: Harman Group

Development and sales of gas appliances and related equipment

Non-Energy Business



G6: Urbanex Group

Real estate development, management, and leasing



G7: Kinrei Group

Production and sales of frozen foods, restaurant chain operation



G8: OGIS Research Institute Group

Information processing services, sales of computer equipment and software



G9: Osaka Gas Chemicals Group

Sales of coke and chemicals, production and sales of carbon fiber and related products



G10: OG Capital Group

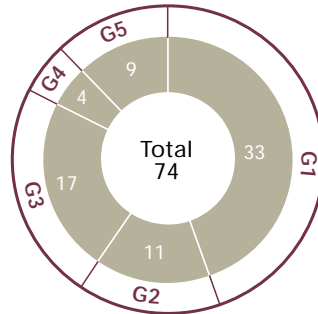
Engineering, contract research, sales of home equipment, security services, sports businesses, senior citizen-related services, information and financial services, and others

Energy Business

The Energy Business sector of the Osaka Gas Group is composed of five groups: Osaka Gas and its affiliates in the Gas Business Group (G1), the Liquid Gas Group (G2), the Nissho Iwai Petroleum Gas Group (G3), the Gas and Power Investment Group (G4), and the Harman Group (G5). The Gas Business Group consists of companies that are closely involved in the gas business. The Liquid Gas Group manufactures and sells industrial and fuel gases. In September 2000 the Nissho Iwai Petroleum Gas Group became part of the Osaka Gas Group. The Gas and Power Investment Group will develop a wide-ranging involvement in areas that include the electric power business and overseas business activities. The Harman Group sells gas appliances and equipment.

Number of Companies in Energy Business

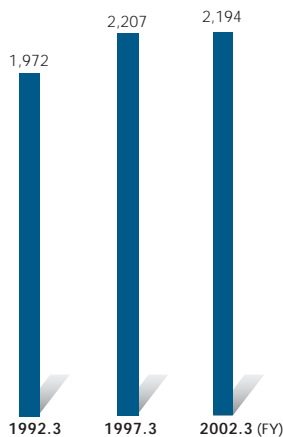
(As of March 2002)



Residential gas hot water floor heater

Residential Gas Sales by Volume

(Millions of m³)



G1: The Gas Business Group

Overview of Gas-Related Activities

Gas sales in fiscal 2002 amounted to 7,309 million cubic meters, a decrease of 1.3% from the previous year. Amid a difficult operating environment that included a sluggish economy and higher-than-normal temperatures, this Group worked to cultivate new demand for cogeneration and air-conditioning systems.

Residential Gas Sales

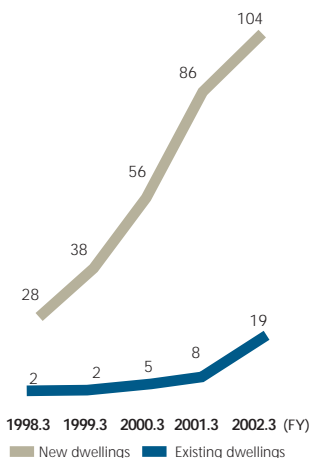
The number of customers increased by 83,000, or 1.3%, to 6,484 thousand. However, sales for residential use edged downward by 2.2% to 2,194 million cubic meters, owing to the effects of warm temperatures at the beginning of spring.

The Osaka Gas Group is actively involved in the development and marketing of safe, convenient gas appliances and systems to promote the use of natural gas as a clean, efficient household energy resource. Recent years have witnessed a rapid increase in the use of central heating equipment, such as hot water floor heating and bathroom heater-driers. Particularly noteworthy, in recent years sales of hot water floor heaters have soared, as these heaters are ideal for matching people's health consciousness and because these heating systems are suited for changes in housing structures that include such characteristics as high degree of air-tightness and insulation. Osaka Gas has designated its gas hot water floor heaters as a crucial product for augmenting residential gas sales and garnering market share for heaters, and will thus focus on expanding sales of these heaters.

The Osaka Gas Group is also working to boost summer gas demand by promoting the use of home-use gas air conditioners in addition to selling the Housing Multi, which is a gas heat pump system. Customers who use these products enjoy reduced running costs under a special rate introduced by Osaka Gas. For customers using home floor heating we offer the Household Floor Heating Contract, the 5% discount for customers using bathroom dryers along with home floor heating, and the Household Air Conditioning Contract for home gas air-conditioning systems.

Sales of Gas Floor Heaters

(Thousands)



Residential Gas Sales

Fiscal Year	1998.3	1999.3	2000.3	2001.3	2002.3
Gas sales (millions of m ³)	2,165	2,114	2,213	2,244	2,194
Number of customers (thousands)	5,786	5,909	6,001	6,092	6,172
Average monthly consumption (m ³ /month)	34.8	33.4	34.5	34.5	33.3
Average annual temperature in Osaka (°C)	17.0	17.7	17.1	17.3	17.5

Industrial Gas Sales

Natural gas has become a key energy resource in a diverse range of industries, including metals, chemicals, machinery, foodstuffs, and textiles. Natural gas is cleaner than other forms of primary energy and boasts numerous other advantages, including reduced energy consumption and space requirements, as well as ease of control. In addition, Osaka Gas uses its technical expertise to develop detailed proposals in response to customer requirements. Accordingly, demand for natural gas is growing.

In addition to demand for thermal energy for industrial furnaces and boilers, there has also been rising demand for natural gas for cooling processes and clean rooms. Also, there has been sustained increase in the use of cogeneration systems, which produce both heat and electric power. These systems allow major energy savings in factories. Their growing popularity reflects the priority that society places on energy conservation.

During the fiscal year, we secured new types of demand, mainly for fuel conversion at large-scale industrial furnaces and users of cogeneration systems. Nevertheless, sales declined 3.0% from the previous fiscal year, to 3,547 million cubic meters.

Industrial Gas Sales

Fiscal Year	1998.3	1999.3	2000.3	2001.3	2002.3
Gas sales (millions of m ³)	3,162	3,134	3,526	3,656	3,547
Number of customers (thousands)	21	21	21	21	21
Average monthly consumption (m ³ /month)	15,811	15,834	18,286	19,106	18,560

Sales of Gas for Commercial, Public, and Medical Use

Gas sales to the commercial, government, and medical sectors are increasing mainly in gas air-conditioning system and cogeneration system areas. Gas absorption air conditioning has become the dominant technology for major buildings. Gas heat pump air-conditioning systems are becoming increasingly popular in small and medium-sized buildings because of their convenience and suitability for stand-alone installation, and are contributing to higher demand for gas.

Cogeneration systems are used by customers with business operations ranging in size from large commercial facilities to hospitals, hotels, and small retail outlets. In particular, a compact 9.8-kW cogeneration system for smaller and medium-sized office buildings and shops, has been very popular since its launch in fiscal 1999. To date it has been installed by 250 customers.

Osaka Gas is also engaged in urban environmental projects. Its Super Waste-to-Energy Generator is a highly efficient power generation system that makes an important contribution to energy conservation by employing waste heat from garbage incinerators in waste disposal plants as well as waste heat from incineration and drying during the sludge treatment process at waste treatment plants.

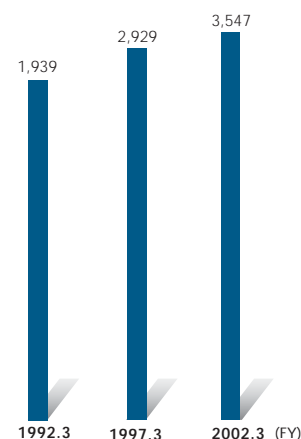
In kitchen-related demand fields, our New Super Appliances, which enhance the efficiency of the cooking environment, have attracted widespread attention, and the use of these appliances is rising.

Sales of commercial gas in fiscal 2002 amounted to 943 million cubic meters, a 3.2% increase compared with the previous year. Sales to the government sector and the medical sector grew 4.6% to 492 million cubic meters. These gains are due to favorable demand for air conditioning due to relatively high summer temperatures as well as the securing of new demand primarily from users of cogeneration systems and gas heat pumps.

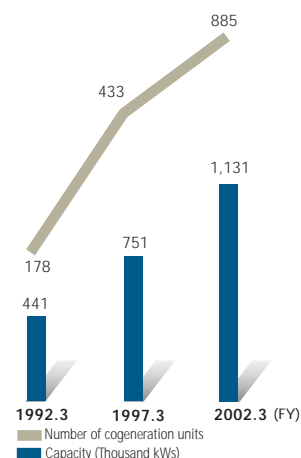


Environment-friendly glass melting furnace, the world's first to be developed by a gas company

Industrial Gas Sales
(Millions of m³)



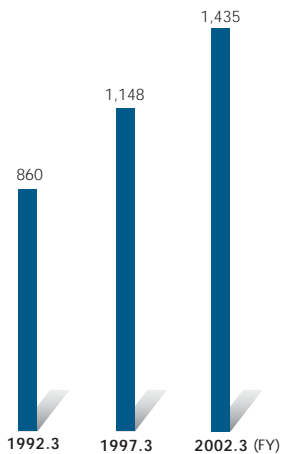
Number of Cogeneration Systems Installed



Sales of Gas for Commercial, Public, and Medical Use

Fiscal Year	1998.3	1999.3	2000.3	2001.3	2002.3
Gas sales (millions of m ³)	1,181	1,254	1,312	1,383	1,435
Number of customers (thousands)	276	280	284	288	291
Average monthly consumption (m ³ /month)	419	444	463	488	506

Sales of Gas to the Commercial, Public, and Medical Sectors
(Millions of m³)



The Distribution Control Center monitors safety of supply systems.

Maintaining and Improving Safety

Safety is the top priority for the Osaka Gas Group and paramount for the Group's survival. Accordingly, the Group implements a host of safety measures. For example, pipes and other supply facilities are regularly inspected for leaks, and older pipes are systematically upgraded to polyethylene pipes, which are more earthquake resistant.

Osaka Gas has implemented an array of measures to guard against the effects of earthquakes. These include microprocessor-equipped meters, which automatically shut off the supply of gas if an earthquake is detected, and the establishment of supply shut-off blocks. Much was learned from the experience of the Great Hanshin Earthquake of 1995. Osaka Gas doubled the number of shut-off blocks in its gas supply network and installed remote-controlled shut-off mechanisms for all middle-pressure A governors at approximately 300 locations. Shut-off devices with seismic sensors were installed in the approximately 3,000 middle-pressure B governors. This work was completed in fiscal 2001.

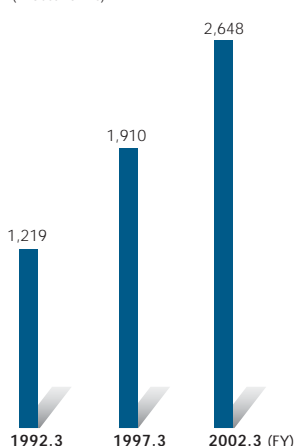
The seismic sensors are especially important, since they will prevent secondary disasters by allowing the supply of gas to be shut off immediately if damage is anticipated due to a major earthquake. In the event that the Distribution Control Center in the Company's headquarters is affected by a disaster, monitoring and control functions can be immediately switched to the newly completed back-up control center in Kyoto. Measures such as these are helping to strengthen the gas supply network against earthquakes.

G1 Group Companies

There are 33 associated companies engaged in both upstream and downstream activities closely related to the gas business of Osaka Gas. A number of these businesses complement various aspects of the gas business, while others are involved in spin-off activities.

Among these, the six consolidated subsidiaries in this category are Osaka Gas International Transport Inc., OG Road Co., Ltd., Kinki Piping Co., Ltd., Harman Engineering Co., Ltd., Enetech Kyoto Co., Ltd., and Enetech Minami-Osaka Co., Ltd. Osaka Gas International Transport owns LNG carriers, and its third vessel, the LNG *Jamal*, entered service in November 2000. OG Road helps to safeguard the global environment by manufacturing road materials using recycled excavated soil from pipeline construction works and other projects. Kinki Piping is the core of the contracting group that handles the installation of house pipes and pipelines for Osaka Gas. Enetech Kyoto, and Enetech Minami-Osaka carry out sales and installations of kitchen and heating equipment, beginning with floor heaters and bathroom heating and drying equipment.

Total Installed Air-Conditioning Capacity
(Thousand RTs)





G2: Liquid Gas Group

The Liquid Gas Group is composed of 11 companies, with Liquid Gas Co., Ltd. as its core. The main activities of the Group are the manufacture and sale of industrial gases and fuel gases. The five consolidated companies in fiscal 2002 were Liquid Gas, Cold Air Products Co., Ltd., Cryo-Air Co., Ltd., Liquid Gas Kyoto Co., Ltd. and Gasnet Co., Ltd.



An air-liquid separation facility (CRYO-AIR)



G3: Nissho Iwai Petroleum Gas Group

In September 2000, Osaka Gas acquired 70% of the shares of Nissho Iwai Petroleum Gas Corporation, an LPG wholesaler in the Nissho Iwai Group. This welcomed a 17-company group led by Nissho Iwai Petroleum Gas into the Osaka Gas Group. The activities of the Nissho Iwai Petroleum Gas Group range from the importation of LPG to wholesaling and retailing through a nationwide sales network. A total of seven companies, including Nissho Iwai Petroleum Gas and Nissho Propane Sekiyu Co., Ltd. are included in consolidation.



An LPG replenishing facility



G4: Gas and Power Investment Group

The Gas and Power Investment Group is made up of four companies, including the core company, Gas and Power Investment. The four include two consolidated subsidiaries, Gas and Power Investment and Gas and Power. Established in June 2000, Gas and Power Investment, is extensively involved in the energy business in Japan and overseas. In July 2001, this company took over the district heating and cooling business from Osaka Gas. In April 2002, Gas and Power began wholesaling of energy to Kansai Electric Power Co., Inc. using its Torishima Energy Center, an IPP facility.



Iwasaki-Bashi Area District heating and cooling system



G5: Harman Group

The Harman Group consists of nine companies, including Harman Co., Ltd. The Group's principal activities are the production and sales of gas appliances and equipment. This group includes three consolidated companies: Harman, Harman Planning, and Harman Seiki Co., Ltd.

Harman manufactures and sells a wide range of gas appliances, including water heaters, kitchen equipment and space heaters. Prolonged sluggishness in consumer spending and fierce price competition have conspired to create a difficult business environment. To respond to this environment, in January 2001 Harman decided to form a business partnership with another gas appliance manufacturer, Noritz Corporation. In September 2001, Harman split its group operations into three companies and in October transferred one of these, a manufacturing company, to Noritz. In the future, while expanding sales using different sales channels of the two companies and pursuing increased rationalization and efficiency, mainly in manufacturing, we will progress with this business tie-up that will yield significant synergy benefits through the combination of Harman's expertise in the area of kitchen equipment, including built-in cookers, with Noritz's leadership in the area of water-heating equipment.



A glass-top built-in cooker

Revenue of Companies in the Energy Business Field

Millions of Yen

Fiscal Year	1998.3	1999.3	2000.3	2001.3	2002.3
G1 The Gas Business Group (Excluding Osaka Gas)	45,520	44,651	44,911	49,295	54,475
G2 Liquid Gas Group	20,901	19,726	19,848	21,115	20,302
G3 Nissho Iwai Petroleum Gas Group	—	—	—	64,698	63,143
G4 Gas and Power Investment	25	26	20	585	9,004
G5 Harman Group	48,609	50,317	48,540	49,337	33,568

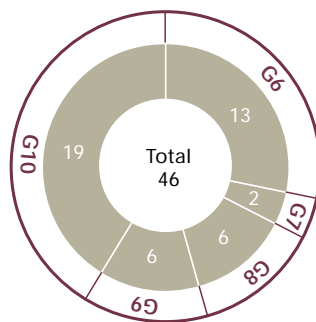
Non-Energy Business

The Non-Energy business group is made up of five groups: the Urbanex Group (G6) of urban development businesses; the Kinrei Group (G7) of food and restaurant businesses; the OGIS Research Institute Group (G8) of information-related businesses; the Osaka Gas Chemicals Group (G9) of companies involved in the areas of coke, chemicals, and materials; and the OG Capital Group (G10), which serves as a financial company for the Osaka Gas Group, helps to incubate new businesses, and includes companies involved in these diverse areas of business, beginning with services.

More than 20 years have passed since Osaka Gas established the New Business Development Office as a specialist organization to lead its business diversification. At present, the Osaka Gas Group's non-energy business spans a wide range of industries and customers and various aspects of daily life.

The Osaka Gas Group continues to cultivate new businesses and expand the scope of its activities. Concurrently, it is also working to improve the efficiency of its businesses, maximize earnings and enhance the overall corporate value of the Group through a strategy of selection and concentration.

Number of Companies in Non-Energy Business
(As of March 2002)



A Japanese-style restaurant, "Kagono-ya," is operated by the Kinrei Group.



Kyoto Research Park



G6: Urbanex Group

The Urbanex Group is composed of 13 companies, including its core company, Urbanex Co., Ltd. Its main activities are real estate development, management and leasing. The Group includes three consolidated subsidiaries: Urbanex, Kyoto Research Park Co., Ltd., and Serendi Co., Ltd. The Urbanex Group plans and operates major commercial facilities and large-scale research and information complexes, including Kyoto Research Park. Other activities include the operation and management of condominiums, commercial buildings, office buildings and other types of real estate, the planning and operation of event spaces, and advertising.



A production line for frozen noodles (Kinrei)



G7: Kinrei Group

The Kinrei Group consists of the core company, Kinrei Co., Ltd., together with OG Royal Co., Ltd. Kinrei and OG Royal are both covered by consolidation.

Kinrei uses refrigeration know-how derived from cryogenic technology employed with LNG. It manufactures and sells a variety of frozen foods, including frozen noodles. It also operates Japanese restaurants, centering on the "Kagono-ya" chain of Japanese restaurants. As of the end of March 2002, it operated 35 Kagono-ya restaurants. In September 2000, Kinrei became the first Osaka Gas subsidiary to list its shares for over-the-counter transaction. The public float of Kinrei's shares symbolizes the evolution of group companies into self-reliant business entities.

As part of its emphasis on "selection and concentration" of businesses during fiscal 2002, Kinrei concentrated its management resources in its restaurant business on its chain of Kagono-ya restaurants and decided to transfer OG Royal's business for Royal Host family restaurants, which OG Royal operates in the Kinki region, to the franchiser Royal Co., Ltd.



G8: OGIS Research Institute Group

The OGIS Research Institute Group is composed of six companies, of which Osaka Gas Information System Research Institute Co., Ltd. is the core company. These companies are involved primarily in information-related activities. OGIS Research Institute is the only consolidated company in this business group. It originated as the Systems Development Department of Osaka Gas. At present, it provides a wide spectrum of information-related services, including software development and sales, sales of systems equipment, and help-desk services to support customers' business activities. In the area of object-oriented technology, which is essential to the efficient development of advanced systems, it is among the most advanced companies in Japan and is able to respond to a variety of customer requirements.

The emergence of the advanced information society is reflected in a growing need for information technology. In fiscal 2000, this business group and Mitsubishi Corp. jointly established EcubeNet.com to provide services relating to EC and EDI. The business group continues to build and enhance its next-generation information service capabilities. For example, in September 2001 the business group made a subsidiary of Ube Information Systems, Inc., which has advanced expertise in the field of computer-aided engineering.



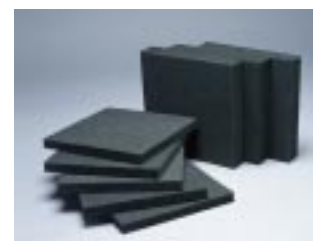
The Iwasaki Computer Center is the key facility of the OGIS Research Institute.



G9: Osaka Gas Chemicals Group

The Osaka Gas Chemicals Group consists of six companies, including the core company, Osaka Gas Chemicals Co., Ltd. Group companies manufacture and sell carbon materials, coke, chemicals, and other products. Only Osaka Gas Chemicals is included in consolidation.

This business group uses the accumulated carbon technology of the Osaka Gas Group as the basis for its sales of essential industrial products, including coke and chemicals. It also manufactures and sells advanced carbon materials, such as carbon fiber, activated carbon fiber and spherical carbon materials. Recently, along with a health boom, the Group has recorded particularly favorable sales of water purifying cartridges and household water purifiers that use activated carbon fiber.



Lightweight, heat-resistant materials used to Shinkansen Train "Nozomi" (Osaka Gas Chemicals)



G10: OG Capital Group

The OG Capital Group was established as a holding company for a group of associated companies involved in activities relating to services, engineering, R&D, marketing, housing, services for the aged, and information. OG Capital helps to improve the efficiency of the Group's internal finances through its cash management system (CMS). It also acts as a business incubator for new companies in such fields as mobile telephony, Internet content and home portals. The OG Capital Group consists of 19 companies, including the core company, OG Capital Co., Ltd. These companies are engaged in a wide array of activities.

The 13 companies covered by consolidation in fiscal 2002 included OG Capital, Osaka Gas Engineering Co., Ltd., which provides engineering services, Osaka Gas Housing Equipment Co., Ltd., which provides services relating to housing equipment, the security company Osaka Gas Security Service Co., Ltd., OG Sports Co., Ltd., which operates sports facilities, and L-Net Co., Ltd., a publisher of community information magazines.

The OG Capital Group is working to strengthen the management resource allocation functions of its core company, to foster new businesses, and to expand the Group's areas of involvement. It is also striving to improve efficiency and enhance its earning power through a strategy of selection and concentration. As part of our selection and concentration strategy, in March 2002 we decided to transfer the operations of Kiccory, which engages in the home center business, to Komeri Corporation, which operates a nationwide chain of home centers.



Life Support Center "Active Life Shukugawa"



The communications magazine "Pado" (L-Net)

Revenue of Companies in the Non-Energy Business Field

Millions of Yen

Fiscal Year	1997.3	1998.3	1999.3	2000.3	2001.3
G6 Urbanex Group	32,979	32,789	32,635	31,769	36,305
G7 Kinrei Group	31,906	33,508	33,363	34,447	34,713
G8 OGIS Research Institute Group	34,311	32,214	32,387	31,489	35,834
G9 Osaka Gas Chemicals Group	16,225	15,187	15,353	17,407	14,890
G10 OG Capital Group	80,165	85,168	86,645	86,006	81,404