

Customer Health and Safety

Why Reasons of materiality in respect of our business

The Daigas Group puts the highest priority on securing safety of gas supply and facilities as an energy business operator which supplies city gas to 5.996 million customers. Therefore, we consider it important that we make efforts to enhance the safety level and formulate a structure to respond possible accidents and disasters.

How Management systems and its performance

Indicator (GRI Standards: 416-1)

Percentage of city gas for which health and safety impacts are assessed for improvement against total city gas provided by Osaka Gas

Commitment

Osaka Gas is committed to ensuring the safety of city gas, our primary product, its secure supply, and safety of gas facilities—all by formulating “Gas Supply Clause” and “Security Rules” in line with the Gas Business Law.

Responsibilities

The Daigas Group has established a system to ensure the safety of city gas supply and gas appliances in all fields of the Group’s city gas value chain [\(21\)](#)—processing, supply, sales and consumption. The “Head of Safety” (Vice President) and the person heading each Business Unit’s safety operation offer advice on safety and security matters concerning his or her Business Unit and other Business Units.

The Vice President in charge of safety operations, the person in charge of safety operations at each Business Unit and the chiefs of the relevant departments—who together constitute the Executive Safety Council—convene a regular safety and security meeting (five times per year) to work out safety activity plans and assess the achievements made in the relevant term. Efforts to ensure and enhance the safety of the city gas supply and gas appliances are also being planned at each Business Unit.

Performance

FY2018 target

100%



FY2018 result

100%

In fiscal 2018, every procedure was conducted based on guidelines in accordance with laws and regulations as well as in-house rules in the processes such as quality control of gas in LNG terminals, safety inspection of gas pipelines and supply facilities, as well as gas appliances at customers consented.

Specific actions taken regarding materiality

To allow customers to receive our energy service without worry, we are working on maintaining the quality of city gas being supplied at high levels while ensuring stable gas supply and the safety of gas-processing and supply facilities.

► Inspection of gas pipes

Gas supply facilities including pipelines and pressure regulators were inspected to ensure their safety at the frequency and content of such inspections set under in-house “Security Rules.”

► Securing safety at customers’ sites

Facilitate systems to respond to reports and prepare resources for dispatching in case of accidents and disasters 24 hours a day, 365 days a year.

In accordance with laws, inspection of gas appliances for gas leaks, gas water heaters for air supply and exhaust function at customers’ sites were conducted. The visits to the customers were exploited as the opportunity for recommending installation of alarms for gas leaks for residential use and ventilation for commercial use, of which penetration rate were 53.0% and 99.1%, respectively.

► Preparation for disaster prevention

From our experience of the earthquake occurred in Kobe, we have made every effort to prevent disasters incurred by earthquakes.

Those efforts include enhancement of safety function and measures in LNG terminals, replacement of old gas pipes with polyethylene pipes [\(21\)](#) (approx. 15,900 km installed), installation of intelligent meter, of which penetration rate reached 99.8%.



A gas pipe made of high-strength polyethylene

Product and Service Labeling

Why Reasons of materiality in respect of our business

It is important for the Daigas Group to provide customers with accurate information regarding safety and environmental aspects of city gas, gas facilities and appliances being provided so that they can use them safely.

How Management systems and its performance

Indicator (GRI Standards: Shifted to general disclosure item 102)

Customer satisfaction rate for customer service duties including safety

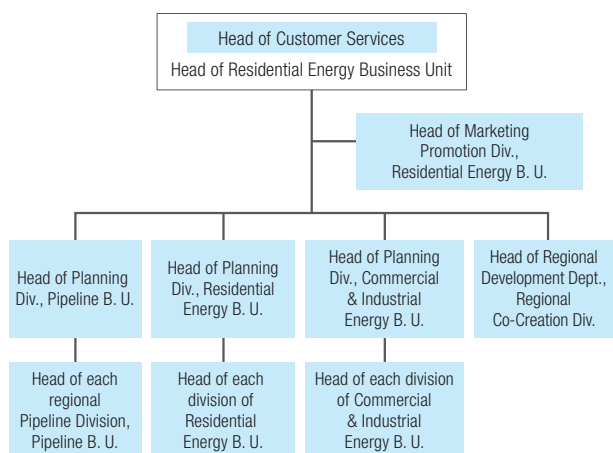
Commitment

Osaka Gas has formulated in-house rules and regulations in line with the PL Law and the Gas Business Law. The company strives to improve safeness and service quality on each business dealing with customers.

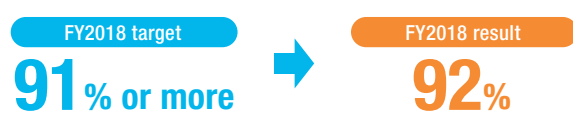
Responsibilities

In order to proceed with actions for improving customer satisfaction in a cross-sectional manner, in addition to the systems introduced in the materiality issue, "Customer Health and Safety," mentioned in the left, the "Head of Customer Services" (Head of Residential Energy Business Unit) appointed under the security system plays a role in maintaining and improving security and service quality.

CS Operating Organization



Performance



We conduct surveys in order to evaluate whether the business duties dealing directly with customers met their expectation. In fiscal 2018, we received about 58,000 replies from customers, their overall satisfaction rate standing at 92%.

Specific actions taken regarding materiality

In FY2018, we took various actions to achieve a higher level of customer satisfaction. For example, to improve the quality of services by phone receptionists, the first contact with customers making an inquiry in various fields, educational seminars were held for them according to the length of service, along with phone service con-tests. Based on customers' opinions reaching our database system "C-VOICE," we improved the Website pages displaying our newly developed products and contact information for inquiries, as well as our business manuals.

From now on as well, we will strengthen our efforts to reflect the diversified voices of our customers in our operations and provide better services to them.



Customer Center

Energy / Emissions

Why Reasons of materiality in respect of our business

The Daigas Group, as an energy business operator, sees it as important to promote more efficient use of energy resources and curtail greenhouse gas emissions over the entire business process, from drilling of natural gas to supply.

How Management systems and its performance

Indicator (GRI Standards: 305-4)

Amount of CO₂ emissions at LNG terminals per unit gas production;
Amount of CO₂ emissions at office buildings per unit floor space

Commitment

The Daigas Group is committed to promoting environmental activities on a group-wide basis by formulating “Daigas Group Environmental Activities Policy” and “Rules for Environment Management Systems” in line with related environmental laws.

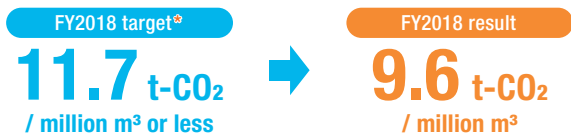
Responsibilities

At Osaka Gas, a unified environmental management system (EMS) based on ISO 14001 ⁽²⁾ is deployed across the company under the supervision of the “CSR Executive” (Vice President), and all employees work to reduce the environmental impact of business activities and ensure that environment-related laws and regulations are complied with.

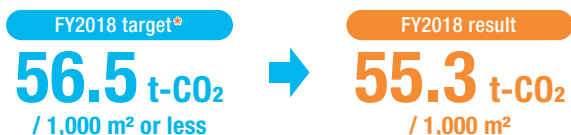
In addition, the Daigas Group’s 56 domestic affiliates operate their own EMSs, such as ISO 14001, Eco Action 21, and the “Osaka Gas Environmental Management System (OGEMS).”

Performance

CO₂ Emissions at LNG Terminals Per Unit of Gas Production



CO₂ Emissions at Office Buildings Per Unit of Floor Space



* FY2021 numerical targets under Environmental Action Targets

In FY2018, CO₂ emissions at LNG terminals was 9.6 t-CO₂ per 1 million m³ of gas produced and CO₂ emissions at office buildings was 54.7 t-CO₂ per 1,000 m² floor space, meaning that we were able to achieve our target toward FY2021 of 11.7 tons or less and 56.5 tons or less, respectively.

Specific actions taken regarding materiality

► Efforts to curb CO₂ emissions at LNG terminals

The Daigas Group has been striving to reduce CO₂ emissions at LNG ⁽²⁾ processing terminals by undertaking various energy-saving activities. By recovering cryogenic energy generated at LNG gasification facilities, the Group is reducing the amount of electricity it purchases, for example. Electricity generation using this cryogenic energy is called LNG cryogenic power generation, which is a power generation system that does not emit CO₂ at all, because no fuel is required in the process of power production. In addition to the existing facility in the Senboku LNG Terminal, a cryogenic power generation facility at the Himeji LNG Terminal started its operation in March 2017.

To promote the efficient operation of our LNG cryogenic power generation facilities, we are implementing a variety of measures. Among measures is supplying LNG cryogenic energy for the cooling process of a plant of a petrochemical company adjacent to the Senboku LNG processing terminal, thus contributing to energy saving and the reduction of CO₂ emissions at nearby plants operated by other companies as well as at our own.



LNG cryogenic power generation facilities at Himeji LNG Terminal

► Efforts in office buildings

Osaka Gas is promoting energy conservation and reducing CO₂ emissions by undertaking “Green Gas Building Activities” which employs advanced high-efficiency equipment and control systems and revamping energy management for the facility as a whole when reconstructing or repairing buildings.

Effluents and Waste

Why Reasons of materiality in respect of our business

Over the entire business process, from drilling of natural gas to supply of city gas, the Daigas Group, as an energy business operator, sees it as important to promote more efficient use of natural resources based on the 3Rs (reduce, reuse and recycle) and to reduce the load on the environment in doing business.

How Management systems and its performance

Indicator (GRI Standards: 306-2)

Final disposal rate of industrial waste at Osaka Gas

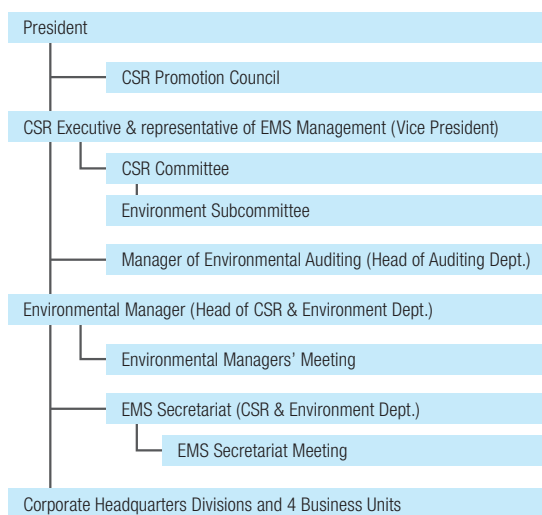
Commitment

The Daigas Group is committed to promoting environmental activities on a group-wide basis by formulating “Daigas Group Environmental Activities Policy” and “Rules for Environment Management Systems” in line with related environmental laws.

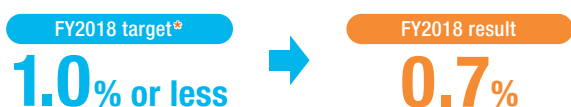
Responsibilities

Same as “Energy / Emissions” on P31.

Environmental Management Promotion Organization



Performance



* FY2021 numerical targets under Environmental Action Targets

Final disposal rate of industrial waste at overall Osaka Gas was 0.7% and it indicates that we are making steady progress toward achieving our target of 1.0% or less for FY2021. From now on as well, we are strengthening 3R (Reduce, Reuse and Recycle) of waste materials.

Specific actions taken regarding materiality

▶ Efforts at city gas manufacturing plants

Industrial waste is generated in the course of repairing/improving plants, while Osaka Gas endeavors to undertake eco-friendly construction work and to reduce industrial waste.

▶ Efforts in gas fitting

For gas fitting, Osaka Gas seeks to curb the generation of roadway waste materials (excavated soil, asphalt waste materials, etc.) by such means as adopting shallow pipe installation method and the method of replacing pipes without excavation of construction.

▶ Appropriate use and discharge of water resources

We control the discharge of drinking water, industrial-use water, underground water and seawater after their use. At power plants, industrial-use water is used for cooling inside a steam-turbine condenser. The used water is evaporated in a cooling tower. Drinking water, industrial-use water and underground water are used at LNG processing terminals, power plants and offices, and discharged into the sea. Seawater, for example, is discharged into the sea after it is used at LNG terminals mainly for vaporization of LNG and at some power plants for cooling inside a steam-turbine condenser, not for consumption. In discharging water after it is used for our industrial activities, we have controlled its quality in line with relevant laws, ordinances and agreements with local municipalities so that chemical substances such as COD*, pH, phosphorus and nitrogen are not contained in the water being discharged. Thanks to such efforts, there were no violations regarding the quality of water being discharged. The Daigas Group sees water as a limited natural resource. We will continue to use water adequately, control its discharge strictly, and promote water saving.

* COD: Chemical Oxygen Demand

Local Communities

Why Reasons of materiality in respect of our business

The Daigas Group conducts businesses rooted in and supported by the local communities. Therefore, we believe various kinds of contribution to the local communities will lead to a favorable cycle that brings the development in both the Group and the society.

How Management systems and its performance

Indicator (GRI Standards: 413-1)

Percentage of operations with implemented local community engagement, impact assessments and development programs

Commitment

Based on the “Daigas Group Code of Conduct”, we care about the issues faced by society and strive to contribute to the local community recognizing what we are supposed to act as a member of the society.

Responsibilities

The “CSR Committee” has set up a “Social Contributions Subcommittee” to deliberate and report on multidisciplinary social contribution activities within the Group. The meetings of the Subcommittee were convened three times in FY2018.

In the Regional Co-Creation Division, we have set up company-wide activity planning, with each individual business operation taking advantage of the local network it built in the communities to move forward with activities in its area.

Performance


FY2018 target

100%



FY2018 result

100%

In FY2018, all major business offices undertook various activities tailored to their characteristics. We promoted communication-enhancement activities to deepen the public's understanding of business projects run by the Daigas Group. In addition, we filed proposals aimed at building resilient  cities and communities while developing programs for making regional communities attractive by adding new value.

Specific actions taken regarding materiality

The Daigas Group strives to develop sustainable regional communities by building vitality-filled towns through the use of its assets, promoting a Small Light Campaign led by employees of the Group, and stepping up collaboration with nonprofit organizations. Through these activities, the Group aims to create new value (Regional Co-Creation) in each local community.

► Daigas Group’s “Small Light Campaign”

This is a company volunteer effort by the Daigas Group that has taken on many forms, including assistance for disaster-hit areas and assistance for the handicapped, over its more than 30-year history starting in 1981 (the UN International Year of Disabled Persons).

► Contribution to building resilient cities and communities

The Daigas Group has been collaborating with municipal governments in building resilient cities and communities while taking advantage of the Group's strong points. Specifically, we have disseminated information regarding energy policies and disaster-prevention plans formulated by municipalities while putting forward our own proposals on these issues.

► Publicize attractive points of regional culture and history, and contribute to revitalizing regions

We are utilizing the Daigas Group's business infrastructure to make the culture and history of the Kansai region more attractive, and to cooperate with local governments and communities as well as NPOs, social designers and others in revitalizing communities.



Support social designers and NPOs in the Kansai region in their regional revitalization projects

Customer Privacy

Why Reasons of materiality in respect of our business

As an energy business operator which secures the basis of the society, the Daigas Group considers it is indispensable to recognize the importance of customers' information and those appropriate management.

How Management systems and its performance

Indicator (GRI Standards: 418-1)

Total number of substantiated complaints regarding breaches of customer privacy

Commitment

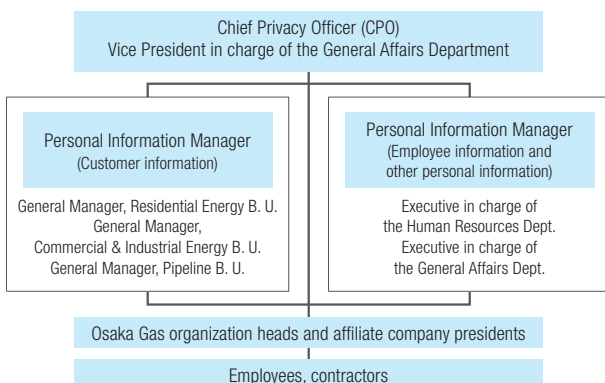
In accordance with the "Daigas Group Code of Conduct" which incorporated code of conduct and guidelines concerning the handling of private information set by the Ministry of Economy, Trade and Industry and the Japan Gas Association, we strive to ensure safety regarding the privacy of customers abiding by in-house rules, such as "Rules for Personal Information Protection," "Privacy Policy," "Manual for Handling Personal Information."

Responsibilities

The Vice President in charge of the General Affairs Department is appointed as the Chief Privacy Officer (CPO). Placed under the Vice President to ensure the protection of private information involving the Daigas Group are "Personal Information Managers," who supervise Business Units, the Human Resources Department, Osaka Gas affiliated companies and contractors working for Osaka Gas.

An "Information Security Subcommittee" was established under the "CSR Committee" (chaired by the CSR Executive), since which it has been developing systems to ensure information security throughout the Daigas Group.

Personal Information Protection Structure



Performance

FY2018 result

No objection substantiated was filed during the year.

During FY2018, no proper objection was filed regarding the alleged violation of customer privacy involving the Daigas Group. We will continue to do all we can to beef up the control of personal information of customers.

Specific actions taken regarding materiality

► Mechanism to protect personal information

The Daigas Group is doing all it can to prevent the leakage of personal information of customers and other incidents affecting their information by improving the Group's information management system, inspecting the implementation of the system as part of its risk-management efforts, carrying out a periodical audit of its business operations, and taking company-wide response actions in the event of incidents such as the loss of customer data, including information sharing and mobilization of all organizations to scrutinize the situation. In FY2018, the Group revised its manual stipulating how to handle the personal information of customers and employees, based on the revised personal information protection law. Through the revision of the manual, we disseminated the importance of protecting personal information to employees and deepened their understanding of the matter. Furthermore, the Group held an e-learning session for Osaka Gas employees regarding the protection of personal information. (6,013 employees attended the session.) In addition, the Group's Information Security Subcommittee introduced a system to check the management of data files containing customer information, and put the system in practice.

► Education of employees

All Daigas Group employees who have the authority to access PCs loaned to them by the Group, including those working on a contract basis and those dispatched from manpower agencies, are required to take an online training course on information security once a year. The percentage rate of employees taking this course reached 100% in FY2018. These employees also receive e-learning training, twice a year, aimed at enabling them to respond appropriately to targeted e-mail attacks.

Grievance Mechanisms

Why Reasons of materiality in respect of our business

A business entity has the responsibility to grasp, as far as possible, the negative effects of its business activities on the environment, local communities, the human rights of stakeholders and labor practices, and to respond expeditiously to filed complaints. Doing so will lead to building long-term mutual trust between companies and their stakeholders.

How Management systems and its performance

Indicator (GRI Standards: Shifted to Management Index 103)

Number of grievances filed, addressed and resolved through the formal grievance mechanism on environmental and social impacts, human rights, and labor practices

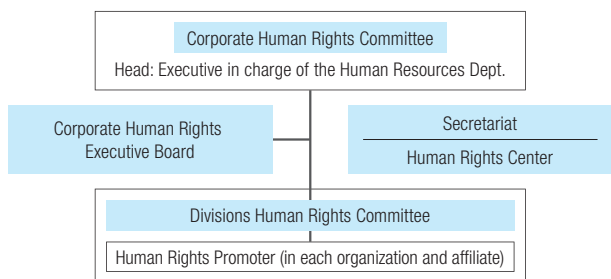
Commitment

The Daigas Group supports such international standards as the Universal Declaration of Human Rights and the United Nations Global Compact, while pledging to observe domestic laws for promoting measures against global warming and protecting whistleblowers.

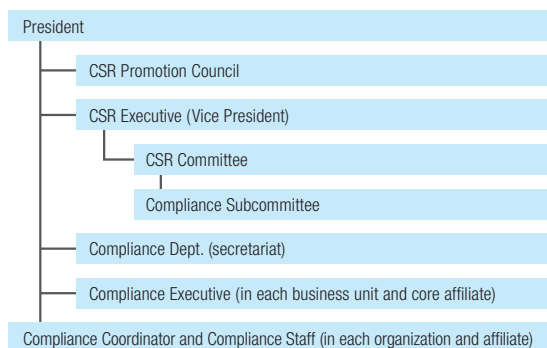
Responsibilities

To deal with voices on the environment, Osaka Gas operates a company-wide Environmental Management System (EMS) according to the ISO 14001 [21](#). As for the voices of local people who are concerned about the possible effects on local communities of our operations, we set up contact desks including customer centers. To address issues associated with human rights and labor practices, we set up “Compliance Desks” at Osaka Gas’s headquarters, major affiliated companies and outside law firms representing Osaka Gas, to receive reports and offer consultation regarding the observance of laws and in-house rules. Employees needing consultation or advice regarding their human rights can contact the “Human Rights Desk”, established at the Human Resources Department. Furthermore, the “Harassment Desk” has been set up for employees facing harassment-related problems in their work. Other systems established for the benefit of employees include the conducting of surveys designed to measure their work-related awareness, periodically holding meetings for the management to hold talks with labor union members, as well as meetings for employees and their superiors.

Systems for Human Rights Awareness Promotion



Organization for Strengthening Compliance



Performance

FY2018 result

Responded to complaints and other negative comments

We responded to complaints and other negative comments filed through help desks and other contacts.

Specific actions taken regarding materiality

Osaka Gas has been making efforts to reflect customers’ voices in its development of new products and improvement of service quality. In FY2018, for example, we improved the “My Osaka Gas” website by adding a new function whereby customers can confirm on their own past records regarding repair and other services provided to them before asking for another repair.

Supplier Assessment

Why Reasons of materiality in respect of our business

Widespread value chain  of our business functions with imperative cooperation of various business partners. Fulfilling our social responsibilities together with our suppliers in the value chain leads to relationships of mutual trust with our stakeholders, resulting in the development of the entire value chain.

How Management systems and its performance

Indicator (GRI Standards: 308-1, 414-1)

Percentage of new suppliers that have been selected using criteria regarding environment, social impact, human rights and labor practices

Commitment

Osaka Gas is committed to fulfilling CSR in close cooperation with business partners in line with the “Daigas Group Code of Conduct,” revised in accordance with the United Nations Global Compact.

In material-procurement activities, which often involve business transactions with new suppliers, Osaka Gas requires to such suppliers to observe procurement-related standards and guidelines set by the company, including “Purchasing Policy” and “CSR-based Purchasing Guidelines.”

Responsibilities

Each organization in charge of procuring particular materials is to fulfill its responsibility in accordance with the procurement-related policies and guidelines set by Osaka Gas.

Performance

FY2018 target

100%



FY2018 result

100%

A total of 34 suppliers began new business transactions with Osaka Gas in FY2018. In the year, no business deals were barred from being started due to violations of standards set in the fields of environmental and social impacts, human rights and labor practices.

Specific actions taken regarding materiality

► Measures in material procurement


Before starting business transactions, Osaka Gas communicates its “Purchasing Policy” and “CSR-based Purchasing Guidelines,” and even confirms their efforts on CSR. In FY2018, a survey was conducted on 175 major suppliers to check their CSR efforts. Furthermore, when the suppliers conduct business transactions with Osaka Gas, they are asked to observe “Green Purchasing Guidelines” set by Osaka Gas, attached to the specifications for the business transactions.

► Revision to the “Green Partner Initiative”

The “Green Partner Initiative” adopted by Osaka Gas is designed to promote environmental conservation by suppliers of gas pipeline materials. Under the system, suppliers that are recognized as being active in environmental conservation activities such as the building of an Environmental Management System (EMS) will be registered as Partners.

Osaka Gas initially focused on suppliers of gas pipelines for its “Green Partner Initiative.” In FY2016, the Company revised the initiative to cover companies other than suppliers of gas pipeline materials as well. As of the end of March 2018, 108 suppliers were registered as Partners.

► CSR Survey conducted on LNG suppliers

Osaka Gas conducted a CSR survey on 11 LNG  suppliers which have concluded long-term contracts with the Company. Of the 11 companies, 10 replied. Reflecting recent global social trends, the questions given in the survey focused on specific response measures being taken by the polled companies in the fields of human rights, labor and prevention of corruption.

Furthermore, Osaka Gas conducted a CSR survey of 271 companies including service companies, engineering firms and gas appliance makers to ensure the safe use of gas appliances by end customers as well as taking into consideration environmental friendliness and social concern. Of the total, 185 companies responded. We will continue to work together with suppliers and other business partners to fulfill our social responsibility and enhance the mutual prosperity of companies operating under our value-chain network.