



These are painted by children who are learning designing at an NPO "Children Design Education." The children's thoughts are attached to the pictures.

Left: "I drew a picture of a parent and child making sweets. The sweets must taste better when a family happily cook together than those made by one person." Right: "I drew a picture on a future environment as a theme. The picture represents the future world where people value nature and human, or otherwise."

http://c0d0e.com/english/index.html



Osaka Gas Co., Ltd.

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Osaka Gas was included in the following socially responsible investment (SRI) indices and an investment universe as of the end of July 2016.



2016 Constituent

MSCI Global













Sustainability Indexes *2



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2016 **OSAKA GAS GROUP CSR REPORT**

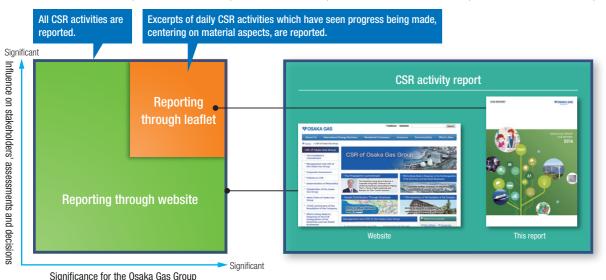
Notes about CSR Report 2016

The Osaka Gas Group reports material aspects of its CSR and its management scheme as well as associated activities for improvement.

The Osaka Gas Group deems that it is necessary for the Group to listen to people's voices sincerely and conduct its business activities based on such voices, if it is to fulfill its corporate social responsibility (CSR).

The Osaka Gas Group identified important aspects for the Group's CSR, which we call "materiality" or "material aspect," by referring to the fourth edition of the Sustainability Reporting Guidelines (G4)—international guidelines being used in the course of preparing a sustainability report—while taking into account the current social situation and continuing dialog with stakeholders and

In this report, the identified material aspects will be categorized in line with each of the five charters set under the "Osaka Gas Group CSR Charter." The Group will then prepare reports on the management situation regarding each material aspect and the degree of implementation of relevant measures. The Group will disclose as much as possible about activities other than those related to the material aspects so that a full picture of the Group's CSR is made known to parties outside the Group.





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Creating Value for Customers

Materiality: Customer Health and Safety

(Activity examples)

- Preparing for large earthquakes
- Launch of "Sumikata Services (Home Services)," "ekul" and "HelloOG!" services

Harmonizing with the Environment and **Contributing to Realizing a Sustainable Society**

Materiality: Energy / Emissions

(Activity examples)

- Launch of the "ENE-FARM type S," with the world's highest power generation efficiency and the world's smallest size
- Development of hydrogen generators and the establishment of hydrogen filling stations



Materiality: Local Communities

(Activity examples)

- Corporate volunteering activities under the "Small Light Campaign"
- Supporting efforts by Daito City to build a community in which people can be healthy and feel happiness

Complying with Laws and Regulations and Respect for Human Rights

Materiality: Customer Privacy

(Activity examples)

- "Compliance Desks": Protecting whistleblowers
- Actions taken by the "Information Security Subcommittee"

Management Policy for Human Growth

- Osaka Gas has been striving to promote diversity in a bid to enhance its corporate value further
- Promoting safety and health management activities based on OSHMS
- 49 Third Party Review / Third Party Verification

[Scope of This Report]

This report covers the Osaka Gas Group consisting of Osaka Gas Co., Ltd. and its affiliated companies. Some information, as noted in this report by phrases such as "Osaka Gas" or "the company," refers exclusively to Osaka Gas Co., Ltd.

Environmental performance data represents Osaka Gas and 68 affiliated companies. Overseas and tenant locations where it is difficult to collect data are not included.

While the most recent data covered in this report represents FY2016 (from April 1, 2015 to March 31, 2016), some articles refer to efforts for FY2017.

- Guidelines Referred to
- Sustainability Reporting Guidelines (G4) of the Global
- Environmental Reporting Guidelines 2012 of the Ministry
- The United Nations Global Compact COP* Policy

COP: Communication on Progress

Coverage and Materiality

We selected topics to be covered in the report and prioritized them taking into consideration what is most important both for our company group and stakeholders (society). Our dedicated website for CSR includes further comprehensive and detailed our efforts.

Readability and Ease of Understanding

To ensure that a wide range of readers can understand the information provided in this report, careful consideration is given to visual design, including the text size use of colors pictures and diagrams, and explanatory notes are provided for technical terms.

Those who are interested in the details of the report or relevant information, please look at the upper right corner of this page where web pages for further

For words with this mark, refer to a terminology list.

Reliability

We use third party verification to ensure the reliability of the content and data presented in our CSR report

The environmental performance data in this report underwent third party verification by Bureau Veritas Japan Co., Ltd. The overall report underwent a third party review process that included assessment and recommendations as well as simple audits, by the Institute for Environmental Management Accounting

Corporate Profile of Osaka Gas

(As of March 31, 2016)

Head Office: 4-1-2 Hiranomachi, Chuo-ku, Osaka 541-0046, Japan

Establishment: April 10, 1897

Commencement of operations: October 19, 1905

Capital: 132,166 million yen Number of employees:

[Non-consolidated] 5,824

(including operating officers, directors and temporary employees, and excluding employees temporarily transferred to affiliated companies)

[Consolidated] 20,844

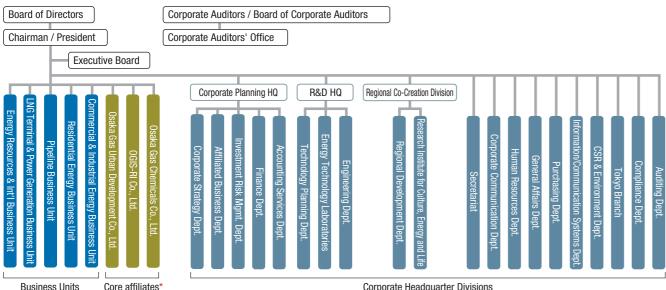
Main Business Lines of the Osaka Gas Group

(As of March 31, 2016)

Business segments	Main business lines
Gas	Sale of gas and gas appliances, gas pipes installation, heat supply
LPG, electricity and other energies	Sale of LPG 11, electricity supply, sale of LNG 11, gas sale for industrial customers
Overseas energies	Overseas energy supply, leasing of LNG tankers, development and investment regarding oil and natural gas
Life & business solutions (Non-energy business)	Development and leasing of real estate properties, information-processing services, sale of fine materials and carbon material products

Osaka Gas Group Management Structure

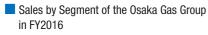
(As of April 1, 2016)

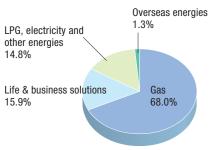


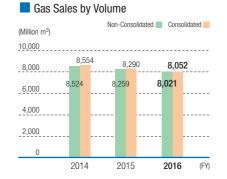
Corporate Headquarter Divisions

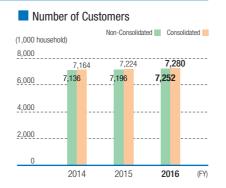
* Note: Organizations other than core affiliates are Osaka Gas Co., Ltd. organizations

Financial Data of the Osaka Gas Group

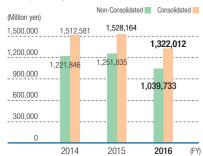


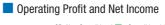


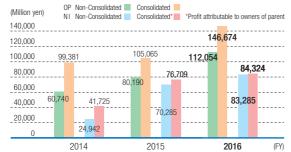




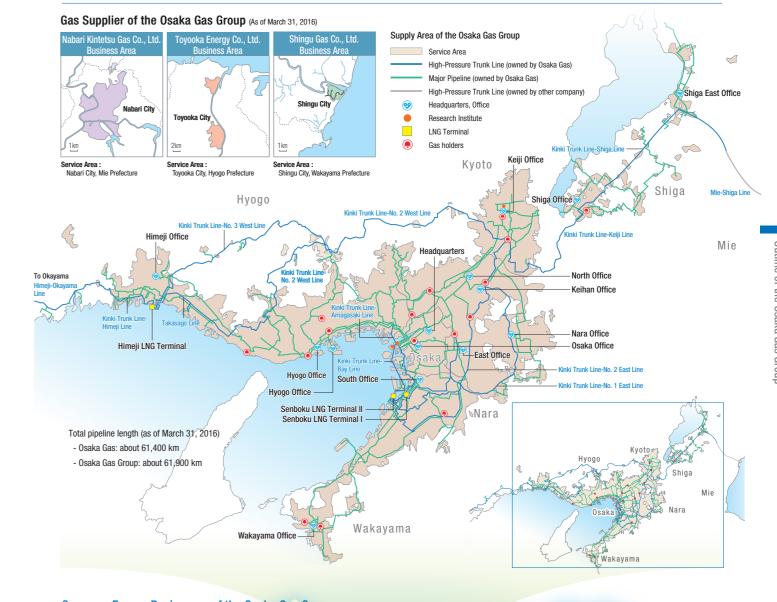
Operating Revenues



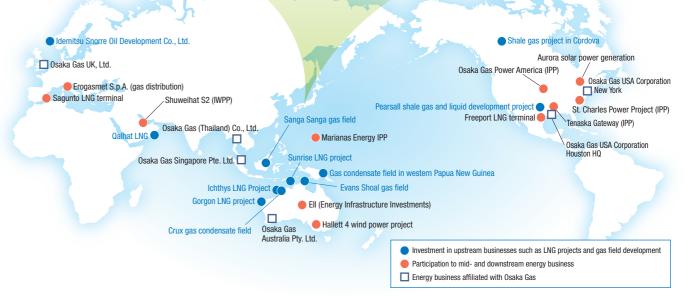




Osaka Gas Group Business Area



Overseas Energy Businesses of the Osaka Gas Group



(As of March 31, 2016)

The Osaka Gas Group Aims to Become a Corporate Group by Helping Them in Terms of Both Livelihoods and Business,



冬花武宏 Takehiro Honjo President

Aiming to become a company that can contribute to the creation of a sustainable society and that can grow itself sustainably.

The year 2015 will be remembered as a year in which the international framework for solving global social issues was upgraded, as characterized by the adoption by the United Nations General Assembly of the Sustainable Development Goals (SDGs) and the signing of the Paris Agreement at the 21st session of the Conference of the Parties (COP) to the United Nations Framework Convention on Climate Change.

Meanwhile, Osaka Gas currently faces the deregulation of the retail electricity and gas markets which brings a significant change in the business environment surrounding the Group. The Osaka Gas Group launched retail business of electricity, especially to households, in step with full liberalization of the power market in April 2016. In April 2017, the retail gas market will be fully liberalized, intensifying competition among utilities seeking to tap into markets for small-lot gas users including households. To become a company which continues to be chosen by consumers amid such a drastic change in the business environment, the Osaka Gas Group will strive further to fulfill its corporate social responsibility (CSR) while promoting dialogue with stakeholders. The Group is committed to contributing to the sustainable development of society by creating four values -- "value for customers," "value for society," "value for shareholders" and "value for employees" - through fair and transparent business activities.

FY2017 marks the final year of a medium-term management plan called "Catalyze Our Dreams," which was formulated to cover the three years from FY2015 to FY2017 in order to realize our long-term management visions, "Field of Dreams 2020." We will steadily implement the measures envisaged under "Catalyze Our Dreams," seeing the change in the business environment as an opportunity for growth, and further strengthening our ability to solve social issues and enhancing our market competitiveness, for the ultimate goal of realizing the Group's sustainable growth.

Priority issues for FY2017

1. Domestic and overseas energy businesses

~ Stable and economical procurement of resources and promotion of upstream (development and production) and liquefaction businesses ~ We will promote stable and economic procurement of natural gas by diversifying LNG procurement sources and contract price indicators while participating in projects to develop and liquefy natural gas. As for projects in which we have already acquired a stake, we will implement them steadily.

We will also explore the possibility of acquiring new concessions in LNG development projects

that Continues to Be Chosen by Customers and Society for Their "Further Evolution."

~ Securing competitive power sources ~

We will strive to build a competitive portfolio of electricity sources by securing highly-efficient power sources including fossil fuel and renewable energies both in Japan and overseas.

~ Expansion of energy marketer business both in Japan and overseas ~

To realize S+3E (safety of service, energy security, economic efficiency and environmental adaptation), which is the responsibility we must fulfill as an energy service provider, we will endeavor to expand the use of natural gas and diffuse distributed energy systems. By doing so, we will make our customers' lives more comfortable, reduce CO2 emissions, promote energy saving and support their business continuity in the event of a natural disaster. We have launched in Japan a new business in which we will purchase surplus electricity generated at the homes of our customers-by fully using the new model "ENE-FARM type S," a cogeneration system which has achieved high power generation efficiency, despite the small size of its main component. As an "energy marketer," we will further strengthen our ties with customers and provide them with a packaged energy service combining various energy sources such as gas and electricity.

We will expand our so-called "marketer" business in Japan in collaboration with energy service providers operating in various regions. As for overseas markets, we will expand our gas and electricity business in North America and Southeast Asia, while steadily developing new projects in these fields.

~ Stable supply of city gas and ensuring safety in its operations ~

As a way of promoting the stable supply of city gas, we will study the building of new high-pressure trunk pipelines. As well as doing all we can to ensure the safety of gas facilities installed at customers' homes, we will continue to maintain, expand and renovate facilities set up for producing and supplying gas, and for generating electricity. We will also continue to make efforts to establish a system to respond to earthquakes and tsunami as a means of enhancing our ability to ensure business continuity in the event of natural disasters.

~ Response to scheduled full liberalization of the retail gas market ~ We will improve our business flows and upgrade our IT systems while taking measures to further increase neutrality in the gas pipe husiness

2. Life & business solutions business

Based on the technologies and business foundation our Group has developed through the energy business, we are committed to enriching the livelihoods of our customers and contributing to their business development. Specifically, we will provide various products and services that are competitive in such fields as material solutions, information solutions and urban development. By delivering such products and services, we will contribute to make our customers' lives more comfortable while enhancing their

convenience and health.

3. Strengthening our management foundation

On the technological development front, we will further increase the operational efficiency and reduce the cost of our gas appliances and facilities, including fuel cell systems. We will promote technological development regarding hydrogen, materials and information technologies, as well as utilization of engineering technologies in the fields of resource development and power generation businesses. For the Osaka Gas Group to strengthen its competitiveness and attain sustainable growth, we will create a business environment in which human resources with various attitudes can display their abilities to the fullest extent while aiming to establish a solid and flexible organizational structure for creating new values.

Pursuing high levels of CSR

Priority themes set for our CSR activities under the mid-term management plan "Catalyze Our Dreams" are "promotion of global compliance," "promotion of CSR activities for the entire value chain 111 network" and "promotion of diversity 11." Also, we have identified an important aspect of CSR, called "materiality," based on the fourth edition of the GRI Guidelines.

While working on matters listed under the "priority issues for FY2017," we will enhance the management of issues associated with important aspects of CSR, including the reinforcement of security and safety in business operations and reduction of CO2 emissions.

In addition, we will strengthen our business activities in line with international norms such as the United Nations Global Compact, international standard ISO26000 and GRI guidelines while abiding by rules set under the Osaka Gas Group Corporate Principles, the Osaka Gas Group CSR Charter, the Osaka Gas Group Code of Conduct and the Osaka Gas Group Environmental Activities Policy. By doing so, we will raise further the CSR level of the entire Osaka Gas Group—both in Japan and abroad—including compliance level

Furthermore, we will continue to develop our CSR activities in collaboration with clients that form part of the entire value chain network of the Osaka Gas Group.

We are also promoting diversity under the Osaka Gas Group Diversity Policy. Specifically, we support female workers in developing and achieving their career goals while making further efforts to enable employees with specialties in various fields to work flexibly and efficiently.

Closing comments

The Osaka Gas Group is committed to creating four values with top priority given to creating "value for customers." We will further promote CSR-oriented management to help create a sustainable society and attain the Group's sustainable growth.

August, 2016

Efforts Toward Full Deregulation of the Electricity

Japan's energy policy was reviewed following the March 2011 disaster that hit eastern Japan, leading to state reform of the electricity and gas market systems. Seizing the occasion of full deregulation of retail business of electricity in April 2016, the Osaka Gas Group commenced to sell electricity to households in the six prefectures of the Kansai region. In addition, Japan's gas market is scheduled to be fully liberalized in April 2017. In view of the expected intensification of competition in energy services that cross over multiple energy sectors, the Osaka Gas Group is working on strengthening its business systems and organizational structure while enhancing neutrality of its gas business operations.

The Osaka Gas Group will grasp the possible effects on the environment and society from its electricity business operations, and ensure fairness and transparency in its business operations, while taking these effects into consideration. By doing so, the Group aims to transform itself into a comprehensive energy service provider.

Comprehensive energy business by the Osaka Gas Group

Refer to the article on the Group's comprehensive energy business operations, shown on the following pages.

- Multi-Energy Business-
- Housing support service known as the "Sumikata Service" → P.28
- "ekul" "HelloOG!"
- Purchase of surplus electricity using the "ENE-FARM type S" cogeneration system

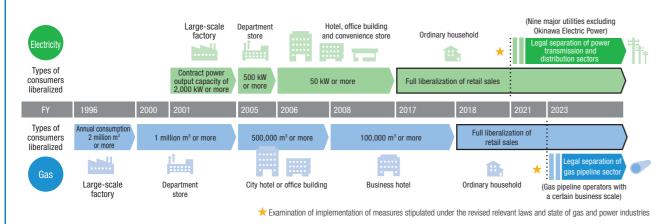
Electricity and Gas Industry Reform

Purpose of the Reform

The central government has been proceeding with the reform of the electricity and gas industries as part of its policy of drastically reviewing the energy supply system in Japan following the major disaster that hit eastern Japan in March 2011. The reform is intended to ensure stable power and gas supply at reasonable prices while providing consumers with various energy options. Efforts to reform the electricity industry are advancing ahead of the one for the gas industry, with discussion focused on establishing a new legal framework.

Flow of the Reform

Amendments to the Electricity Business Act and the Gas Business Act were enacted following Diet passage in June 2015. The enactment concretized a time schedule for reforming the electricity and gas service systems. Before the enactment, retail sales of electricity and gas had been deregulated in a phased manner. The 2015 amendment paved the way for the complete liberalization of the retail power market in April 2016, to be followed by the full liberalization of the retail gas market in 2017, including gas services for households, enabling all customers to choose power and gas suppliers freely.



Efforts Toward Full Liberalization of the Gas Retail Market

The Osaka Gas Group will further strengthen its relationship with customers and provide them with meticulously crafted customer-oriented services ahead of the scheduled full liberalization of the retail gas market. By doing so, the Group aims to become a comprehensive energy service provider that continues to be chosen by customers.

The Group will improve its business flows and business systems while enhansing its organizational structure in response to changes in the business environment. The Group will also provide a variety of services in response to various customer needs, including housing support services called "Sumikata

Services (Home Services)," "ekul" and "HelloOG!." The Group expects such services to make people's lives more comfortable.

Meanwhile, it is essential to ensure neutrality and fairness in gas pipeline business if equal competition for all competitors is to be ensured. As part of our efforts to further enhance neutrality, the Group established the "Gas Transportation Services Reception Center" and the "Gas Transportation Services Information Center" in April 2015. We are doing all we can toward the complete liberalization of the retail gas market.

and Gas Retail Businesses

Electricity Business of the Osaka Gas Group

Power Supply Areas and Power Supply Mechanism

The Osaka Gas Group began supplying electricity to households and business operators such as restaurants and merchandise shops in April 2016 following full liberalization of the retail power market. Areas where the Group can supply power are the six prefectures in the Kansai region (excluding Fukuura, Ako City, Hyogo Prefecture) plus Fukui Prefecture (to the west of Mihama Town, Mikata County), Mie Prefecture (Kumano City, Kiho Town and Mihama Town of Minamimuro County) and Gifu Prefecture (part of Sekigahara Town, Fuwa County). Electricity can even be supplied to households and businesses that do not currently receive gas service from Osaka Gas.

Osaka Gas provides electricity to its customers using power transmission and distribution networks operated by Kansai Electric Power Co., Inc., which means that the service quality and reliability will remain the same as those provided by Kansai Electric Power. The Osaka Gas Group has established a solid electricity supply system whereby power supply will not be suspended even if trouble occurs at power stations operated by the Group.

Possession of Diverse Power Sources

The Osaka Gas Group undertakes power generation business with diverse power sources, including fossil energy sources, cogeneration systems 1 and renewable energy sources of its own. The combined power output capacity in

Japan of all of these power sources is about 1.84 million kW, with the most power generated at the highly efficient Senboku Natural Gas Power Plant. The output capacity also includes electricity generated by wind power and solar power. The Group will continue tapping more power sources as a means of stabilizing electricity supply.



(Takaishi City, Osaka Prefecture)

Advantage as an Experienced Energy Company

The Osaka Gas Group has provided city gas in a stable manner for 110 years since its foundation. Since 2001, the Group has supplied electricity to business entities operating office buildings and manufacturing plants as a sales agent of ENNET Corporation.* Based on its long-term experience and accumulated know-how as an energy service provider, the Group, as an energy service expert, has established a solid system wherein customers can continue to receive electricity in a stable manner.

* ENNET is a retail company selling electricity, established jointly by NTT Facilities Inc., Tokyo Gas Co., Ltd. and Osaka Gas Co., Ltd. ENNET provides reasonably priced power services in a diverse manner, using IT and energy technologies

Factors Being Considered in Power Business Operations

Effects on the Environment

The Osaka Gas Group, as a comprehensive energy service provider, recognizes that it is an extremely important mission for the utility to bring its electricity business operations into harmony with the environment. Among important challenges to be addressed to attain the utility's goal of helping create a low-carbon society is reducing CO₂ emissions. At present, power sources possessed by the Group in Japan are capable of generating electricity with a combined output capacity of about 1.84 million kW, of which CO2 emission is assessed to be 3.687.000 t-CO₂e.

Senboku Natural Gas Power Plant is a mainstay power station operated by Osaka Gas, with a total power production capacity of 1,109,000 kW. The plant is powered by natural gas, a fuel whose environmental impact is less than that by other fossil fuels such as coal and petroleum. In order to reduce its environmental impact, the Plant employs the energy-efficient combined cycle method 11, which combines a gas turbine and a steam turbine.

In April 2016, we established Himeji Natural Gas Generation Co., Ltd. jointly with Idemitsu Kosan Co., Ltd. for proceeding with the new power business plan.

Nakayama Nagoya Joint Power Generation Co., Ltd., an affiliate of the Group, is building a biomass-mixed coal-fired power plant with a power output capacity of 110,000 kW. The fuel used at the new plant will contain 30% woody biomass. The use of biomass is expected to curb CO2 emissions

In November 2015, Osaka Gas filed with the Economy, Trade and Industry Minister an environmental assessment plan regarding the proposed construction of a new power station in Nishiokinoyama, Yamaguchi Prefecture,

tentatively called Nishiokinoyama Power Plant. The project has been undertaken by Yamaguchi-Ube Power Generation Co., Ltd., a company jointly established by Ube Industries, Ltd., Electric Power Development Co., Ltd., and Osaka Gas. The project envisages the introduction of the most advanced and highly energy-efficient coal-fired power-generation facilities to bring the business into harmony with the environment.

Furthermore, the Osaka Gas Group owns a large number of electricity sources that have less impact on the environment, including renewable energy sources such as wind power and solar power, and cogeneration systems. The Group resolves to help the realization of a low-carbon society by diffusing power generated by such power sources which has less environmental impact.

Effects on Society

When undertaking electricity business, the Osaka Gas Group makes efforts to grasp its possible effects not only on the environment but also on society, and take these factors into account

The Group is prepared to fulfill its accountability to customers regarding their concern over the reliability of its power supply service and product quality desk set up at our customer center while striving to solve their troubles or problems via a customer desk operated using a chat function. We have also opened a user-friendly website page dedicated to our electricity business.

To help our employees acquire professional expertise in comprehensive energy services, including the electricity business, we are holding educational seminars and trainings for them. In preparation for tapping into new business fields, we are also working on improving our business flows and operational manuals, which are part of the Group's efforts as a comprehensive energy service provider to respond to customer needs and requests in a responsible

CO2 emission factors used for calculation are 0.69 kg-CO2/kWh for electricity (source: "Interim Summary by the Target Attainment Scenario Subcommittee, Global Environment Group, Central Environment

OSAKA GAS GROUP CSR REPORT 2016 | 08 OSAKA GAS GROUP CSR REPORT 2016

ormation sted on the Web • Corporate Principles and CSR Chater • Osaka Gas Group Code of Conduct • Global Compact and ISO 26000 • Osaka Gas Group Environmental Activities Policy

Seeking Further Evolution in Quality of Life and Business

Corporate Principles and CSR Charter of Osaka Gas Group

The Osaka Gas Group gives the highest priority to creating "value for customers." The Group believes that creating "value for customers" plus three other values—"value for society," "value for shareholders" and "value for employees" through fair and transparent business activities constitutes fulfillment of its corporate social responsibility (CSR).

In order for the Osaka Gas Group to meet stakeholder expectations, fulfill its full CSR obligations and to achieve its sustainable development, we set forth the "Osaka Gas Group CSR Charter" as guiding principles for the management and employees of Group companies in conducting their business in 2006. In 2007, the Osaka Gas Group expressed its intent to participate in the United Nations Global Compact to demonstrate its policy of dealing with CSR from the global point of view, becoming Japan's

first utility to join the U.N. initiative.

The "Osaka Gas Group Code of Conduct," adopted in 2000 as guiding principles for Group executives and employees, was revised in 2008 to be more reflective of what is shown in the United Nations Global Compact. The Code of Conduct was also revised in 2011 to cover core subjects taken up under ISO 26000.

Furthermore, the Osaka Group introduced "CSR Indicators" in 2009 to promote and visualize its CSR efforts. Currently, we are striving to achieve CSR goals set for a three-year period ending in March 2017. We also introduced indicators corresponding to material aspects that were identified in fiscal 2015.* While taking the indicators into account, we are promoting effective CSR management. * Refer to P17 for details on materiality

Osaka Gas Group Corporate Principles

[Who We Strive to Be]

Osaka Gas Group powers continuous advancement in consumer life and business.

[Our Commitments]

The Osaka Gas Group aims to create four values.

The Osaka Gas Group is committed to creating value primarily for customers, as well as for society, shareholders and employees.

[Value for customers]

Osaka Gas Group is committed to providing services that meet customer expectations for comfort. convenience and reliability in diverse fields

Osaka Gas Group is committed to supporting sustainable development and environmental protection in society through business, mindful of compliance and transparency.

[Value for society] [Value for shareholders] [Value for employees]

Osaka Gas Group is committed to meeting shareholders' expectations for stable, long-term growth and maximized corporate value, while maintaining its sound financial

Osaka Gas Group is committed to respecting the individuality of employees and providing opportunities to pursue their careers and achieve self-development

[Our Corporate Motto] Service First

Osaka Gas Group CSR Charter

Osaka Gas Group Code of Conduct

Osaka Gas Group Environmental Activities Policy

Throwing Support behind International Initiatives

United Nations Global Compact

This is an initiative proposed by then U.N. Secretary-General Kofi Annan at the 1999 World Economic Forum which calls for businesses to observe 10 principles concerning human rights, labor, the environment, and the anti-corruption. The Osaka Gas announced its participation in this initiative

ISO 26000

This is an international standard issued by the ISO in November 2010 concerning social responsibility. ISO26000 is a guiding document on universal social responsibilities such as environmental protection and respect for human rights toward the creation of a sustainable, fair and balanced society. This standard is reflected in the CSR activities of the Osaka Gas Group

Osaka Gas Group CSR Charter



Creating Value for Customers

The Osaka Gas Group is committed to making a positive contribution to realizing a higher level of comfort and development in the business activities of its customers. The group intends to achieve this objective through the provision of a reliable and safe supply of patural gas and other energy services with an improved level of services for its customers. We also pursue the development of new products and services furthering value for customers, and that create opportunities for growth for our business and customers and society at large.



Harmonizing with the Environment and Contributing to Realizing a Sustainable Society

Addressing the issues of the environment both at regional and global levels is of paramount importance for the Osaka Gas Group which is engaged in wide-ranging energy services. Being seriously aware of the impacts of its business activities on the environment, the Group seeks to harmonize its businesses with the environment and to realize efficient utilization of energy resources, thereby contributing to realizing a sustainable society.



Being a Good Corporate Citizen Contributing to Society

As a good corporate citizen, the Osaka Gas Group strives to maintain communication with society and the communities it serves. Through proactive disclosure of information and improved managerial transparency, we intend to establish favorable relationships with citizens and to make our positive contribution to the development of a healthy society.



Complying with Laws and Regulations and Respect for Human Rights

The management's and the employees' compliance with laws and regulations forms the basis for gaining society's trust. Our perspectives on compliance go beyond legal and regulatory boundaries to include decent conduct expected of all citizens. Based on our respect for human rights, we intend to maintain equitable relationships with our customers, business partners, and other parties



Management Policy for Human Growth

The Osaka Gas Group strives to become a group of enterprises to realize the growth of its employees through work by ensuring employment opportunities and respecting employees' individuality and initiative. We will charge ourselves with the task of creating new value for customers, shareholders and society.

How the U.N. Global Compact and ISO 26000 are related to the Osaka Gas Group Code of Conduct

			ISO 26000: Core subjects*	
Osaka Gas Group Code of Conduct		United Nations Global Compact	Organizational governance (See P.13-14)	
1 Respect for human rights		Principle 1 Businesses should support and respect the protection of	Human rights	
2 Creating a pleasant work environment	Human Rights	Internationally proclaimed human rights; and Principle 2	Osaka Gas Group Code of Conduct	
3 Compliance with laws and regulations	make sure that they are not complicit in human rights abuses.		1 3 4 5 13	
4 Personal and professional lives		Principle 3 Businesses should uphold the freedom of association and the		
Respect for international rules and regulations as well as international norms including those on human rights	Labor	effective recognition of the right to collective bargaining; Principle 4 the elimination of all forms of forced and compulsory labor;	Labor practices Osaka Gas Group Code of Conduct	
6 Consideration to the environment	LdDUI	Principle 5 the effective abolition of child labor; and	2 3 4 5 13	
7 Compliance with anti-monopoly laws and practice of fair transaction		Principle 6 the elimination of discrimination in respect of employment and		
8 Provision of products and services	-	occupation.		
9 Ensuring safety of products and services	Principle 7 Businesses should support a precautionary approach to			
10 Interacting with customers		environmental challenges; Principle 8	The environment	
11 Contributing to society	11.1111	Osaka Gas Group Code of Conduct 3 4 5 6 13		
12 Associating with business partners		Principle 9 encourage the development and diffusion of environmentally	3 4 3 0 13	
13 Developing our partners' understanding of our Code of Conduct		friendly technologies.		
14 Use of information and information systems	Anti-	Principle 10 Businesses should work against corruption in all its forms, including	Fair operating practices Osaka Gas Group Code of Conduct	
15 Disclosure of information	Corruption	extortion and bribery.	3 4 5 7 12 ~ 18	
16 Management of intellectual property		,	Consumer issues	
17 Prohibiting association with anti-social forces, favors and benefits		CALBAL COMP	Osaka Gas Group Code of Conduct 3 4 5 8 9 10 13	
18 Appropriate payment of taxes and accounting practices			Community involvement	
*Numbers in the right column show the items of the Osaka Gas Group Code of Conduct relating to each core subject of ISO 26000.		Network Japan WE SUPPORT	and development Osaka Gas Group Code of Conduct 3 4 5 11 13	

^{*}Numbers in the right column show the items of the Osaka Group Code of Conduct relating to each core subject of

OSAKA GAS GROUP CSR REPORT 2016 OSAKA GAS GROUP CSR REPORT 2016

Management and CSR of the Osaka Gas Group

formation sted on the Web • Long-Term Management Vision • Medium-Term Business Plan • Integration of CSR with Management Strategy

Integration of CSR with Management Strategy

The Osaka Gas Group has drawn up a long-term management vision toward 2020, called "Field of Dreams 2020," and also set long-term business goals, both to implement the Group's long-term challenging task of business reshaping. By not only pursuing the company's growth but also meeting rising expectations from society, we are striving to carry out high-level CSR with fully integrating it in our management strategy.

The Osaka Gas Group has formulated a medium-term business plan called "Catalyze Our Dreams," covering the three-years between FY2015 and FY2017, to realize the long-term management vision. The word "catalyze" represent our commitment toward changes to our business as if it were being empowered by the force of a catalyst, a

substance that makes a chemical reaction happen faster. By having all of our employees act like a catalyst, the Osaka Gas Group will accelerate its efforts to evolve into a "comprehensive energy business operator" that can respond to possible future changes in the business environment, such as moves to regulatory reform of the electricity and gas industries.

In fiscal 2016, the second year of our mid-term business plan called "Catalyze Our Dreams," we engaged in CSR activities in line with the management plans listed on the right-hand page.

As a company which remains chosen by all stakeholders, we will strive for development of both the Company and society.

Long-Term Management Goals for the Osaka Gas Group ("Field of Dreams 2020" formulated in March 2009)

Broadening of Business Felds

The Group establishes the three core businesses of "domestic energy businesses", "international energy businesses" and "life & business solution businesses" by proactively making growth-oriented investments.

Enhancement of Corporate and Business Quality

The Group fulfills a high level of CSR as an excellent company which renders services to people, businesses, and communities, while more than meeting growing social expectations (level of commitment, disclosure).

Contribution to the Environment

Osaka Gas actively reduces stress on the global environment through the spread of environment-friendly natural gas; provision of efficient equipment, systems (fuel cells, cogeneration systems (11), etc.), and energy-saving programs; and development of renewable energy.

Increasing Corporate Value

To continue to be a company chosen by all stakeholders, Osaka Gas Group is committed to making efforts to score sustainably high performance and enhance its corporate value by raising its asset and capital efficiency, maintaining dividend payments in a stable manner and keeping its financial standing sound.

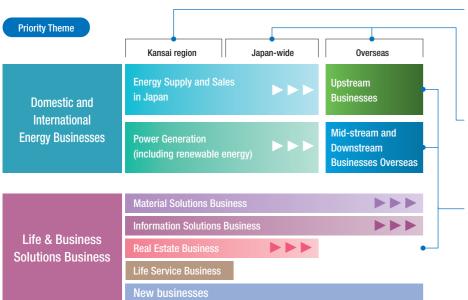


Changes in business environment surrounding Osaka Gas Group

(March 2011 earthquake in eastern Japan, electricity and gas industry regulatory reform, shale gas revolution and others)



Medium-Term Business Plan of the Osaka Gas Group (FY2015-2017) "Catalyze Our Dreams"



1 Strengthening the energy business in the Kansai region

While enhancing the energy business in the Kansai region as the core business, the Osaka Gas Group aims to develop into the "Comprehensive Energy Business Operator" that can respond to a variety of requests from customers.

2 Expanding the area of the energy business

The Osaka Gas Group aims to expand its energy businesses both in Japan and abroad by utilizing its accumulated know-how.

3 Creating the next "core"

The Group will embark on the challenging task of expanding its businesses in markets with growth potential by taking advantage of its strengths in the international energy businesses and life & business solutions business.

Long-Term Management Vision "Field of Dreams 2020"

Medium-Term Business Plan of the Osaka Gas Group

Osaka Gas Group's Business Plan for FY2016.3

FY2010 FY2021

Osaka Gas Group's Business Plan for FY2016.3 and relevant CSR activities

	Osaka Gas Gr	oup's Business Plan for FY2016.3	Topics covered in the CSR Report 2016	
	Response to the scheduled reform of electricity and gas industries	Efforts to increase neutrality in the pipeline division Improvement of business flows, IT systems and organizational structure	Efforts Toward Full Deregulation of the Electricity and Gas Retail Businesses	P.7-8
	Energy (gas and electricity) sales business	Expansion of retail power sale business (since FY2017) Further evolution as a comprehensive energy service provider	Efforts Toward Full Deregulation of the Electricity and Gas Retail Businesses Charter I: Multi-Energy Business	P.7-8 P.27
Domestic an	Distributed energy system	Efforts to diffuse "ENE-FARM," cogeneration systems, and gas air-conditioning systems Technological development of appliances and facilities Installation and operation of hydrogen stations	Charter II: Helping Customers' Efforts to Realize a Low-Carbon Society Charter II: Developing Environmental Technologies	P.32 P.34
Domestic and International Energy Business	Reinforcement of city gas production and supply infrastructure	Renewal and reinforcement of facilities: 5th LNG tank set up at the Senboku LNG Terminal Promotion of measures against earthquakes and tsunamis	Charter I: Customer Health and Safety Charter I: Efforts for Safety and Security	P.24 P.25 P.26
Energy Busines	Power generation business, cross-regional energy business	Acquisition of new power sources Development of demand through the Himeji-Okayama line	Efforts Toward Full Deregulation of the Electricity and Gas Retail Businesses Charter I: Multi-Energy Business Charter I: Efforts for Safety and Security	P.7-8 P.27 P.25
S	Natural gas procurement, overseas upstream business	Diversification of procurement sources and contract price indexes; participation in projects of natural gas Promotion of overseas projects where Osaka Gas has already joined	Charter I: Efforts for Safety and Security Charter I: Multi-Energy Business	P.25 P.27
	Overseas downstream business	Considering launching businesses in broader international markets including Southeast Asia and North America Considering setting up new business bases in Southeast Asia	Charter I: Multi-Energy Business	P.27
_		Material solutions for creating new value: Accelerated development of next-generation products centering on fine materials	Charter II: Developing Environmental Technologies - Life & Business Solutions Business	
Š	Life & business solutions business	- Information solutions for businesses: expansion of cloud service business	Charter I: Safety and Security 4: Consumption Stage - Provision of Services Aimed at Ensuring the Safety and Security of Customers Charter I: Proposing New Value - Proposals of IT-based New Services	Website
Solutions Business		Real estate business enriching urban life: business expansion through acquisition of prime assets	Charter II: Conserving Biodiversity - Osaka Gas Group Consideration of Biodiversity in its Greening and Planting Activities - Development of Condominiums Introducing the Indigenous Species in Their Gardens	te
		Life service business for customers and society: entry into new businesses including healthcare service	Charter I: Proposing New Value - Efforts for Tasty Food and Health - Opening of "Rico," and Urban-Styled Fitness Studio Dedicated to Female Users	
Common	Promotion of diversity ?! in workforce	Preparing the environment helping female employees play more active roles	Charter V: Efforts to promote diversity Charter V: Balancing Work and Family	P.46 P.47

Corporate Governance

Basic Views on Corporate Governance

Osaka Gas believes it is important to achieve sustainable growth and increase medium and long-term corporate value by engaging in fair and transparent business activities. To achieve this, the Company looks to respond appropriately to the exercising of shareholder rights, work toward maintaining and increasing a sense of trust by dialogue and cooperation with its stakeholders,

and enhance the level of the entire Group's corporate social responsibility (CSR). Further, the Group looks to respond swiftly to changes in the Group's business environment and continuously improve and strengthen its corporate governance so that transparent, fair and decisive decisions can be made and efficient and appropriate actions can thereby be implemented.

System and Efforts Aimed at Enhancing Corporate Governance

Osaka Gas has chosen to be a company that adopts a corporate auditor system. The Company has also adopted an executive officer system. The Company's corporate governance system is shown below.

. Board of Directors, Directors of the Company

The Board of Directors consisted of 13 Directors, including three Outside Directors, as of the end of a regular general shareholders meeting on June 29, 2016. Its mission is to make swift and appropriate decisions concerning important matters that affect the Group as a whole including subsidiaries, and reinforce the supervisory function of the Board

Executive Officers

Osaka Gas has adopted an executive officer system, which is aimed at revitalizing the activities of the Board of Directors, and enhancing its supervisory function while increasing the Company's management efficiency, by enabling Directors to focus on decision-making, and monitoring and supervisory duties. Under the executive officer system, Executive Officers perform duties determined by the Board of Directors, while some Representative Directors and Directors concurrently serve as executive officers to make management decision-making more accurate and efficient.

Executive Board

Osaka Gas makes decisions on important matters concerning basic management policies and other management issues after the Executive Board fully discusses these matters. In line with the in-house rules related to the Executive Board, the Board is composed of the President, Vice Presidents, Managing Directors, Heads of HQ and Business Units, all of whom concurrently serve as Executive Officers. In principle, meetings held by the Executive Boards each year include three meetings held as the "CSR Promotion Council."★ which deliberates on CSR-related activity plans and reports on results of the activities.

• Board of Corporate Auditors, Auditors

The Board of Corporate Auditors consists of five Auditors, including three Outside Auditors. These auditors audit the execution of duties assigned to each Director.

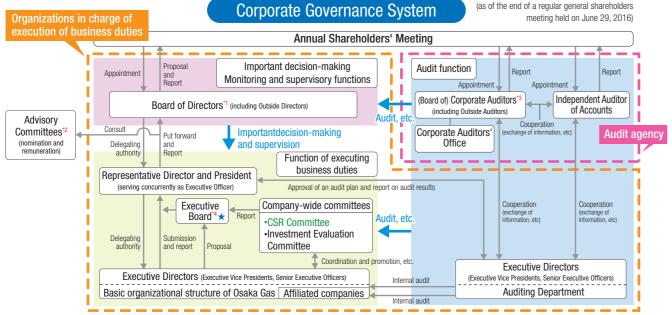
• Advisory Committee on Appointment of Directors/Auditors and Remuneration From the viewpoint of ensuring objectivity and transparency in decision-making, matters relating to the nomination of Directors and Auditors, and remuneration paid to Directors are determined following deliberation by voluntary Advisory Committee, the majority of whose members are Outside Directors.

CSR Committee

The CSR Committee is chaired by the CSR Executive, a Director in charge of controlling CSR activities of the Osaka Gas Group, with its members chosen from among the chiefs of relevant divisions and departments. The CSR Committee promotes CSR activities in such fields as the environment, compliance, regional contribution, human rights, employment, information security and risk management, and plays a coordinating role between relevant departments or divisions regarding these activities

Investment Evaluation Committee

The Investment Evaluation Committee is chaired by the Head of the Corporate Planning Headquarters (HQ), with its members chosen from among the General Managers of relevant investment projects of a certain scale. The evaluation, put forward to the Executive Board, is used for appropriate investment decision



- *1 Board of Directors: 13 Directors (10 in-house Directors and three Outside Directors)
- 2 Advisory Committee: Three Outside Directors, three Outside Auditors and those nominated by the Representative Director and President (up to two persons chosen from among other Representative Directors
- 3 Board of Corporate Auditors: Five Auditors (two in-house standing Auditors and three Outside Auditors)
- *4 Executive Board: President, three Vice Presidents and eight Senior Executive Officers (🖈 In principle, three meetings are held as the "CSR Promotion Council.")

Audits by Internal and Outside Auditors

The Company has established the Auditing Department (with a staff of 21) that functions as an internal auditing division and, based on a yearly auditing plan, monitors the appropriateness and efficiency of business activities, and provides key internal organizations and affiliated companies with advice and recommendations, while reporting audit results to the Executive Board. For Business Units, core Group companies and other sections, the Group is working to enhance and strengthen auditing and internal control functions. For example, "Basic Rules for Affiliated Companies" and "Self-Auditing Regulations," both commonly shared by Group companies, more clearly define the roles and duties of internal auditors, based on which internal auditors have been deployed as well as self-auditing has been conducted. Moreover, the Auditing Department, in cooperation with internal auditors, evaluates internal controls in connection with

the compilation of financial reports, based on the Japanese Financial Instruments and Exchange Law, and reports the evaluation results to the Executive Board.

The Corporate Auditors' Office has been established as a way of supporting the Board of Corporate Auditors. Composed of four full-time staff working outside the chain of command of Directors, the office is designed to assist Corporate Auditors in their research activities to ensure that their duties are fully and properly executed.

The Auditing Department, Corporate Auditors and Accounting Auditos meet on a regular basis to discuss annual audit plans and audit reports, and also convene when necessary mostly for information sharing. These meetings are intended for the department, Corporate Auditors and Accounting Auditos to enhance their mutual collaboration to strengthen the effectiveness and quality of their auditing activities.

Outside Directors and Outside Auditors

Osaka Gas has three Outside Directors and three Outside Corporate Auditors.

Candidates for Directors and Corporate Auditors are in principle selected from a diverse group of people taking their knowledge, experiences, abilities, and personalities etc. into account. As for candidates of Outside Directors, the Company checks whether they have a high level of independence, which is deemed essential for objective judgment, and whether they have broad-based knowledge, wealth of experience, and expertise in their specialized fields for Outside Director candidates.

The concrete roles of Outside Directors and Outside Corporate Auditors include verifying the state of the internal governance system in accordance with Japan's Companies Act,

evaluating internal governance related to financial reporting in compliance with the Japanese Financial Instruments and Exchange Law, assessing the overall state of internal audit, as well as the status of CSR with holding hearings at the Board of Directors meetings or other occasions. They also confirm the content of audit reports compiled by the independent auditor of accounts.

All of the Outside Directors and Outside Corporate Auditors appointed by Osaka Gas meet the "independence" criteria set by the Company for such people to be deemed as independent directors or independent auditors. Therefore, all of these people have been registered to securities exchanges where the Company is listed as "independent" directors or "independent" auditors.

Risk Management

Heads of divisions of Osaka Gas and affiliates are in charge of managing crisis-related losses by conducting risk-management inspections on a regular basis. Utilizing the "Gas Group Risk Management System (G-RIMS)," an originally developed by Osaka Gas for self-assessment of risk management practices, each division and affiliate checks if risk control has been conducted properly regarding each risk item and devices follow-up measures

As for risk management regarding matters that affect the entire Osaka Gas Group, such as safety, security, and disaster and accident prevention, the departments or divisions responsible have been clarified to support each division. In order to be prepared for

disasters or emergency situation, the rules for disaster control and the business continuity plan (BCP 11) in the event of large-scale disasters and accidents are established and shared throughout the Group.

* "G-RIMS" was introduced in 2006. Managers in charge of risk management are asked to recognize the potential risks of their organization or company using a check list comprising about 180 risk items, and implement corrective measures under the PDCA (plan-do-check-act) cycle. The Secretariat (consisting of Auditing Department, Compliance Department, Corporate Strategy Department, Affiliated Business Department and General Affairs Department) conducts an annual self-inspection and exchanges views with each department and division, as well as affiliated companies, in order to monitor the implementation of the measures envisaged under the PDCA cycle. The results of these meetings and problems that surface through the meetings are reported to higher-ranked Osaka Gas officials at an appropriate time for information sharing.

Status of Internal Control

The Company establishes systems (internal control systems) to ensure that the directors of the Company execute the duties in compliance with the laws and regulations and the Articles of Incorporation and other systems necessary to ensure the properness of the Group's operations. The Company confirms the operating status of the internal control systems on a periodic basis on April 27, 2016, it was reported that the internal control systems

by receiving reports from the organizational heads and other persons concerned. At the meeting of the Board of Directors held were operated in a proper manner.

nformation osted on the Web • CSR Management • Dialogue and Cooperation with Stakeholders • Response to Stakeholders' Voices

CSR Management

The Osaka Gas Group Promotes CSR

The Osaka Gas Group aims to become a corporate group that helps further evolution of customers' livelihood and businesses. To this end, the management and employees act based on the "Osaka Gas Group CSR Charter" which stipulates basic concept of our CSR.

As the Group's business field is expanding, the scope of its stakeholders—customers, local communities, shareholders and employees—all of whom are affected by our business operations, is expanding

We deem it necessary to operate our business taking into account its possible effects on the environment and society. Based on this perception, in fiscal 2014, we

identified 16 important aspects for the Group's CSR, which we call "materiality,"* based on the opinions of outside experts

Focusing our attention mainly on the identified materiality items, we will, under the CSR Promotion System, appropriately evaluate the results of our efforts and indicators in order to make the PDCA management more effective. In addition, we will accurately recognize expectations and requests from society through dialogue with stakeholders both inside and outside the Company, with the aim of enhancing our CSR level.

*Refer to P.17 for details on materiality

CSR Promotion System

The Osaka Gas Group makes efforts to implement its CSR activities appropriately and positively by setting up supervisory bodies such as "CSR Promotion Council" and "CSR Committee."

The CSR Promotion Council is where executives of Osaka Gas discuss activity plans and activity reports under the leadership of the President. At the "CSR Committee", its members composed of the head of business units undertake cross-departmental coordination under the leadership of the CSR Executive (Vice President).

To deal with fields covered by the Osaka Gas Group CSR Charter, cross-department subcommittees responsible were established, enabling promotion of CSR activities in a cross-departmental manner.

In fiscal 2017, a "Risk Management Subcommittee" was created as part of the Group's efforts to strengthen its overall risk

CSR Promotion System (As of April 1, 2016) Executive Board

Dialogue and Cooperation with Stakeholders

The Osaka Gas Group is focusing on active engagement with stakeholders through dialogue to recognize various possible issues involved in its CSR and to come up with mutually acceptable solutions to such issues.

For example, the Osaka Gas Group has been promoting dialogue with the Kansai Consumers' Association, the Osaka Voluntary Action Center, and the Osaka Gas Labor Union. Furthermore, the Group is sharing information with the Japan Network of the United Nations Global Compact, and actively taking part in the formulation of various policy measures by the government and municipalities. The Group is also active as a member of the International Gas Union (IGU) putting forward proposals, aimed at promotion of the global gas industry.

One of the results of such engagement is that 5 business associations formed by partner companies undertaking gas-related services established the Code of Ethics respectively in response to the Group's policy. The Group is also actively working with businesses, universities and NPOs

Customers	Busienss opportunities such as security service and sale PR events Customer Centers Showrooms Service shops Website
Consumer groups	Meetings
Regional communities	Social contribution activities
Students, educational organizations	Joint study "Energy and Environmental Education," "Food Education," "Fire Education," "Education on Disaster Prevention" Acceptance of interns Recruitment meetings Website
Knowledgeable people	Joint study
Administrative authorities	Submission of various documents
NPOs, NGOs	Joint research Joint work and cooperation for solving regional issues Meetings
Shareholders, investors	• Issuance of various documents (financial statements, annual reports) • Briefings • Website
Employees	Labor-management meetings
Business partners, clients	Business opportunities

Important aspects of CSR (materiality)

Grievance Mechanisms on Environmental Impacts, Impacts on Society, Human Rights and Labor Practices

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.

The Osaka Gas 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. In accordance with the "Osaka Gas Group Code of Conduct", the Group established a system to respond to the voices from stakeholders concerned in our business, such as customers, local community members, clients, and employees.

To deal with voices on the environment, it operates a company-wide Environmental Management System (EMS) according to the ISO14001 . 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.

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



Customers' voices have been reflected in our efforts to develop new products and improve service quality.



Saori Ikeda

Our customer centers and website have received various opinions and requests from stakeholders. which are valuable information we are sharing through our "C-VOICE" database system, so as to have them reflected in our efforts to improve business operations and service quality, and develop new products.

We will continue to step up collaboration with the relevant parties to attain our goal of increasing customer satisfaction.

Management system and its performance

Indicator

Number of grievances filed, addressed and resolved through the formal grievance mechanism on environmental and social impacts, human rights, and labor practices (G4-based indicators: G4-EN34, S011, HR12,

Specific actions taken regarding materiality

Gas bill improved by reflecting customers' voices

Osaka Gas has been making efforts to reflect customers' voices in its development of new products and improvement of service quality.

In fiscal 2016, for example, a user-friendly design was adopted for the notification delivered to each household informing the amount of gas consumption. On the sheet, information deemed important for customers, such as the month and the amount charged, the amount of gas consumed, are shown in larger print. A year-to-year comparison is also shown for each month's gas consumption, and a universal-design font is

Statistical data deemed especially important for customers are shown in larger print on the sheet.

- . The month charged
- The amount charged
- The amount of gas consumption
- The date scheduled to transfer the payment from the bank account (for customers using such payment method)

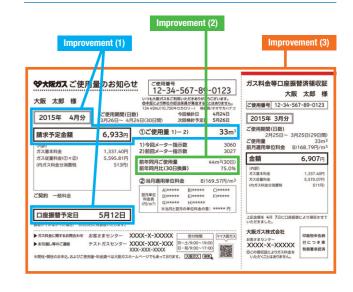
Improvement (2)

New data added in response to requests from customers

• Year-to-year comparison of gas consumption and number of days covered

Use of a universal-design font

Employed a universal-design font which is excellent in visibility and readability.



Key Performance Indicators of Osaka Gas Group

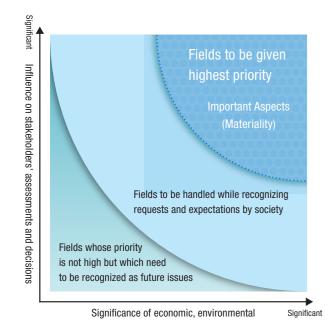
CSR Activities

The Osaka Gas Group believes that it should engage in its business activities while grasping and managing the possible effects on society of its activities as an energy business operator.

To this end, the Group introduced CSR Indicators by which the level of management and transparency of CSR activities to be accelerated.

Apart from the CSR Indicators, the Group, as a way of fulfilling its social responsibility, identified aspects deemed important (materiality) after hearing opinions from outside knowledgeable people, taking into account the characteristics of its business and areas where it operates, and in line with procedures stipulated in the fourth edition of the GRI Guidelines (G4).

In fiscal 2015, indicators for identified materiality were introduced to assess the level of activities.



and social impacts to the Osaka Gas Group

			G4-•••	64 Indicators	* Target fo	or FY2017
CSR Charter		Key Performa	nce Indicators	FY2016 Target	FY2016 Result	Page No.
	CSR Indicators	Customer Satisfaction Survey: Seven Customer Service Duties	Overall satisfaction rate Each satisfaction rate for	87% or more	91.9% 84% or more in all of the seven duties	P.23
Ţ	Materiality Indicators	_	seven customer service duties	O T/0 of filore	in all of the seven duties	
Creating Value for Customers		Percentage of city gas for which health and sa	afety impacts are assessed			
	Customer Health and Safety	for improvement against total city gas provide		100%	100%	P.24
	Product and Service Labeling	Customer satisfaction rate for customer service	ce duties including safety G4-PR5	87 % or more	91.9%	Web site
	CSR Indicators	Environmental Management Indicator	Environmental Management Efficiency	58 yen/1,000 m³ or less*	59 yen/1,000 m³	P.29
Π	Materiality Indicators					
Harmonizing with the Environment and Contributing to	Energy / Emissions	Amount of CO ₂ emissions at LNG terminals pe	er unit gas sales G4-EN18	12.3 t-CO ₂ /1 million m³ or less*	11.7 t-CO ₂ /1 million m ³	P.30
Realizing a Sustainable Society		Amount of CO ₂ emissions at office buildings p	per unit floor space G4-EN18	74.4 t-C0 ₂ /1,000 m ² or less*	61.8 t-C0 ₂ /1,000 m ²	
	Effluents and Waste	Final disposal rate of industrial waste at Osaka	a Gas G4-EN23	2.0% or less*	0.9%	Web site
III	CSR Indicators		Number of events held (on-site dietary and energy/environmental seminars, etc.)	1,100 events or more	2,028 events	
		Communication events	Number of contacts (visitors to permanent facilities including Gas Science Museum)	60,000 persons or more	61,402 persons	P.37
		Social contribution	Number of events held	600 events or more	778 events	
Being a Good Corporate Citizen Contributing to Society Materiality Indicators						
	Local Communities	Percentage of operations with implemented lo impact assessments and development progra	174-5111	100%	100%	P.38
			(Individual) Understanding level of "Code of Conduct"	Higher than the previous year	0.4 points improved compared to the previous year (73.8%)	
IV	CSR Indicators	Scores on compliance awareness	(Organization) Degree of compliance penetration in the organization	Higher than the previous year	0.4 points decreased	P.41
Complying with Laws and		Percentage of employees receiving the "Compliance Training"	ponouation in the organization	100%	compared to the previous year (86.6%)	
Regulations and Respect for Human Rights	Materiality Indicators					
3	Customer Privacy	Total number of substantiated complaints regacustomer privacy	arding breaches of G4-PR8		Took measures to prevent recurrence of mishandling of information	P.42
V Management Policy for Human Growth	CSR Indicators	Employee Attitude Survey	Job satisfaction and attachment to the company	Maintain sufficient levels	Maintain sufficient levels (Result of FY2015. Survey is conducted every few years.)	P.45
	Materiality Indicators					
Common Theme	Grievance Mechanisms on Environmental Impacts, Impacts on Society, Human Rights and Labor Practices	Number of grievances filed, addressed and re the formal grievance mechanism on environm impacts, human rights, and labor practices			Responded to each grievance received	P.16
	Supplier Assessment on Environmental Impacts, Impacts on Society, Human Rights and Labor Practices	Percentage of new suppliers that have been s criteria regarding environment, social impact, labor practices		100%	100%	P.22

OSAKA GAS GROUP CSR REPORT 2016 18

Information posted on the Web CSR Efforts Throughout the Supply Chains

CSR Efforts Throughout the Value Chains

Osaka Gas's task of delivering city gas to customers can't be achieved without the cooperation of various business partners—not only Osaka Gas Group companies but also business partners. We believe it is necessary for Osaka Gas to control the social and environmental effects that are generated in its business process in the most responsible manner and in close cooperation with our business partners.

Osaka Gas has adopted "CSR Procurement Guidelines" as a way to fulfill its CSR in procurement activities and disclosed that on its website. New materials suppliers have been briefed about the Guidelines, before starting business transactions with Osaka Gas. Major suppliers are to be asked to reconfirm the content of the Guidelines during an

annual CSR survey on them as part of our follow-up efforts.

Our CSR survey for fiscal 2016 covered gas appliance makers and companies engaging in the gas business on a consignment basis, such as gas service chains and gas pipeline construction companies. Our "Green Partner Initiative," applied to pipeline materials suppliers, was revised in the year.

We will continue to work with our suppliers to fulfill our CSR and aim to promote mutual prosperity in the entire value chain , from LNG drilling to marketing, sales and consumption.

CSR Survey Conducted in FY2016

Companies covered by the survey	Number of companies surveyed	Number of companies which replied	Other efforts
Main suppliers, including gas pipeline material makers	191 companies	185 companies	Revision to the "Green Partner Initiative"
Gas appliance makers	39 companies	34 companies	Holding of an educational seminar on the Electric Industry Code of Conduct
Gas service chains and gas pipeline construction companies	238 companies	140 companies	
Total	468 companies	359 companies	

Held a seminar on the Electric Industry Code of Conduct along with two gas appliance makers

In January 2016, Osaka Gas, Noritz Corporation and Rinnai Corporation held an educational seminar regarding the code of conduct to be observed by the Electronic Industry Citizenship Coalition (EICC).

Composed of more than 90 electronic companies operating internationally, the EICC formulated a common audit model, as a way of fulfilling member companies' social and environmental responsibilities in electronic industry supply chains [11], urging their material suppliers to implement improvement measures in the fields of labor conditions, safety and sanitation, the environment, and business practices, including corporate ethics.

Through the seminar, attended companies were able to recognize the importance of supply-chain management while sharing information

regarding international CSR trends and what they are supposed to do in terms of CSR in business operations.



Stakeholder Views

Takuya Ogawa

Director of General Affairs Department and Public Relations Department, Management Headquarters



Participation in a study seminar on the **Electric Industry Code of Conduct**

I participated in a study seminar on the Electric Industry Code of Conduct held by Osaka Gas. CSR-based management has become increasingly important for manufacturers. We are to take into consideration not only themes including labor conditions, workplace safety and sanitation, and the environment, but also overseas business transaction and labor practices which may be different from those in Japan. The seminar provided me with a good opportunity to learn about the global CSR trends and judgment standards. Through the seminar, I was able to share information with people working for other companies in the same industry. I learned how they recognize the issues facing us and which direction we should take to resolve these issues. The seminar became a very valuable experience for me. I would like to express my gratitude to Osaka Gas for providing me with such a precious opportunity.

Important aspects of CSR (materiality)

Supplier Assessment on Environmental Impacts, Impacts on Society, Human Rights and Labor Practices

Reasons of materiality in respect of our business

Widespread value chains of our business function with imperative cooperation of various business partners. Fulfilling CSR together with those business partners throughout the value chains leads to a better relationship with stakeholders including society as well as employees, resulting in the development of the entire value chains.

Management systems and its performance

Indicator

Percentage of new suppliers that have been selected using criteria regarding environment, social impact, human rights and labor practices (G4-EN32, S09, HR10, LA14)

Commitment

Osaka Gas is committed to fulfilling CSR in close cooperation with its business partners in line with the "Osaka Gas Group Code of Conduct," drawn up based on the United Nations Global Compact.

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

Responsibilities

Each organization in charge of procuring particular materials holds responsibility to buy materials in accordance with the procurement-related standards and guidelines set by Osaka Gas, as shown above.

Performance

A total of 36 suppliers began new business transactions with Osaka Gas in fiscal 2016. 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.



Aiming to realize sustainable growth for the overall value chain



Hiroshi Hara Manager, CSR Office. Osaka Gas Co. Ltd

At a time when the Osaka Gas Group is expected to fulfill its social responsibility throughout the value chain, we believe that raising the CSR level of the Group along with our business partners will lead to mutual prosperity, and result in sustainable growth of the overall value chain. To become a company that continues to be chosen by customers and society, we will grasp, prioritize and steadily solve issues associated with the value chain, while promoting dialogue with stakeholders.

Specific actions taken regarding materiality

Measures in material procurement

Before starting business transactions with suppliers, Osaka Gas communicates its "Purchasing Policy" and "CSR-based Purchasing Guidelines," and even confirms their efforts on CSR. In fiscal 2016, a survey was conducted on 191 major suppliers to check their CSR efforts. Furthermore, when the suppliers conduct business transactions with Osaka Gas, they are asked to observe "Green Purchase Guidelines" set by Osaka Gas, attached to the specifications for the business transactions.

Revision to the "Green Partner Initiative"

The "Green Partner Initiative" is applied to suppliers of gas pipeline materials. Under the system, suppliers that are recognized as being active in the building of an Environmental Management System (EMS) will be registered as Partners. As of the end of March 2016, 16 suppliers were registered as Partners. When their Partner status is renewed, they undergo screening to check if they meet the registration standards. At the same time, they are encouraged to step up their environmentally friendly management. In fiscal 2016, Osaka Gas revised its "Green Partner Initiative," effective from fiscal 2017, to cover companies other than suppliers of gas pipeline materials.

"CSR Survey" conducted on gas appliance makers

Osaka Gas conducted a CSR survey on gas appliance makers to enhance their awareness of the importance of taking into account social and environmental aspects in doing business, and to ensure the safe use of gas appliances by end customers. The survey, conducted following the one in the previous year, asked 39 companies about their CSR efforts regarding 67 items covered by eight themes—compliance, human rights, labor, occupational health and safety, product safety and quality, environmental protection, ethics and anti-corruption, and implementation systems—in line with the "CSR Procurement Guidelines on Gas Appliances." Of the 39 companies, 34 replied.

In order to improve effectiveness of the questionnaire for the service chains and engineering companies, Osaka Gas attached a guide explaining the purpose of the questions and making the questionnaire easy to be answered regarding the questions of which many of answers were negative ones, such as "efforts are insufficient,""not sure," or refrained from answering. Compiling a guide is also aimed at sharing information on CSR that businesses are expected to fulfill.

We will continue to conduct similar surveys in the future as a means of deepening communications with our business partners.

Important aspects of CSR (materiality)

Customer Health and Safety

CSR Charter





Creating Value for Customers

Fundamental concept

The Osaka Gas Group will endeavor to ensure stable procurement, stable supply and security to allow customers to utilize energy safely. By doing so, the Group will provide products and services that are valuable to customers.

The Osaka Gas Group is committed to making a positive contribution to realizing a higher level of comfort and development in the business activities of its customers through stable procurement and safe supply of natural gas and other energies, and ensuring of safe use of gas and equipment with an improved level of services for its customers. We believe that an important foundation in realizing this will be ensuring security so that customers can use energy without worry. We will endeavor to provide products and services that give utmost reassurance to safety and to take on the challenge of creating new value in line with customers' wishes in order to be a corporate group that continually evolves and develops alongside its customers.

CSR Indicator

Customer Satisfaction Survey: Seven Customer Service Duties

The "Customer Satisfaction Survey" covers seven operations that deal directly with customers: opening of gas lines, repair of gas appliances, regular security patrol (gas facilities inspection), response to telephone inquiries, sales of appliances, security emergency response, and replacement of gas meters upon expiration of the validity period. A questionnaire form is mailed out after the completion of each operation, and assessments of responded customers received are then analyzed. Customer satisfaction is graded on a scale of one to six, and "overall satisfaction rate" is the ratio of responses in the top two grades to the total number of responses.

Targets and results

The overall satisfaction rate was 91.9% in fiscal 2016, representing an improvement of 0.9 percentage point from the preceding year.

We will continue to offer customer-oriented services based on their opinions shown in the survey.

	Targets
rall sfaction rate	87% or mor

84% or more

Actions taken Further efforts to enhance levels of customer service

In fiscal 2016, we redoubled our efforts to improve customer satisfaction (CS). Specifically, we observed the behavior of Osaka Gas staff who received high CS grades in four of the seven customer-service fields—opening of gas lines, repair of gas appliances, sales of appliances, and response to telephone inquiries. This is what we call "behavioral observation."* The observation results were analyzed and developed into a customer service manual in each field for use by all other staff

"Behavioral observation" is a methodology for identifying and presenting solutions based on the academic analysis of facts and findings obtained through the observation of people's behavior

Reasons of materiality in respect of our business

The Osaka Gas Group puts the highest priority on securing safety of gas supply and facilities as an energy business operator which supplies city gas to 7.28 million customers. Therefore, we consider it important that we make efforts to enhance the safety level and formulate a structure tolerant and resilient to possible accidents and disasters.

Management systems and its performance

Percentage of city gas for which health and safety impacts are assessed for improvement against total city gas provided by Osaka Gas (G4-PR1)

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

The Osaka Gas Group has established a system to ensure the safety of city gas and gas appliances in all fields of its city gas value chain 11 processing, supply, and sales and consumption in the corresponding business units. The "Head of Safety" (Vice President) and the person heading each Business Unit's safety operation offer advice on inter-section and inter-district security.

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 and conducted at each Business Unit.

In fiscal 2016, every procedure is 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 11 terminals, safety inspection of gas pipelines and supply facilities, as well as gas appliances at customers consented.



We are striving to improve supply networks so that customers can use city gas safely



Tomoyuki Shimada

The main duties I am assigned include the maintenance and management of gas-supply facilities to ensure their sound operations and the adjustment of pressure inside gas pipelines. I take on these tasks so that our customers can use city gas 24 hours a day, 365 days a year without worry.

When undertaking the duties mentioned above, I place top priority on ensuring the safety of customers and stable supply to their households. I will continue to do all I can to ensure the safety of gas-supply facilities and supply city gas to customers safely.

Specific actions taken regarding materiality

Maintaining the quality of city gas, and ensuring stable gas supply and the safety of gas-processing and supply facilities

To allow customers to receive our 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

* Refer to P.20-21 for the entire business process ending with the gas reaching the customers.

Securing safety at customers' sites

Facilitate systems to response 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 once in 40 months (14 months at specific sites) are conducted. The visits to the customers are exploited as the opportunity for recommending installation of alarms for gas leaks for residential use and ventilation for commercial use, of which penetration rate are 51.7% and 99.3%, respectively.

We are conducting replacement of old gas pipes [21] with new ones that are resistant to earthquakes and corrosion. We are actively proposing the renewal of corrosion-prone old gas pipes by contacting affected customers. In fiscal 2016, we implemented measures to deal with old gas pipes made of gray cast iron, which had been required to be replaced under government instruction—far ahead of the initial schedule of fiscal 2021.

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 (approx. 15,080 km installed), installation of intelligent meters that detect vibrations from the earthquake and shut off the gas supply, of which penetration rate reached 99%. Seismoscopic automatic gas shutoff devices set up in approx. 3,000 places in our gas supply area is one of measures to prevent secondary damage from earthquake.

Learned from disasters incurred by earthquakes in Tohoku region in 2011, we enhanced safety facility in LNG terminals in order to prevent damage by tsunami. Specifically, we have installed stand-alone power-generation facilities, made the terminal buildings watertight and moved part of the terminal facilities to higher locations to avoid tsunami waves. In December 2015, we introduced a damage-reduction block system, which controls gas supply of medium- and

low-pressure gas pipes of the coastal area. The block system is designed to prevent secondary damage and facilitate the early recovery of gas supply. In addition to these anti-tsunami measures, mainly involving improvement on the hardware front, we are taking steps on the software front such as the holding of company-wide



disaster drills and training. We expect these disaster-prevention efforts to establish robust and resilient value chain in city gas service.

■ Securing safety of city gas

At LNG terminals, quality of gas is monitored on a daily basis to be in accordance with the criteria determined in our guidelines based on the law. The amount of gas in the gas holders and pressures in gas pipelines are monitored in real time in the

<The figures are those compiled as of the end of March 2016.>

Efforts to Ensure Safety and Ease Customers' Worry

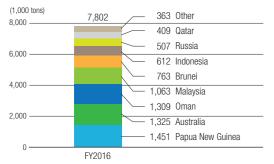
Ensuring stable LNG procurement by diversifying sources from which Osaka Gas imports

While reserves of oil are concentrated in the Middle East, natural gas can be exploited around the world. Natural gas's reserve-to-production ratio is also much longer than that of oil.* These factors make natural gas an advantageous source of energy.

In 1972, Osaka Gas began importing liquefied natural gas (LNG 11) from Brunei, and since then we have made efforts to diversify our sources. Today we import LNG from the eight countries of Brunei, Indonesia, Malaysia, Australia, Qatar, Oman, Russia, and Papua New Guinea. We also plan in 2018 to start a natural gas liquefaction project in the US state of Texas, aiming to ensure more stable procurement.

* BP Statistical Review of World Energy 2016

LNG Imported by Osaka Gas*



The amount of LNG for electricity generation and whole sale trade is included.

Monitored 24 hours a day, 365 days a year

Central control rooms at LNG terminals carry out around-the-clock monitoring and operation of all processes from receipt of LNG, vaporizing of the gas, to delivery of the product.

These central control rooms also carry out monitoring and operation of all of the incident detectors and surveillance cameras so that problems are detected promptly and prevented from spreading.

If an incident detector picks up a problem, an alarm is sounded in the central control room and staff are on the scene immediately



Central control room at an LNG terminal

Development and commercialization of a LNG tank using state-of-the-art technologies

Construction of the No. 5 LNG tank at the Senboku LNG Terminal, which began in 2012, was completed and its operation started in December 2015. The material of the interior wall of the tank is made from 7% nickel (Ni) steel, which contains 20% less of the rare metal nickel than conventional 9% Ni steel. This technology contributes to reducing procurement of material, the precious earth resource.

In addition, the Slipform engineering method* was employed in the construction of the concrete wall that constitutes the outer part of the tank. The use of this engineering method, the first for a domestic LNG tank, enabled significant shortening of construction

An engineering method that

and scaffolds is lifted using a

reinforcement and concreting

hvdraulic iack while

work are simultaneously

The completion of the No. 5 LNG tank further ensured a stable city gas supply.



The No. 5 LNG tank at the Senboku LNG Termina

Building a wide-area gas pipeline network

Osaka Gas has a network of pipelines (gas pipes (1)) throughout the entire Kansai region to deliver city gas to its customers. Gas is sent from the terminal at high pressure, which is then gradually reduced to medium and low pressure by gas pressure regulators installed along the pipelines. Also situated along this network of pipelines are gas holders that allow temporary storage and thus more effective control of fluctuations in demand. This system ensures that customers throughout the network whether they are in homes, office buildings, or factories get a safe and stable supply of gas.

These pipelines are constantly being expanded in line with our long-term supply plans. As part of our planned expansion, we completed the pipelines between Mie and Shiga and between Himeji and Okayama in 2014.

Further stability of the city gas supply following the full opening of a reinforcement pipeline between Taga Town and Hikone City

A reinforcement pipeline linking the 6.1 km distance between Taga Town in Shiga Prefecture and Hikone City in the same prefecture fully opened in September 2015. As a result, a medium-pressure gas transportation pipeline became duel between Taga Governor Station in Taga Town and Shiga-Higashi Office in Hikone City. This pipeline was connected to the Hikone-Nagahama reinforcement pipeline linking the Shiga-Higashi Office and Nagahama City in Shiga Prefecture, which had opened in March 2013. The connection strengthened the Osaka Gas Group's redundant gas supply system, resulting in a significant improvement in the stability of gas supply in the Hikone and Nagahama regions.

Preparing for large earthquakes

Osaka Gas has always had a range of measures for dealing with large earthquakes, such as earthquake-resistant polyethylene pipes . intelligent meters that detect vibrations from the earthquake and shut off the gas supply, as well as an emergency communications network. However, the Great Hanshin-Awaji Earthquake of 1995 prompted us to step up these measures.

We have seismometers installed in 258 locations in the Osaka Gas service area, which allow us to quickly determine the seismic intensity and other information.

To prevent secondary damage from earthquakes, the service area is divided into blocks, each of which can have its gas supplies shut off separately. This is possible thanks to a system of automatic gas shutoff devices which installed seismoscope (approx. 3.000 locations in total) in case of a tremor, as well as remote shutoff devices (approx. 3,000 locations in total) that can be activated to stop gas supplies from the Central Control Room of the head office. If the Central Control Room is physically damaged, a sub-senter with a similar function, set up in Kyoto, will take over its task.

In addition, we are also making constant efforts to improve employees' ability to response to emergencies, such as company-wide earthquake drills and education using e-learning.

In fiscal 2016, a company-wide earthquake drill and a drill in line with the Business Continuity Plan (BCP11) were conducted simultaneously to identify issues arising from the execution of both response to the disaster and efforts for ensuring business continuity, while verifying the initial anti-quake response was conducted under the scenario of an earthquake with a maximum seismic intensity of 7 occurring in the Nara Basin. About 2,400 employees participated in the drill, held as a company-wide event. In the training, President Honjo headed a task force set up at the headquarters to work out various measures in response to the assumed earthquake. Through the task force, the participants shared information, including the extent of the damage caused, while confirming the process of decision-making in the event of a disaster, such as how to establish a response-action system and whether to suspend the gas supply. A practical drill was conducted at each department and division. Under the BCP drill, it was confirmed how to allot employees who are to be assigned to important business operations that are required to continue even in the event of a contingency, along with the procedures thereof.

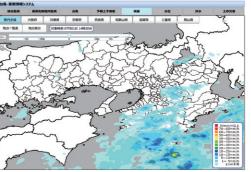


A company-wide disaster drill

Weather data collection system enabling Osaka Gas to grasp information on accumulated rainfall during typhoons, torrential rain and landslide disasters in an integrated manner

Osaka Gas developed a system to obtain weather information, such as accumulated rainfall during typhoons and torrential rain and landslide disasters, in an integrated manner. The system, dubbed "the typhoon and torrential rain information system," began operation in July 2015.

Previously, Osaka Gas had collected weather information by separately referring to websites operated by such organizations as the Japan Meteorological Agency and the Ministry of Land, Transportation and Tourism. The new system enables the Company to gather weather data in its service area in an integrated manner and more expeditiously, making its initial response action in the event of typhoons and torrential rain more effective.



Rainfall data during the July 2015 typhoon, the season's 11th

Informing customers about gas appliance safety

To ensure that customers can use their gas appliances with peace of mind, we take every opportunity to talk to them about the safety of their appliances: during regular safety inspections, when providing a new gas service, and when conducting repairs.

The Osaka Gas website has a section with important announcements on gas appliances, where we talk about the proper use of gas appliances, and post prompt notices about product modifications or defects



Website of "Important announcement regarding gas appliances" (Japanese version only)

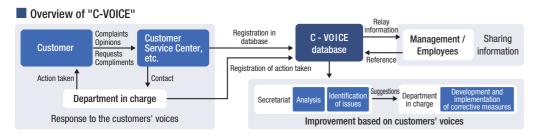
Efforts to Reflect Customers' Opinions

Sharing customer voices throughout the Company

Osaka Gas has established a database system called "C-VOICE" to share customer opinions and demands among all employees. The company has reflected such customer voices in its business operations, product development and service quality.

Customers' voices reaching the Company daily—including both positive and negative comments—are sorted out by the end of each day and filed into the "C-VOICE" system, to be shared the following day not only by the relevant sections and departments but also by top management officials and all other employees. Osaka Gas

has adopted a policy of sharing all information about customers among all of its employees—not only facts and response to customers but also preventive measures and system improvement measures being devised in response to complaints and opinions. In fiscal 2016, the Company improved its in-house response system to enable speedier response to customer complaints and opinions. For example, responses for negative comments requiring immediate fact-finding and formulation of preventive measures are to be decided ahead of schedule.



Multi-Energy Business

Positioning the electricity business as the second most important business after the gas business

Amid diversifying customer needs for energy services due to the accelerated deregulation of the energy market, the Osaka Gas Group is acting as a comprehensive energy supplier to propose the best mix of energy sources, including natural gas, electric power, liquefied petroleum gas (LPG 1) and thermal energy, with the aim of enhancing value for customers.

In particular, we have been positioning the electricity business as the second most important business after the gas business. In fiscal 2010, the Senboku Natural Gas Power Plant (capacity: 1.109 million kW) went into operation as one of our key power plants. In addition, in Japan, we operate five fossil-based power plants and three cogeneration systems while participating in five wind power businesses and six solar power businesses as part of our efforts to promote power generation from renewable energy sources. Our overseas IPP business includes investment in fossil-based power plants, wind power projects and solar power projects in North America and Australia. In 2015, we invested in St. Charles Power Project, a natural

gas power station located in Maryland, the United States.

These projects give the Osaka Gas Group power sources totaling about 2.92 million kW as of the end of March 2016; about 1.84 million kW in Japan and about 1.08 million kW overseas (concessions owned by Osaka Gas).

Meanwhile, as part of our efforts to expand our LNG and city gas sales into broader regions across Japan, we supply part of the LNG we purchase to large-lot customers and other energy service operators in non-Kansai regions, using LNG tank trucks and ships dedicated to carrying LNG. In fiscal 2017, we will begin providing LNG to Hiroshima Gas Co., Ltd. In overseas operations, we acquired an equity stake in Erogasmet S.p.A. of Italy, which marked the first time that Osaka Gas engaged in the city gas distribution business overseas.

In the future we will continue to work with energy companies in other regions to promote our multi-energy business, including our power business, and offer a variety of energy solutions to customers.



Total power generation capacity (overseas)

Approx.

1.08 million kW

sil-based power generation:

0.98 million kW

Renewable energy souces:

0.10 million kW

* Generation capacity of power plants including partly owned by the Group, excluding plants not yet in operation. (As of the end of March 2016)

Proposal for Creating New Value

Launch of "Sumikata Service (Home Services)" Contribution to realizing a higher level of comfort and security in people's lives by combining various housing-support services with basic energy services to be provided to households

Osaka Gas launched a housing support service called "Sumikata Service," which combines various housing-support services to gas and electricity services to be provided to households, to make a positive contribution to realizing a higher level of comfort and security in people's lives.

The "Sumikata Service" consists of three basic services—housing support aimed at realizing a higher level of comfort and security, housing renovation services, and

water-related facility repair services. For example, in water-related facility repair services, Osaka Gas service chains act expeditiously in response to inquiries from customers while



using the technological expertise acquired through the maintenance and repair of gas appliances in repairing water-related facilities including kitchens, bathtubs, bathrooms and toilets.

Launch of "ekul" and "HelloOG!" services ICT service aimed at strengthening ties with corporate clients

Taking advantage of its information and communication technology (ICT), the Osaka Gas Group has offered devices and services that enable industrial/commercial customers to check and control their energy consumption and saving, such as "Eneflex" and "Motto Save."

In July 2016, we began to offer the "ekul" data measurement service, whereby gas and electricity consumption are immediately measured and its information is simultaneously notified to the client, all aimed at reducing energy consumption and business costs, promoting labor saving, and in response to various client needs controlling energy consumption. With this service, the client can immediately know data such as gas, electricity and water consumption, the number of visitors to the client office, and weather information such as temperature and humidity.

As a comprehensive enegy business, we also launched the "HelloOG!" information service in which Osaka Gas provide information that is seemingly useful to each client. The information is selected among its



stockpile that Osaka Gas accumulated over the years. Members of the service can access useful information posted on the website, such as the amount of gas and electricity they have consumed and the rates thereof, free of charge. The information to be sent to clients will be expanded in the future aiming to appropriately respond to their need.

We will continue to propose the best solutions to our clients as their good partner.

Stakeholder Commer



Mr. Hideo lida

Council of the Kansai Consumers' Association
(All-Osaka Consumer Group Liaison Association)

It is the time when the true values offered by Osaka Gas are put to the test

An interim report compiled in June 2016 by the Consumer Affairs Agency study team on ethical no consumption states the significance for energy service providers in responding to consumers' moves to seek ethical consumption as follows; improving their risk management ability through society-friendly and environment-friendly activities at each stage of distribution, enhancing their competitiveness through the solution of social and environmental issues, earning trust and confidence from stakeholders.

Deregulation of the electricity and gas markets has progressed in Japan. The power market has been already been completely liberalized. Full liberalization of the gas market is scheduled to be completed next year, intensifying competition in the Japanese energy market. Under these circumstances, consumers are beginning to give high marks to Osaka Gas for its positions on business policies.

Osaka Gas has taken various measures to ensure safety of gas business in the past, including implementing safety and security steps for customers, replacing old gas pipes 1 under meticulously crafted plans, and taking anti-disaster measures. By implementing all these measures, the Company has worked on enhancing customer satisfaction

It is the time when the true values offered by Osaka Gas are put to the test. We hope Osaka Gas will respond to the voices of consumers sincerely and step up its efforts to promote business innovation in an ethical fashion.

CCB Charter

CSR Chart

CSR Charter

osted on the Web • Efforts Contributing to Realizing a Low-Carbon Society • Environmental Performance Data

Energy / Emissions

CSR Charter





Harmonizing with the Environment and **Contributing to Realizing a Sustainable Society**

Fundamental concept

Through the provision of products and services, including natural gas, the Osaka Gas Group is committed to reducing the environmental impact of business activities. By harmonizing its business activities with the environment, the Group will strive to create a sustainable society.

Environmental conservation on a local and a global scale is an extremely important mission for the Osaka Gas Group, whose operations center on the energy business. In accordance with the "Osaka Gas Group Environmental Activities Policy" we established in 2006, the Osaka Gas Group is lessening the environmental impact of its business activities through the provision of natural gas and other products and services. And through our business activities, we contribute to environmental improvement and the development of sustainable societies locally, nationally, and internationally by pursuing harmony with the environment and making efficient use of energy and resources.

CSR Indicator

Environmental Management Indicator: Environmental Management Efficiency

Osaka Gas uses "Environmental Management Efficiency" as an indicator to assess progress in environmental management in a continuous, integrated manner. This indicator is the total monetary value of seven environmental impacts* per gas sold. The smaller the figure for environmental management efficiency, the greater the reduction in environmental impact per amount of gas sold. * GHG 🔃 emissions, NOx emissions, COD (chemical oxygen demand), final disposal of general/industrial waste, final disposal of excavated soil 🔃, chemical emissions, use of water

Targets and results

The environmental management efficiency for FY2016 was given as 59 yen/1,000 m³, showing steady progress toward achieving the goal set for FY2017.

Target for FY2017

FY2016 performance was

58 yen/1,000 m³ or less **59** yen/1,000 m³

Targets

Actions to reduce the environmental impact to improve its Environmental Management Efficiency

The Osaka Gas Group implemented measures including continuous operation of cryogenic power generation facilities at LNG terminals, enhancement of the "Green Gas Buildings" activities facilitating installation of energy-saving measures at office buildings, and improvement of efficiency of experiment for gas appliances at our research and development laboratories. All employees of the Osaka Gas Group have worked on reducing the environmental impact of business activities by operating the Environmental Management System (EMS) toward the ultimate goal of cutting overall greenhouse gas emissions. In addition, we have reduced the environmental impact of business activities by recycling drilling soil discharged during the laying of gas pipelines. Consequently, the environmental management efficiency for FY2016 came to 59 yen/1,000 m³, compared to the FY2017 target of 58 yen/1,000 m³ or less. Aiming at achieving the target for FY2017, each department and division of the Group will work together to step up its efforts.

Reasons of materiality in respect of our business

The Osaka Gas 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.

Important aspects of CSR (materiality)

Management systems and its performance

Indicator

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

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

In the Osaka Gas, a unified environmental management system (EMS) based on ISO 14001 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 Osaka Gas Group's 71 domestic affiliates operate their own EMSs, such as ISO 14001, Eco Action 21*, and the "Osaka Gas Environmental Management System (OGEMS)."

In fiscal 2016, CO₂ emissions at LNG terminals was 11.7 t-CO₂ per 1

million m³ of gas sold and CO₂ emissions at office buildings was 61.8

t-CO₂ per 1,000 m² floor space, indicating that we are making steady

progress toward achieving our target for FY2017, respectively 12.3 or

*EMS standard formulated by the Ministry of Environment

■ Environmental Management System (EMS)



Renewal inspection

(every three years) Periodical inspection (twice every three years) Certification agency: Japan Gas Appliances Inspection

Association

- Main inspection items Situation regarding the achievements of enviro
- (activities in offices, business activities Situation regarding the compliance to environment-related laws
- Situation regarding internal audit - Management review
- Situation regarding the management of facilities used for front-line operations

Senboku LNG Terminal LNG Terminal & Power Generation

Specific actions taken regarding materiality

Efforts to curb CO₂ emissions at LNG terminals

The Osaka Gas Group has been striving to curb CO2 emissions at LNG 11 terminals by undertaking various energy-saving activities.

At LNG terminals, for example, the amount of electricity purchased is reduced by utilizing electricity generated by cryogenic energy obtained from LNG gasification process. This power generation process does not emit CO₂ at all, because no fuel is required. Not only utilizing cryogenic energy at our own facilities, we also supply it to the nearby plants of petrochemical company adjacent to the LNG terminal to be used for their cooling process, and thus contribute to saving energy consumption and curbing CO₂ emission inside and outside of the company.

Furthermore, at Senboku LNG Terminal, we have installed inverters at three out of eight seawater-transport pumps being used for LNG gasification. Following the modification of the pumps, their variable-speed operation became possible in 2012, leading to the reduction of power consumption, along with reduction of 25% energy unit for those seawater-transport pumps at the Terminal. In addition, replacement of illumination devices degraded with age reduced electricity consumption at the Terminal. In fiscal 2014, about 300 of the 800 outdoor illumination devices were replaced with explosion-proof LED lighting devices, resulting in a cut of 410,000 kWh in annual power consumption.



The effective use of LNG cryogenic energy is contributing to the reduction of CO2 emissions at Senboku LNG Terminal.



Noriyoshi 0mura Day Shift Group 2

Senboku LNG Terminal set up the first LNG cryogenic power plant in 1979. Adding another plant built later, currently, operation of the plants generate electricity accounting 30% of electricity used in the Terminal. Concerted efforts with companies adjacent to the Terminal made efficient operation of the plants, resulting CO₂ emissions reduction by 150,000 tons per year. In fiscal 2016, the operation rate of the two plants rose following the improvement of their engineering process and the review of the maintenance method. We will continue to work on efficient operation of the plants contributing to energy saving and the reduction of CO₂ emissions in local communities

less and 74.4 or less.

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Efforts Contributing to Realizing a Low-Carbon Society

Reducing CO₂ Emissions at Offices

At offices of each company of the Osaka Gas Group, efforts to achieve targets for energy consumption and CO2 emission are being made under the environmental management systems based on the standards such as ISO 14001 [1], Eco Action 21, and "OGEMS." Under the EMS each and every employee works to reduce his or her own energy use by turning off lights and office equipment not currently needed or in use, and setting air conditioning to reasonable temperatures.

The Osaka Gas Group has been renovating the operations of its office buildings to make them more energy-saving, by implementing advanced energy-conservation measures and measures to reduce CO₂ emissions when its buildings are renewed or renovated. Such measures include the installation of equipment to achieve higher energy efficiency, the adoption of energy-control systems, and an overall review of the facility operations. Measures deemed effective for energy saving are horizontally applied to all office buildings of the Osaka Gas Group under the "Green Gas Buildings" project. As of July 2016, "Green Gas Buildings" activities are in operation at nine of the Group's business offices.

When we renovated the Hokubu Gas Building (Takatsuki City,

Observation Method"*1 into the building design process to further promote energy saving. Observation and analysis of the tenants' behavior on energy saving according to the Method allowed us to realize reduction of CO₂ emission.

Osaka Prefecture), Osaka Gas incorporated the "Behavioral

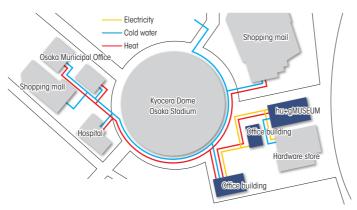
Our offices also introduced surveillance systems such as the "Motto Save," which is aimed at promoting energy saving at office buildings by deciding their optimal energy use based on building size and the type of building operation. In addition, the Fukiai office of Osaka Gas, located in Kobe City, Hyogo Prefecture, introduced "BCP-Lite,"*2 an emergency power-supply system that enables even a small-sized building not usually equipped with a backup power generator to continue the minimum level of business operations in the event of a natural disaster. Following its introduction, the Fukiai office confirmed that the system could function as designed. The "BCP-Lite" is a system in which the concept of a business continuity plan (BCP 11) was added to our conventional energy-saving equipment. We expect this to help the building of a low-carbon society in the future while supporting our business continuity in the event of a contingency.

*1 "Behavioral observation" is a methodology for presenting and implementing solutions derived by the academic analysis of facts and findings obtained through the broad-based observation of people's behavior.

*2 "BCP-Lite" is an emergency power supply system for office buildings in which electricity can be supplied without interruption even if power outage occurs following a natural disaster A self-driven gas engine heat pump (GHP) is incorporated into the system

Smart Energy Network

Osaka Gas structured a district heating and cooling system at the area surrounding the facilities of the Company in Nishi Ward in Osaka City. The system also functions as the Smart Energy Network, where heat and electricity generated in the area are accommodated in the community. The system can be controlled optimally from the perspective of the entire area, realizing an approach to urban planning that allows energy to be used efficiently.



Helping Customers' Efforts for Realizing a Low-Carbon Society

Working Together with Customers to Save Energy

Part of efforts to encourage local companies in the Kansai region to introduce natural gas equipment, Osaka Gas is promoting the "Try! Carbon Offset" project, which envisages using the central government's J-Credit system to reduce the amount of CO2 emitted at various events held in Kansai region to effectively zero.

Under the government's J-Credit system, CO₂ emission reductions achieved by customer companies when they introduce high-efficiency gas equipment such as natural gas-fueled boilers, cogeneration systems , and gas engine-driven heat pump air-conditioning systems are converted into credits, which are acquired by us. We then use the credits as carbon offsets for local sports events, local-government-organized events, and so on, which means that the CO2 emissions from such events are offset to the zero level. As a result of this initiative, we are promoting

so-called "local consumption," whereby credits earned by local companies are used for local events.

In fiscal 2016, CO₂ emissions dropped by 3,079 tons, equal to the sum of CO₂ emitted from about 770 ordinary households.* In fiscal 2017, Osaka Gas offered credits equal to 100 tons of CO2 in the year by joining the government-sponsored Carbon Offset project for the G7 Summit Japan 2016 held in May.

* The number of household is calculated based on the National Greenhouse Gas Inventory Report of Japan (2016). The offset amount is calculated using the marginal factor



Osaka Gas supported the Carbon Offset project through the

TOPIC

Launch of the "ENE-FARM type S," a household-use solid oxide fuel cell (SOFC) realized both the world's highest power generation efficiency and the world's smallest size

Osaka Gas developed the new model of a household-use solid oxide fuel cell (SOFC 11), "ENE-FARM type S,"*1 which achieved the world's highest*2 power generation efficiency of 52%*3, in addition to the world's smallest*4 size of its main components. The compactness of the model, launched in April 2016, has made installation easier in condominiums, generally less spacious than ordinary houses. The installation of power generation units connecting with existing water heater has also become

- *1 Gas cogeneration systems for household use which utilizes exhaust heat associated with power generation occurred by chemical reaction of hydrogen extracted from city gas with oxigen in the air
- *2 The world's highest power generation efficiency among household-use fuel cells with a rated output capacity of 1 kW or less (based on data compiled by Osaka Gas as of Feb. 24, 2016).
- *3 Calculated based on a lower heating value, which is the calorific value calculated by subtracting the latent heat of vaporization of the water vapor that is generated when complete fuel gas combustion occurs.
- *4 The world's smallest size among household-use SOFCs, including fuel-cells systems using exhaust heat (based on data compiled by Osaka Gas as of Feb. 24,
- *5 This marked the first time in Japan that electricity generated by household fuel cells was bought through the grid (based on data compiled by Osaka Gas as of Feb. 24, 2016). Customers from whom we can buy their redundant electricity are those who use our specific "FNF-FARM" models and have concluded gas contracts with us.

possible, resulting in broader-based customers receiving services. Furthermore, Osaka Gas became the first company in Japan to purchase redundant electricity from customers following the deregulation of retail power sales.*5 This enables Osaka Gas to contribute to CO2 emission reductions in Japan, support the central government's policy of diversifying and dispersing power sources, and ease peak power load.



Effective use of biogas

A main component of biogas is methane, as in the case of natural gas. Biogas is a renewable energy source and is seen as an effective tool to combat global warming. Osaka Gas began purchasing biogas in September 2010 on behalf of customers who are to receive the gas from us through our pipelines, in line with our "Biogas Procurement Guidelines" a set of conditions we apply when we buy biogas for

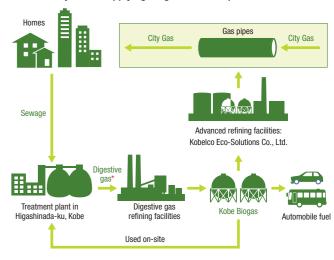
It is a pilot project Osaka Gas launched jointly with Kobe City and Kobelco Eco-Solutions Co., Ltd., in which biogas produced at the processing plant in Kobe City is provided as our city gas to customers via gas pipelines 11 operated by the Company. The amount of biogas we accept into our pipelines—whose brand name is "Kobe Biogas"—is about 800,000 m³ per year (equal to the gas consumed annually by about 2,000 households).

OGCTS Co., Ltd., an Osaka Gas Group company, will begin operating the "Power Generation Business Using Digestion Gas at Sewage Plants in Osaka City" in April 2017 in partnership with the Osaka City municipality, Tsukishima Kikai Co., Ltd. and Tsukishima Technology Maintenance Service Co., Ltd. Having combined power generation capacity of about 4,090 kW, the four power plants will generate electricity of about 25.8 million kWh annually, which is equal to the sum used at about 7,100 general household in a year. The project is one of the largest of its kind to be launched in Japan under the feed-in-tariff (FIT) power

purchasing system, introduced in line with the Act on Special Measures Concerning the Procurement of Electricity from Renewable Energy Sources by Electricity Utilities.

Furthermore, Energy Bank Japan Co., Ltd., an Osaka Gas Group company, has been collaborating with Kobe City in the "Kobe W Eco Power Generation Project," a power generation system combining solar power generation and a biogas cogeneration system, the first of its kind in Japan.

Trial Project for Supplying Biogas via Gas Pipes



Digestive gas is made by anaerobic fermentation in sewage sludge where no oxygen exists.

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Major Activities in FY2016

Efforts to Promote the Recycling of Resources

Recycling of used gas appliances and compliance with the **Home Appliances Recycling Law**

In fiscal 2016, 1,823 tons of used gas appliances were collected and about 90% of this was used as recycled metal. Some of the used gas appliances were residential gas air conditioners and clothes dryers, which were collected and recycled under the Home Appliances Recycling Law, which was enacted in April 2001. The recycling rate in fiscal 2016 was 90% (minimum legal requirement: 80%) for residential gas air conditioners (about 170 tons collected) and 88% (minimum legal requirement: 82%) for clothes dryers (about 13 tons collected).





Hot water dispenser and iron used in the product, which is to b





Copper and electrical wiring, both of which are to be recycled into

Conserving Biodiversity

Use of recycled soil at gas pipe construction

The Osaka Gas Group works to reduce the amount of excavated soil and waste asphalt generated as a result of gas pipe installation, which contributes to reduce impact on the ecosystem. Ways to achieve this include the Vermeer method, which requires soil excavation of only two points, and the shallow pipe installation method. In fiscal 2016 these methods allowed us to reduce the amount of excavated soil generated by 510,000 tons compared to what would have been generated using conventional methods.

Our soil and asphalt recycling system promotes the reuse of waste asphalt and excavated soil as either recycled asphalt, regenerated roadbed material, or improved soil. These efforts allowed us to reuse 89% of material excavated during gas pipeline construction in fiscal 2016 and send to final disposal just 11,000 tons.

Turning the roof of the building into a place providing the opportunity of valuable experience and learning

Osaka Gas laid a rice field and a vegetable garden patch, of about 100 and 12 square meters respectively, on its showroom building, where the Company holds educational sessions aiming at enhancing children's awareness of environmental conservation.

At sessions held in fiscal 2016, 97 fifth graders of a local elementary school attended and experienced the entire process of rice farming—from rice planting, reaping and cooking to tasting-resulting in the harvesting of about 45 kg of rice.

The participants learned about biodiversity through a nature-watching event held in the paddy fields one month after their rice planting. Specifically, they took a first-hand look at rice growing and the various forms of life emerging from the paddies, such as dragonflies and water fleas. In the autumn, the children experienced rice reaping, and also engaged in the threshing of the harvested rice using old-fashioned agricultural machines, including thousand-tooth threshers and wind-powered threshers.

Positive comments reached us from the parents of the participants, with one stating that the children themselves had apparently grown through the rice-farming experience. Other parents said their child spoke positively of the experience after returning home following the event.

The program was developed and run by staff members of our showroom and employees of the Osaka Gas Group working at adjacent business locations. These people support demonstration sessions held for elementary school children in rice planting and harvesting, and engage in daily observation of the fields to see how they are managed and maintained. We will continue this events in fiscal 2017.





Local elementary school children experiencing planting and harvesting of rice

Developing Environmental Technologies

Development of hydrogen generators and the establishment of hydrogen filling stations

Osaka Gas has developed a compact on-site hydrogen generator, "HYSERVE-300", which makes hydrogen from natural gas with an output capacity of 300 m³N/h. The move has been in response to increasing demand in recent years for hydrogen-generating devices for use at filling stations, amid the anticipated spread of fuel cell automobiles, considered to be the ultimate clean car. We have also developed an LPG model, "HYSERVE-300P", which went on sale in January 2015. The launch of this product enhanced our lineup of the on-site hydrogen generator which can meet various customer

In step with the development of hydrogen-generating devices, Osaka Gas has been conducting empirical research on hydrogen filling stations for their diffusion since fiscal 2002. In April 2015, the company opened Kita-Osaka Hydrogen Station, which is equipped

with its "HYSERVE-300" hydrogen generator, in Ibaraki City, Osaka Prefecture. In March 2016, it also opened Kamitoba Hydrogen Station, a movable filling station in Kyoto City. At each filling station, hydrogen generated from city gas is provided to fuel cell vehicles.

Osaka Gas will continue to support the creation of a low-carbon society through the establishment of hydrogen-supplying infrastructure facilities, and the development and sales of hydrogen generators.



Kamitoba Hydrogen Station

Development and sale of the "Spot Silencer" a noise canceling device

Osaka Gas developed the "Spot Silencer", a noise control device designed to reduce the level of noise using a sound with different phase. Sasakura Engineering Co., Ltd. began selling the product.

The device is designed to offset low-frequency sound, which is a kind of sound difficult to absorb or insulate, with the sound of the opposite waveform. Installed adjacent to the source of noise, the "Spot Silencer" can prevent the noise from spreading spatially.

The device is small in size, yet incorporates all of the necessary functions in a uniform manner which eliminates redesigning responding to the place where it is installed. A high degree of quietness can be achieved if it is used for a gas cogeneration system . Its use in commercial facilities and factories, both notorious for noise arising from compressors and transformers, is expected to grow.

TOPIC

The Osaka Gas Group was Chosen as a Leading Company in the Information Disclosure under the CDP 2015

The Osaka Gas Group was selected as one of the Climate Disclosure Leadership Index (CDLI), the index compiled by the CDP* sellecting companies excellent in disclosure information on their climate change strategy and greenhouse gas emission. The Group was included in the CDLI for the fourth time, following the first listing in fiscal 2014. The Osaka Gas Group will continue to take measures to curb climate change and alleviate its impact on the environment while promoting information disclosure.

* The CDP is an international, nonprofit organization based in the U.K., which is supported by institutional investors across the globe, with its total assets amounting to 95 trillion U.S. dollars. The CDP is encouraging companies to disclose climate change information with the aim of easing its impact on the environment. In fiscal 2016, 500 companies in Japan were subject to analysis of the CDP, of which the top 25 companies were selected for inclusion in the CDLI as companies with excellent information disclosure.



Dr. Koii Shimada

Professor, Department of Economics at Ritsumeikan University

Expect further efforts to reduce greenhouse gas emissions in the gas and power businesses, as well as appropriate environmental management in value chains.

In the city gas business, Osaka Gas, with the development and sale of the world's most energy efficient "ENE-FARM", has contributed to the reduction of CO₂ emissions on the demand side. Expectations for Osaka Gas in the electricity business have also grown, as it has built a business model for purchasing redundant electricity, which contributes to the supply of electricity with less burden on the environment.

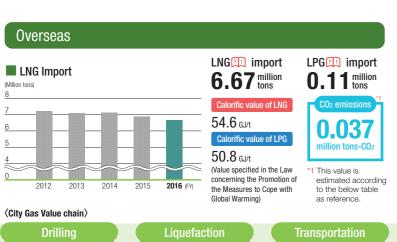
CO₂ emissions from power sources operated by Osaka Gas are expected to increase in view of the expansion of electricity sources by its Group companies in the future. This makes it essential for the Group to set up top-level power-generation facilities in terms of environmental friendliness, and expand its renewable energy business.

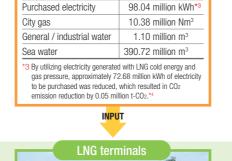
It is advisable for Osaka Gas to link up with overseas suppliers in the procurement of fossil fuel sources for the gas and power businesses, and promote environmental assessment and environmental management in drilling, processing and transportation. It is also necessary for the company to grasp the possible effects of its business operations on labor conditions and human rights, and take necessary response actions if necessary.

Environmental Impact of City Gas Value Chain (FY2016)

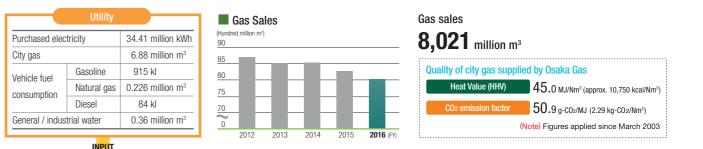
Throughout its city gas value chain [1],

Osaka Gas makes various efforts to reduce environmental impact by its business, including cutting GHG (11) emissions and waste discharges.





In Japan



OUTPUT



*1 These values are estimated according to the below table as reference.





CO ₂ emissions *4		
2 emission per	F 0 ~ CO-/m	.3
it of gas sold	5.3 g-CO ₂ /m	2
0 t-CO2)		(g-CO ₂ /m ³)
		6
<u> </u>		-
		2
		0
2012 2013	2014 2015	2016 (PY)
CO ₂ emissions		
- CO ₂ emission per un	it of gas sold	

CO ₂ e	mission	18	.37 millio	on t-CO ₂
(Million t-CO ₂)				
15				
10				
5				
0				
2012	2013	2014	2015	2016 (FY)

Comparison of	(g-CO ₂ /MJ, HHV)			
	Coal *1	0il *1	LPG *1	LNG *2
Production	4.58	4.06	4.94	7.93
Transport	1.71	0.79	1.80	1.97
Infrastructure	0.11	0.08	0.11	0.05
Combustion	88.53	68.33	59.85	49.50

Natural gas is highly expected as clean energy with the least environmental

■ LCA*2 Comparison of GHG Emissions among Fossil Fuels

(g-C02/MJ, H				
	Coal *1	0il *1	LPG *1	LNG *2
Production	4.58	4.06	4.94	7.93
Transport	1.71	0.79	1.80	1.97
Infrastructure	0.11	0.08	0.11	0.05
Combustion	88.53	68.33	59.85	49.50
Total	94.93	73.26	66.70	59.45
Ratio	160	123	112	100

*1 Source: Future Forecast for Life Cycle Greenhouse Gas Emissions of LNG and City Gas 13A (Energ	У
and Resources, Vol. 28, No. 2, March, 2007)	

^{*2} Source: Calculation of life cycle greenhouse gas emissions of LNG and city gas 13A (Research papers and a collection of academic speeches released at the 35th meeting of the Japan Society of Energy and Resources, held between June 6 and June 7, 2016)

*2 LCA (Life Cycle Assessment)

impact among fossil fuels.

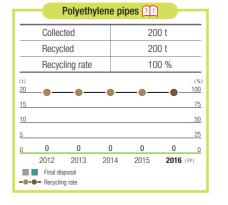
A comprehensive method of survey, analysis, and evaluation of the amount of environmental impacts of products and services. The assessment covers all the related processes from resource extraction to waste disposal including production, transportation, consumption, and recycling for the products and services.

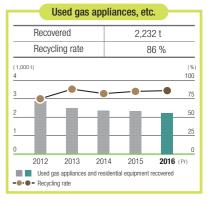


Chemical substance, etc.						
Xyclene	5.33 t					
Toluene	0.67 t					
COD	2.20 t					
NOx	3.42 t					
	Xyclene Toluene COD					



OUTPUT





- *4 CO2 emission factors used for calculation are as follows.
- Electricity: 0.69 kg-CO₂/kWh (source: "Interim Summary by the Target Attainment Scenario
- Subcommittee, Global Environment Group, Central Environment Council," July 2001) - Gas: 2.29 kg-CO₂/m³ (Osaka Gas data)



OSAKA GAS GROUP CSR REPORT 2016

Local Communities



Being a Good Corporate Citizen Contributing to Society

Fundamental concept

As a good corporate citizen, we are working for the development of local communities through various activities and promoting communication with them, with a focus on people's living, the environment and the betterment of local communities.

The Osaka Gas Group conducts business rooted in communities, and its business cannot succeed without good relations with these communities. Actively disclosing information to promote better understanding of our business is a matter of course, and we are engaged in social contribution activities on the topics of living, the environment and the community. We are making dynamic use of the Osaka Gas Group's assets to undertake efforts based on our "Small Light Campaign" underway for more than 30 years to contribute to the growth of local communities and also boost the pride of our employees.

CSR Indicator

Number of Communication / Social Contributions Events

"Number of events (on-site dietary and energy / environment seminars, etc.) held" is the number of events featuring educational activities about energy / environment and food / fire, "Number of contacts" is the number of visitors to the Gas Science Museum and the Himeji Gas Energy Hall, and the "Number of events (for social contributions) held" is the number of social contribution activities implemented by our sports clubs and other initiatives. (Targets)

Targets and Results

In fiscal 2016, the Osaka Gas Group held 2,028 educational events for energy, environment, food and fire. In the year, 47,038 people visited the Gas Science Museum and 14,364 people visited the Himeji Gas Energy Hall. A total of 396 events aimed at promoting the Group's social contribution were held, including activities under the "Small Light Campaign" and activities by athletic clubs. In addition, the number of social contribution activities by the Research Institute for Culture, Energy and Life (CEL) of Osaka Gas and the Osaka Gas Group Welfare Foundation totaled 382 in the year.

Communication Events		
Number of events held (on-site dietary and energy / environment seminars, etc.)	1,100 events or more	2,028 events
Number of contacts (visitors to permanent facilities including Gas Science Museum)	60,000 people or more	61,402 people
Social Contributions	600 events or more	778 events

Continuation of communication activities and social contribution activities

By taking advantage of the assets it has acquired through its business operations, Osaka Gas is continuing to undertake activities aimed at enhancing its communication with society and developing healthy next-generation human resources, such as energy and environmental education events, food education events, disaster-prevention events and fire education events. Furthermore, the Group actively undertakes social contribution activities, including baseball and soccer teaching sessions held for children by athletic clubs of Osaka Gas and activities aimed at supporting healthy growth of young people.

Important aspects of CSR (materiality)

Reasons of materiality in respect of our business

The Osaka Gas 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.

Management systems and its performance

Percentage of operations with implemented local community engagement, impact assessments and development programs (G4-S01)

Based on the "Osaka Gas Group Code of Conduct", we care about the issues faced by society and strive to contribute to the local community recognizing what we are expected as a member of the society.

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 fiscal 2016. In the Regional Co-Creation Division, we have set up company-wide regional, multidisciplinary 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.

In fiscal 2016, all major business locations held various activities tailored to local stakeholders' needs.



Osaka Gas is making efforts to build a sustainable society with enhancing communication with society



Noriko Yokota

The Osaka Gas Group will continue to engage in volunteering activities, including the "Small Light Campaign." The Group has also been stepping up its efforts to solve problems facing our society. In view of liberalization of the electricity and gas markets, it will become increasingly important for the Group to start communication with customers and

people in new service areas, and contribute to the development of local communities in collaboration with government agencies and nonprofit organizations (NPOs). For these activities to be undertaken continuously, we will work on upgrading the relevant in-house systems and creating opportunities encouraging increasing number of employees to participate.

Specific actions taken regarding materiality

"Small Light Campaign" by the Osaka Gas Group

The "Small Light Campaign" was launched in 1981, the International Year of Disabled Persons, as a special initiative of the Osaka Gas Group aimed at getting each employee of the Group interested in efforts in their own backyards and encouraging them to exercise initiative in resolving the problems confronting their local communities. The campaign calls for all of our employees to take the initiative in devising activity programs and participating in such programs.

As a responsible member of the regional community, the Osaka Gas Group is committed to raising awareness and taking part in even more activities, by which it fulfills its role as a good corporate citizen. The "Small Light Campaign" forms part of these activities. To kick-start these activities and enhance employees' awareness regarding corporate social contribution, we have introduced a host of systems aimed at encouraging each employee to support such activities proactively. Specifically, the President of Osaka Gas will give an award to employees who have undertaken activities that have led to social contribution in each region. Also introduced have been "a community gift" (open applications) system and a system allowing employees to take days off to engage in volunteering

■ Management of funds collected for the "Small Light Campaign"

"The Small Light Campaign" is operated by funds collected through various charity events held inside and outside the Company, including the "Charity Calendar Donation," the "Midosuji Fureai Bazaar," a "Book Recycling Fair," a cultural exhibition sponsored by "Osaka Gas Suzurankai" (an informal meeting of former Osaka Gas employees) and "Osaka Gas Healing Music Concert." Money collected through these events is managed as the "Small Light Fund," and finances various social contribution activities, including the support of regions affected by natural disasters and the subsidization of NPO activities. In fiscal 2016, the "Small Light Fund" saw 12,518,268 yen in revenue and 13,434,477 yen in

■ Support activities using the fund

The "Small Light Fund" is used to finance various activities, including the holding of cooking classes providing opportunities to children of nursing facilities to experience the joy of cooking and recognize the importance of food, and handicapped people to participate in social

A "Charity Family Cooking" is one of the annual charity events of the "Small Light Campaign" aimed at promoting food education for children aged five or older, which is held as part of our efforts to reconstruct the areas affected by the March 2011 Great East Japan Earthquake. Money collected through the event is donated to the HATACHI FUND* that was established to support children born in 2011 until they attain adulthood.

The "Small Light Fund" is also used to finance various activities aimed at helping people affected by natural disasters that occur both in Japan and overseas

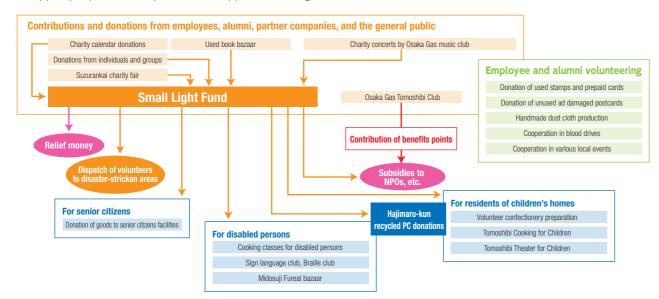
*It is a fund run by a public interest incorporated association for 20 years from 2011. Under this fund, subsidies are provided to organizations that are undertaking support activities for children affected by the March 2011 disaster to enable them to stand on their own two feet by academically supporting them, while taking into account the progress of reconstruction and the needs of the affected areas

Major Activities in FY2016

Corporate Volunteering Activities under the "Small Light Campaign"

Mechanism of the "Small Light Campaign"

The Osaka Gas Group has continued to lead the "Small Light Campaign" for more than 30 years. Under the campaign, charity events have been held with the backing of Osaka Gas employees, its former employees (Suzurankai), supporting companies and ordinary citizens, all on a voluntary basis. Money collected through the campaign has been incorporated into the "Small Light Fund," set up to support various activities, including the rebuilding of disaster-affected areas, employment support for handicapped people, and the provision of support to nursing and welfare facilities for children.



Provision of support to areas damaged by the major earthquake that hit Kumamoto Prefecture in April 2016

The Osaka Gas Group collected contributions from its employees to support people and regions affected by the Kumamoto earthquake through the "Small Light Campaign." The donations collected through the campaign, apart from direct contributions made by Osaka Gas, amounted to 4.9 million yen, and the sum was provided to affected parties via the Central Community Chest of Japan and the Kumamoto Prefectural Government.

Confectionery made by volunteering staff presented to welfare facilities for children

In December 2015, volunteers including citizen, instructors of Osaka Gas Cooking School Co., Ltd. and employees of the Osaka Gas Group made confectionery for children in welfare facilities.

The confectionery were presented to 15 welfare and nursing facilities for children operating in the six prefectures of the Kansai region. The children received the confectionery along with messages sent from the volunteers. In exchange for the messages, they sent thank you letters with their own illustrations to the volunteers.

Social Contribution Activities

"Energizing Kids" — A project to support children

The Osaka Gas Group has been working in collaboration with experts, NPOs, volunteers and others on an "Energizing Kids" project designed to expose the coming generation of youths to a variety of experiences, including classes on energy and environmental protection and sports and cooking lessons.

Efforts to develop healthy next-generation human resources through sports activities include the management of "NOBY T & F CLUB," a sport club led by Nobuharu Asahara, a former Olympic medalist and the Deputy Manager of the athletic club of Osaka Gas. Other sport clubs operated by Osaka Gas are also undertaking various activities for youths.



Main activities by each sports club

Baseball club	Baseball Training Session , The "Heartball Project" and other
Athletic club	Time trial for kids, athletic class and others
Soccer club	Youth soccer tournament and others
Women's basketball club	Exchange with female local junior high school students and others
Men's volleyball club	Volleyball class for elementary school children and others

TOPIC

Supporting efforts by Daito City to build a community in which people can be healthy and feel happiness

Resonating the concept promoted by Daito City in Osaka Prefecture, Osaka Gas, jointly with the City and other companies, established the "Daito Club" which undertakes various activities in the fields of "sports and health," "culture and history" and "food."

In November 2015, "Daito Club" held a picnic, a one-day event in which participants experienced various sports activities. Activities undertaken during the event were a volleyball class conducted by Mr. Shoichi Yanagimoto, the former manager of Japan's women's national volleyball team who currently heads the Athletic Network, and an athletic class held by Mr. Nobuharu Asahara. Also held were "Roshu no Hito," a reader's theater depicting the life of Nagayoshi Miyoshi, a Sengoku Period samurai lord, and a food education session by a local chef and pâtissière. "Daito Club" will begin full-fledged activities at the former elementary school site in the fall of 2016.

Osaka Gas will continue to support community-building activities by Daito City with the aim of expanding such support to other municipalities.





eader's theater



Track training session

Volleyball training sess

Activities for Promoting Communication with Society

Food education activities

The Osaka Gas Group has been pursuing food education activities under the slogan "Nurturing healthy youth through food" to give children a zest for living through food and help them build well-rounded characters.

These activities include holding food education and cooking classes for children, preparing and providing food education learning materials to elementary schools, and developing food menus to be provided to elementary school cooking classes. Also to be held are cooking contests participated in by parents and their children chosen from across Japan and a food and environment symposium jointly sponsored by Osaka Seikei College. Through all these events, Osaka Gas has been pushing for food education activities jointly with local communities.

Direct exchange of opinions between representatives of consumer groups and management

In order to use the views of as many people as possible to improve business and operations, Osaka Gas creates opportunities to gather the opinions of people, such as members of consumer groups.

Once a year, there is a direct exchange of opinions between Osaka Gas's management and the representatives of the Kansai Consumer Group Liaison Commission, an organization of local consumer groups throughout the Kansai region. In fiscal 2016, we received many comments and questions regarding Japan's future energy strategy related to such topics as energy market liberalization, in addition to the role we are expected as a gas business, such as efforts for safety and security for gas supply.

Osaka Gas will continue dialogue with representatives of consumers by holding such meetings and tours to our facilities.



Executive Director of CSO Network Japan

Ms. Kaori Kuroda

Expect Osaka Gas Group to evaluate its social contribution activities

The Osaka Gas Group, runs regionally-rooted businesses, has been undertaking social contribution activities for local communities. These activities are designed to enhance safety and security in local communities, improve people's health, develop next-generation human resources, provide education of energy and environment. The representative activity is the "Small Light Campaign," which the Group has been promoting for more than 30 years in cooperation with local communities and with the backing of volunteering staff of Osaka Gas Group employees.

In the fall of last year, Osaka Gas began to support efforts by Daito City in Osaka Prefecture to build a community in which people can be healthy and feel happiness. Fields in which Osaka Gas can play a supporting role with Daito City and private business in the community-building program include sports, culture and food. This is a kind of efforts the Osaka Gas Group can expect to expand to other communities, and I hope the Group would do so. We also want the Group to evaluate how effective its long-standing and broad-based social contribution activities have been in solving regional problems. Such evaluation should include clarifying the problems that have confronted the Group and how it has overcome such problems.

CSR Charter





Complying with Laws and Regulations and Respect for Human Rights

Fundamental concept

The Osaka Gas Group believes that observing compliance and respecting human rights are the most important factors for the Group in winning trust from customers and society, and constitute the basis of business continuity.

Based on our notion that compliance extends beyond just following laws and regulations to include exhibiting decent behavior as a member of society, we endeavor to maintain fair and honest relations with customers, business partners, and all other parties, and to respect human rights. Ensuring compliance is the most important thing we can do to gain the trust of customers and the society, and we believe it to be the cornerstone of staying in business. Recognizing that individual employees are the key to compliance, we are continually conducting training sessions and employee surveys to raise awareness.

CSR Indicator

Scores on Compliance Awareness / Percentage of Employees Receiving the "Compliance Training"

We have introduced three viewpoints deemed important for compliance promotion as CSR indicators. These three are: (1) the degree of understanding by each Osaka Gas employee of the "Osaka Gas Group Code of Conduct", (2) the degree of penetration through each Osaka Gas Group organization of employees' awareness of the importance of compliance, and (3) the percentage of Osaka Gas Group employees taking the "Compliance Training." As for indicators (1) and (2) above, the Osaka Gas Group aims to obtain higher scores than in the previous year in the compliance awareness surveys that it has been conducting since fiscal 2004 to measure the degree of its penetration. Concerning indicator (3), we work to ensure that all employees receive the "Compliance Training."

Targets and results

A compliance awareness survey conducted among employees revealed that the score of (1) had improved by 0.4 points from the previous year, while the score of (2) had declined by 0.4 points from the preceding year. The percentage of employees taking the compliance training course reached 100%.

Actions taken

Actions taken to enhance the awareness and understanding of employees of compliance

1: (Individual) Understanding level of Code of Conduct

2: (Organization) compliance penetration in the organization

Higher than the previous year

(Targets)

Up 0.4 points from the previous year (73.8%)

Down 0.4

(86.6%)

100%

Higher than the points from the previous year previous year

100%

Efforts are under way to have all employees understand the content of the "Osaka Gas Group Code of Conduct" and for their awareness of the importance of compliance to penetrate through each organization of the Group. Specifically, each organization of the Osaka Gas and its affiliated companies hold training sessions for their employees while taking into account the characteristics of business and workplace of each organization and affiliate. Employees who have yet to take a training course, will be advised to do so in order to leave nobody unattended.

The results of the survey will be fed back to each organization of Osaka Gas and its affiliates. An in-house case-study session based on actual scandals that occurred inside and outside the Company will begin in fiscal 2017.

Important aspects of CSR (materiality)

Customer Privacy

Reasons of materiality in respect of our business

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

Management systems and its performance

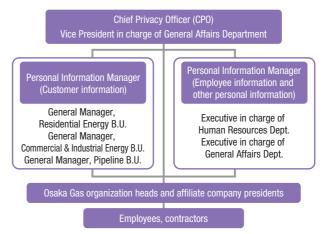
Indicator

Total number of substantiated complaints regarding breaches of customer privacy (G4-PR8)

In accordance with the "Osaka Gas 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."

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

Personal Information Protection Structure



In March 2016, direct mail containing erroneous information (an incident in which personal information relating to names and addresses was erroneously printed on mail) was delivered. Following the incident, Osaka Gas reviewed its procedures for executing business duties and put in place a strict information management system to prevent the recurrence of a similar irregularity.

Specific actions taken regarding materiality

Establishment of a solid group-wide system to protect personal information

The Osaka Gas Group recognizes that the protection of personal information is an extremely important matter. Based on this notion, the Group is appropriately managing the personal information of its customers and doing its best to prevent such information from being leaked to outside parties or being lost.

Mechanism to protect personal information

The Osaka Gas 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.

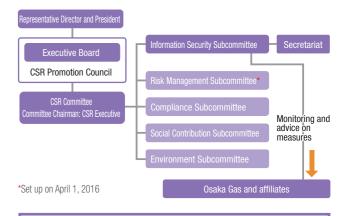
The "Information Security Subcommittee", set up within Osaka Gas in fiscal 2016, reviewed the authority granted to employees to access a database containing customer-data files. It also devised a manual to be used to handle customer data including the "My Number" social security and tax number. In the future, the Group will introduce a system to check how files containing personal data have been protected, and promptly implement measures envisaged for its protection in a meticulous manner.

Education of employees

All Osaka Gas 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 fiscal 2016.

These employees also receive e-learning training, twice a year, aimed at enabling them to respond appropriately to targeted e-mail attacks.

Information Security Structure



I am working on strengthening the Osaka Gas Group's overall information security



As an energy service provider that assumes the role of providing part of the social infrastructure, the Osaka Gas Group recognizes the importance of information management, given that cyberattacks have become rampant recently. In fiscal 2016, the Osaka Gas Group created the "Information Security Subcommittee" to reinforce the

 $\label{thm:condition} \textbf{Takashi Tsuruta} \hspace{0.2cm} \textbf{Group's overall management of information security}.$ We will continue to step up the education of employees of the Group, including management, recognize the

importance of strengthening information management and security, and prevent their possible illicit conducts from undermining our long-standing relationships of trust with our customers and stakeholders.

Major Activities in FY2016

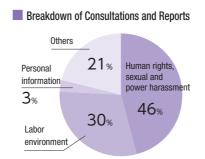
• Compliance Desk • Compliance Promotion Efforts ted on the Web • Action on Human Rights • Information Security

Compliance Desk

"Compliance Desks"

The Osaka Gas Group has established "Compliance Desks" at the Head Office, core affiliates, and law offices outside the company to provide a channel for persons who need a place to seek advice on, and report matters of compliance with laws and internal rules. Not only management and employees of the Group, and workers dispatched from manpower agencies to work for the Group, but also management and employees of client companies providing goods and labor to Group companies on a long-term basis can seek advice or make reports by phone, email, or in writing anonymously.

In fiscal 2016, the "Compliance Desks" received a total of 95 consultations and reports. Upon receipt of a report, an initial examination was made, following which a fair investigation of the facts was conducted and any necessary corrective measures were implemented.



Protecting whistleblowers

Osaka Gas has a rule that details compliance-related reports by employees to the "Compliance Desks" and the subsequent examination of the matter. Based on this rule, "Rules for Counselling and Reporting System regarding Compliance of Laws, Regulations and Work Manual," we keep the names of the whistleblower and persons implicated secret, and prevent retaliatory action against the whistleblower.

The details of the whistleblower's complaint, the result of the examination, and the corrective measures are reported to bodies such as the "Compliance Subcommittee" and the "CSR Committee," which work to prevent the problem from reoccurring.

Organization of "Compliance Desks"



TOPIC

Efforts to prevent the recurrence of scandals

We would like to express our sincere apologies to all stakeholders and customers for causing great trouble and concern following the incident.

Report based on the Construction Material Recycling Act

Upon a notice from the Japan Gas Association on April 14, 2015, asking the Company to do its utmost to observe the Construction Material Recycling Act, Osaka Gas conducted an in-house investigation and found that the Company had failed to submit reports to authorities regarding several engineering projects that had to be reported prior to the start of their work based on the act, including gas pipe-laying projects.

Osaka Gas took the irregularity seriously and is doing all it can to prevent its recurrence. Specifically, the Company has been educating its employees about certain types of engineering projects that require reporting to authorities based on the Construction Material Recycling Act, while strengthening its system to check the observance of the act. It has been already confirmed, however, that the mandatory separation of waste to be disposed of was conducted appropriately according to the types of waste, and recycling procedures were undertaken appropriately for all of those engineering projects that Osaka Gas failed to report to the authorities.

Delivery of direct mail containing erroneous personal information

On March 9, 2016, Osaka Gas confirmed the delivery of direct mails to 268 customers on which other names were erroneously printed.

The direct mail in question contained sales promotional information regarding gas appliances, and was meant for delivery to customers who had earlier agreed to receive such mail. The above incident occurred because the names of customers that did not correspond to their addresses were erroneously entered into the address list, resulting in the wrong combination of names and addresses.

Osaka Gas identified all of the customers who had received such direct mail with their names incorrectly printed, and visited their houses individually to apologize to them for the incident. The names were the only personal information to be erroneously included in the mail in question. Osaka Gas recognizes the protection of personal information as an important matter to be taken care of in its operations and took the latest incident very seriously. The company vows to do all it can so as not to allow the incident to be repeated.

Compliance Promotion Efforts

Promotion of global compliance in step with overseas business operations

In view of expanding business operations abroad, Osaka Gas has compiled an English version of the leaflet meant for dissemination of the "Osaka Gas Group Code of Conduct" at overseas offices. Information included in the leaflet, to be handed out to employees for dissemination, are the "Osaka Gas Group CSR Charter." the "Osaka Gas Group Code of Conduct" and "Compliance Desks" used for the internal reporting system.

In fiscal 2016, the Company identified compliance risks associated with overseas operations, and its relevant divisions and departments

discussed compiling countermeasures. The Company then sorted out the main points to be addressed in risk management for overseas operations. Based on these discussions, "G-RIMS," a self-help risk-assessment system initially used for domestic operations, has also been applied to overseas operations. Under "G-RIMS." we have held follow-up meetings in collaboration with the relevant divisions and departments while sharing information on key issues and discussing response measures.

Educational Action on Human Rights

Education and training for human rights awareness-raising

The Osaka Gas Group holds a human rights awareness slogan contest and other activities every fiscal year in an effort to build a corporate culture in which human rights are respected.

In fiscal 2016, under our slogan "Foster a workplace climate conducive to respect for human rights by listening to others to understand how they feel," we strove to achieve various initiatives including the following: Enhanced and strengthen Osaka Gas Group's human rights awareness-raising structure. Enhanced human rights education and awareness raising activities, Disseminated information on human rights to be aware of across the Osaka Gas Group, Actively participated in activities outside the Group and gather various relevant information.

The Osaka Gas Group has human rights training for all job levels: directors, managers, and new recruits.

Newly appointed managers learn about "business and human rights" through training sessions featuring interactive lectures and video watching. We have human rights lectures for division heads and managers led by outside experts. In fiscal 2016, a lecture was offered under the title "social issues and corporate management."

Since fiscal 2011, we have been conducting trainings for all employees led by human rights promoters in each division. In fiscal 2016, approximately 17,000 Osaka Gas and Osaka Gas Group employees took part in such training.

Information Security

Actions taken by the "Information Security Subcommittee"

Under the leadership of the "Information Security Subcommittee", the Osaka Gas Group has established a system to enhance its overall information security by deploying managers in charge of promoting information security at core companies of the Osaka Gas Group, management departments at Headquarters of Osaka Gas and by deploying staff in charge of promoting information security at other organizations and affiliated companies.

In fiscal 2016, Osaka Gas conducted an on-the-spot inspection of its 66 affiliated companies regarding their information security. Based on the inspections, each company devised and implemented improvement plans. In addition, the Group offered information-security education to employees of Group companies to raise their awareness and the level of skills regarding information security.



Dr. Emi Sugawara Associate Professor, Faculty of Law,

Osaka University of Economics and Law

Due diligence regarding human rights must be deepened and expanded at Osaka Gas following the evaluation of its human rights situation

Protection of personal information is an important issue to be addressed from the viewpoint of preventing violation of the dignity of stakeholders and the right of preservation of each individual's privacy. It was regrettable that such a case of violation of personal information occurred at Osaka Gas. However, the Company expeditiously took action to remedy the damage sustained by the affected customers. We expect the Osaka Gas Group's enhanced management of information security, including the establishment of the formation Security Subcommittee", to help prevent further violations of the private information of customers.

In the energy business, Osaka Gas expanded its engagement with client companies following its receipt of the results of the evaluation of its valuechain 🔟 s human rights situation, including study sessions with gas appliance makers and the distribution of an instruction manual to service chains and engineering firms, along with the plan of study sessions with these firms set for fiscal 2017. Meanwhile, the Group needs to recognize that the expansion of its electricity business must be accompanied by the expansion of its value chains.

As a new step, the Group embarked on the task of evaluating the situation of human rights at in overseas operations. We expect due diligence 🔟 regarding human rights to be deepened and expanded at Osaka Gas, when the Company deals with issues surfaced by the



Management Policy for Human Growth

Fundamental concept

The Osaka Gas Group strives to become a company that can realize the growth of its employees through work. The Group has been working on building a personnel management system whereby employees' individuality and initiative are respected, and establishing a foundation to enable employees with expertise in various fields to play key roles in corporate activities.

The Osaka Gas Group would like to be a company at which employees can find not just employment but also personal growth through their work. To that end, we have introduced career-course-specific human resources systems designed to respect and put to full use the individuality and autonomy of employees, and we have been conducting a wide range of training. We have also formulated the "Osaka Gas Group Diversity Policy" to ensure that a diversity of people can play active roles at the Osaka Gas Group. Convinced that ensuring employees' safety and maintaining/improving their physical and mental well-being are keys to all our operations, we are also undertaking efforts to prevent work accidents and to promote fitness.

CSR Indicator

Employee Attitude Survey: job satisfaction and attachment to the company

Osaka Gas periodically conduct "Employee Attitude Survey" to understand how employees satisfy with their job, workplace environment, superiors, company systems, and so on. Employees are asked to rate their satisfaction level on a five-point scale for 23 categories, including job satisfaction, attachment to the company, etc., and to leave an open comment.

Targets and results

The goal of the "Employee Attitude Survey," conducted every two or three years, is to confirm changes over time in employee attitudes and the progress made in adopting/implementing the human resources systems introduced in FY2012.

The results of the latest survey, conducted in FY2015, surpassed the results of the previous survey (FY2013) in the CSR indices of job satisfaction/attachment to company and degree of satisfaction with human resources systems.

*Result of the survey

conducted in FY2015

Maintain sufficient levels

(Targets)

Maintain sufficient levels

(3.85 against scale of 5 for job satisfaction and 4.38 of scale of 5 for attachment to the company

Actions taken

An "Employee Attitude Survey" conducted

In the latest "Employee Attitude Survey," a grade on a five-point scale was assigned to the attitudes of Osaka Gas employees in 23 categories, including "job satisfaction" and their "degree of attachment to the Company." The employees were also asked to comment freely in the survey, conducted in fiscal 2015 covering all employees of Osaka Gas.

Osaka Gas has been striving to promote diversity in a bid to enhance its corporate value further.

Efforts to achieve the goal of raising the percentage of women out of the total fast-track workforce to more than 30%, and the goal of raising the percentage of female managers out of the total number of employees in management positions to 5%

In view of the declining working population in Japan, Osaka Gas is endeavoring to create a workplace environment in which women can exercise their abilities and play active roles.

Working in line with their aptitude and wishes, women have been displaying their abilities in the fields of gas production, gas supply and marketing. Following such efforts, Osaka Gas has received high evaluation from outside the Company, as shown by its selection as the leading company in empowering women, awarded by the Mayor of Osaka City in February 2016, and its selection as a "Nadeshiko Brand," an award that has been given to the Company for three years in a row since fiscal 2014.

In March 2016, we developed an "Action Plan"*1 for further empowerment of women which is the higher level of target following the numerical targets set two years earlier along with the "Osaka Gas Group Diversity Policy." The Company will continue to work on achieving the goal of raising the percentage of women out of the total fast-track workforce to more than 30%, and the goal of raising the percentage of female managers out of the total number of employees in management positions to 5% by 2020, with implementing various measures including institutional reforms.

In part the outcome of efforts to encourage a work-life balance that harmonizes employees' professional and personal lives, the percentage of women in management positions*2 was 2.7% in April 2016, improved compared to the previous year.

*1 The Action Plan is disclosed on our website. *2 Section chief level or higher

Number of Employees Taking Childcare and Nursing Leave at Osaka Gas (excluding loaned employees)

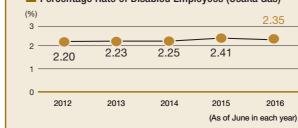
		FY2012	FY2013	FY2014	FY2015	FY2016
Ohildaara laarra		28	19	21	28	21
Childcare leave	Male	3	0	1	1	1
Shorter working hours	for childcare	40	32	35	35	37
Nursing care leave		0	3	0	4	2
Shorter working hours	for nursing	1	1	2	2	2
		172	194	192	164	171
Nurturing leave	Male	147	173	175	140	153
	Rate (%)	78.9	86.6	87.7	77.0	79.2

Improvement of employment conditions for disabled and elderly people

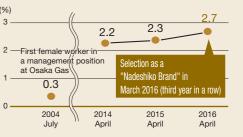
Osaka Gas does all it can to hire disabled persons and creates a work environment conducive to the talents of each individual. As a result of these efforts, disabled persons accounted for 2.35% of our workforce as of June 2016, well above the legal minimum of 2.0%. Of the 37 affiliate companies subjected to the relevant law, 19 have achieved the legal minimum.

Osaka Gas has a system known as the "Reemployment Scheme" to rehire employees who are 60 and older after retirement, under which applicants are placed in jobs that match their skills and desires. In fiscal 2009, we introduced a full-time reemployment system to meet the increasingly diverse needs of both companies and employees. All Osaka Gas Group companies have similar reemployment schemes.

Percentage Rate of Disabled Employees (Osaka Gas)



Change in the Percentage of Women in Managerial Positions (Osaka Gas)



Training Sessions Held in FY2016 to Promote Diversity

Training session	Participant
Mentoring program*	26 persons (Osaka Gas)
Training program for new employees focusing on the diversity of Osaka Gas	134 persons (Osaka Gas)
Training program for new managers, focusing on the diversity of the Group	61 persons (Osaka Gas) 69 persons (affiliates)

*A program experienced mentors provide advice to female employees being on the occasion of their life events and promotion in job career to develop a network

Providing support to female workers to help realize their career goals



Human Resources Department

Since introducing childcare leave and family care leave in 1992, Osaka Gas has been establishing a system to support employees in achieving a balance between work and life. Such efforts have been more than quaranteed under law, and Human Resources Development Team have been well ahead of social moves. In March 2014.

the Osaka Gas Group adopted a "Diversity Promotion Policy" and set numerical targets to promote women's roles in the workplace. To reflect women's voices in the Company's operations, Osaka Gas interviewed all female workers of fast-track career and introduced a mentoring program in fiscal 2015. Measures put in place continuously to empower women as part of the Company's institutional reform include, from fiscal 2016, allowing the use of the name a female worker is commonly known by, the flexible setting of the time of starting or ending daily work for female employees working under a shorter-working-hour contract, and the introduction of a long-term leave system allowing female workers to leave their job to accompany their husband placed on a overseas business assignment. Furthermore, the program for improving awareness on diversity 11 policy and corporate culture was incorporated into training according to employees' job levels. I will continue to support the efforts being made by female workers to develop their career goals



Employment

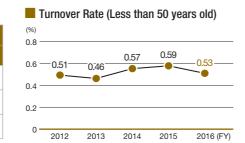
Creating a good work environment

As of the end of fiscal 2016, the average length of service at Osaka Gas was approximately 19.6 years. This is much higher than the 17.4-year average for companies of at least 1,000 employees (according to the survey, conducted by the Central Labour Relations Commission of the Ministry of Health, Labour and

Welfare). We also have a low employee turnover rate (0.53%) for employees under 50 years of age. We believe this is a result of efforts to increase value for employees, such as by providing opportunities for growth and creating a good work environment.

Data on Employees as of the End of March

	FY2012		FY2012 FY2013		013	FY2014		FY2015		FY2016	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	
No. of employees	5,057	784	5,071	796	5,058	803	5,056	810	4,978	846	
Average age	43.0	42.5	42.9	42.9	43.1	43.5	43.1	43.7	43.2	43.9	
Average length of service (years)	20.7	21.9	20.6	22.1	20.2	22.4	19.7	22.4	19.3	21.7	



Balancing Work and Family

Supporting childcare through systems and the workplace environment

Osaka Gas has a number of systems to support employees both while they are working and taking care of their families. These systems are aimed at enabling employees to display their abilities to the full extent by creating a workplace environment whereby they can strike a balance between work and childcare. For example, we have a system allowing employees to take "Childcare Leave" up to the end of the month in which children reach their third birthday, as well as a system for "Shorter Work Hours" until children finish their third year at elementary school. We also lend employees PCs so they can check the company intranet and email and thus keep in contact while they are on childcare leave. And we offer employees telephone counseling on matters of childcare. These are just some of the ways that Osaka Gas labor and management are cooperating to create a workplace conducive to balancing work and family duties. In addition, we have

established a consultation desk in the Health Promotion Center so that employees and their families can seek advice on health during pregnancy and

In recognition of these efforts, in March 2015 as well as April 2007 and May 2011 Japan's Minister of Health, Labour and Welfare certified Osaka

Gas as a company that actively supports childcare for its employees in accordance with the Law for Measures to Support the Development of the Next Generation, entitling the Company to use a special logo from the Ministry. Moreover, Osaka Gas has been continuing to support employees in achieving a balance between work and childcare in line with its 4th Action Plan (from January 2015 to March 2018).



Logo of certification from the Ministry of Health. I abour and Welfare

Human resource development and rewards

Training system

To further augment measures to support Osaka Gas Group companies in developing human resources, we have offered training programs proven to be in great need. In conjunction with this, we reexamined training programs that had already been offered, thereby reorganizing the overall training program for the Osaka Gas Group.

Executives	Management ability improvement program				
Diceutives	Management Academy aiming for improvement of management ability and enhancement of "human" power	will play a core role in the organization Challenge Seminars or workplace management as well as or workplace management as well as or and mindset nking and how to apply it practically alf a year / second year worker)			
	Middle Leader Program aiming for fostering of future leaders who will play a core role in the organization				
Managers	Workshop to study cases outside the company	Corr	Chal		
	Training for newly appointed managers	espond	lenge S	Semir	
Mid-level	Self-discovery Training aiming for recognition of abilities required for workplace management as well as own abilities, and enhancement of enthusiasm to develop them	ence course	eminars (ele	ars on acco	
employees	Power-up Program II aiming for acquisition of management literacy and mindset		ctive t		
	Power-up Program I aiming for learning fundamentals of logical thinking and how to apply it practically	ation	raining)	and fin	
Junior/ New employees	Provision of training to young employees (new employees / after half a year / second year worker) Training for newly-appointed coaches for new employees - Training for newly-hired mid-career employees Group-wide training			ance	

Improving Occupational Health and Safety

Promoting safety and health management activities based on OSHMS

Osaka Gas has been systematically and meticulously undertaking activities aimed at preventing workplace accidents with establishing the "Osaka Gas Health and Safety Action Plan" based on the Occupational Safety and Health Management System (OSHMS 11), which was established by the Minister of Health, Labour and Welfare.

Based on the Plan, each organization of Osaka Gas is working on reducing the number of workplace accidents leading to absence from work to zero. The Plan, consisting of three priority themes—prevention of transportation-related accidents, prevention of general work accidents, and prevention of accidents through collaboration with business partners—is designed to enhance the level of workplace safety by implementing improvement measures under the PCDA cycle.

Each Osaka Gas Group company is carrying out safety- and health-enhancement measures envisaged under its own safety and health-management plan, modified based on its evaluation of the previous year's activities in line with the Basic Plan on Health and Safety of Osaka Gas Group (covering fiscal 2015 to fiscal 2017).

Industrial Accident Rate

	FY2012	FY2013	FY2014	FY2015	FY2016
Frequency of accidents causing absence from work *1	0	0.26	0.09	0	0.18
(The national average) *3	1.62	1.59	1.58	1.66	1.61
Frequency of accidents causing no absence from work	1.13	0.70	0.80	0.98	1.24
Overall absence rate	1.13	0.96	0.88	0.98	1.42
Accident severity rate *2	0	0.006	0.133	0	0.004
(The national average) *3	0.11	0.10	0.10	0.09	0.07

- *1 Absence rate
- Absence rate = (No. of accidents / total work hours) X 1,000,000
- *2 Accident severity rate
- Accident severity rate = (Lost work days / total work hours) X 1 000
- *3 Source: The report compiled by the Ministry of Health, Labour and Welfare regarding

TOPIC

Employed newly-designed work uniforms to improve safety of workers

For the first time in 30 years, Osaka Gas carried out a full-scale changeover of the specifications of its work uniform as a way of reducing accidents involving its workers and passing vehicles, and enhancing overall workplace safety for workers. The new clothes, which started to be worn by workers in July 2015, incorporate a high degree of fluorescent color, increasing daytime visibility, and use reflective materials, increasing nighttime visibility. Under the new uniform system, workers choose their uniform from two types, according to where they work and how dangerous their work is. Workers whose main duties involve street work or nighttime work wear high-visibility clothes. Workers in other work environments wear medium-visibility clothes.



Regular health checkups and health guidance

Osaka Gas holds regular health checkups as required by law and all employees expected to take them had planned checkups at Osaka Gas Group Health Development Center. Checkup results are given to the person the same day, and follow-ups with an industrial physician provide individual advice on nutrition, exercise,

rest, and other lifestyle habits. This promotes early detection and prevention of illnesses.

Health checkups and health counseling are also offered to employees at Osaka Gas affiliates, and in fiscal 2016 about 8,400 employees of 35 companies underwent health checkups.



Mr. Taro Tamura

Representative Director Institute for Human Diversity Japan

Efforts to realize sustainable management of overall value chain

Osaka Gas has been highly commended by outside parties for its efforts to empower its female employees. This is a result of the Company's efforts such as adoption of the "Osaka Gas Group Diversity Policy" in 2014, followed by development of the action plan based on the Act to Advance Women's Success in their Working Life. In addition, the company has been selected as a "Nadeshiko Brand" for three consecutive years. Statistics reflecting employment conditions and health and safety-related indexes at Osaka Gas are higher than those scored by other companies of a similar business scale, as well as the national averages in the relevant fields. Also, a large number of employees have attended in-house seminars on diversity. Those facts show the enthusiasm of Osaka Gas pursuing its management policy of human growth on a company-wide basis.

I expect Osaka Gas to work harder in enhancing its corporate value by sharing its accumulated knowledge and expertise with Group companies. The promotion of diversity 20 is important for companies in terms of securing their labor force. I hope that all parties in the Osaka Gas Group, including those that constitute its value chain network such as engineering firms and business partners, will cooperate with each other to foster a corporate culture whereby the diversity of people is respected, and realize sustainable corporate management.



OSAKA GAS GROUP CSR REPORT 2016

Third Party Review

The Osaka Gas Group CSR Report underwent a third party review by the Institute for Environmental Management Accounting (IEMA), including recommendations as well as simple audits. IEMA interviewed Masataka Fujiwara, Executive Vice President and CSR Executive, regarding the planning and implementation of CSR activities at the Osaka Gas Group.

The interview was lively, with questions and answers focused on the Group's response to full liberalization of the retail electricity market, KPI management and corporate governance code. Based on the interview and documents submitted, IEMA prepared and presented a report which summarized IEMA's overall evaluation and advice regarding the Osaka Gas Group's CSR activities.



(From left, Mr. Kokubu, Ms. Nashioka, CSR & Environment Department head Washio and CSR Executive Fuiiwara)

IEMA

Evaluation and Opinion of CSR Management

Purpose and outline of work that has been undertaken

From our position as a third-party that maintains no business relationships with Osaka Gas, we are expressing our opinion to help enhance the reliability of the Osaka Gas Group CSR Report 2016 by evaluating all the CSR initiatives that are not related to environmental management. We interviewed Masataka Fujiwara, Executive Vice President and CSR Executive, to clarify the planning and implementation of CSR management (excluding environmental management) of the Osaka Gas Group and the evaluation and utilization of the performance data that indicates the results of these activities and serves as the basis for the disclosed information.

Evaluation and Opinion

The Osaka Gas Group has been praised as being "always advanced" in its CSR activities. Since 2014, the Group has released key performance indicators (KPIs) corresponding to each of the 16 important aspects of business operations, technically called "materiality," an idea introduced by GRI-G4, a set of guidelines for CSR information disclosure.

The Group disclosed the result of its KPI performance. This evaluation report distinguished between KPIs of the CSR Charter, which were introduced in 2009 and serve as the basis of CSR activities, and KPIs introduced based on GRI-G4, which provides information that can be used to evaluate the corporate value of the Osaka Gas Group.

Consequently, the CSR situation of the Osaka Gas Group as shown in the progress of KPIs has become more transparent. In addition, the report specified the degree of implementation of measures envisaged for PDCA management, making it easier for people with no professional knowledge of CSR management to understand and grasp the CSR situation at the Osaka Gas Group.

These efforts for CSR information disclosure were highly commendable and are important for the Osaka Gas Group, which is working with various stakeholders.

It is understood that the Osaka Gas Group has fostered its corporate value as we move toward the era of liberalized electricity and gas markets, aided by its solid CSR management. It is also understood that the concept of CSR has been reflected in the operations of environment-conscious Japanese companies and in the provision of services that take the Japanese energy situation into account.

However, issues associated with climate change have been posing an increasing international risk for energy service operators following the signing of the Paris Agreement at the 21st session of the Conference of the Parties (COP) to the 1992 United Nations Framework Convention on Climate Change. In light of the new business environment surrounding energy companies, we hope that Osaka Gas will formulate its management strategy in response to the scheduled liberalization of the power and gas markets and further examine issues related to environmental risks.

How to link corporate governance and CSR activities is an issue that has recently been drawing attention, a trend that apparently gathered impetus following the introduction in Japan and the UK of a corporate governance code. Of importance is how to achieve sustainable corporate development that can continue over the medium- or long-term. This is what Osaka Gas aims to achieve. We hope that Osaka Gas will conduct its operations based on this idea and develop it into a corporate management model.

July 11, 2016

Katsuhiko Kokubu. Professor, Kobe University; Director of IEMA

Eriko Nashioka. Certified Public Accountant and Certified Tax Accountant: CEO of IEMA

Third Party Verification

The environmental performance data of the Osaka Gas Group included in this report underwent third-party verification by Bureau Veritas Japan Co., Ltd. The verification was conducted to check whether the data were reliable and consistent with the purpose of the report.

Verification Outline

This verification was conducted using Bureau Veritas' standard procedures and guidelines for external verification of non-financial reporting, based on current best practice. Bureau Veritas refers to the International Standard on Assurance Engagements (ISAE) 3000 in providing a limited assurance for the scope of work stated herein.



Scope of verification

Environmental data selected by Osaka Gas for FY2016, which are related to the following items

Energy consumption, atmospheric emissions, water usage, chemical substances, waste, environmental impact reduction, Environmental Management Indicators, gas sales by volume, FY2016 results to Environmental Action Targets, environmental impact of the city gas value chain (FY2016)

Note: The boundaries for reporting of each data are defined by Osaka Gas.

Sites visited

- Osaka Gas's head office, Osaka Gas Kyoto Research Park Office, Osaka Gas Tobu Office, OTCTS Co., Ltd. Iwasaki Energy Center

Verification Methodology

Review of documentary evidence produced by Osaka Gas's head office and the sites visited; interviews with relevant personnel of Osaka Gas's head office and the sites visited; site inspection and review of data monitoring procedures; comparison between the reported data and supporting documentary evidence

Findings

On the bases of our methodology and the activities described above:

- Nothing has come to our attention to indicate that the reviewed information within the scope of our verification is inaccurate and does not provide a fair representation of the performance for the defined period.
- It is our opinion that Osaka Gas has established appropriate systems for the collection, aggregation and analysis of quantitative data within the scope of our verification.

Bureau Veritas has implemented a code of ethics across its business which is intended to ensure that all our staff maintain high standards in their day to day business activities. We are particularly vigilant in the prevention of conflicts of interest. Bureau Veritas activities for Osaka Gas are for sustainability reporting verification only and we

Comments on "Evaluation and Opinion of CSR Management"



Masataka Fujiwara

Executive Vice President and CSR Executive Osaka Gas Co., Ltd.

As has been pointed out, Osaka Gas recognizes that how to respond to issues related to climate change is one of challenges facing our operations. Osaka Gas began supplying electricity to households in April 2016. We are committed to expanding electricity sources by establishing the best mix between highly-efficient fossil-based power generation systems introduced using our most updated and advanced technologies and renewable energy sources such as solar power and wind power. In April 2016, Osaka Gas launched the new model "ENE-FARM type S," a household-use solid oxide fuel cell (SOFC 11), which achieved the world's highest power generation efficiency, and became the first company in Japan to purchase redundant electricity from customers. We are determined to help create a low-carbon society by promoting the advanced use of natural gas through the diffusion of gas cogeneration systems including the newly launched "ENE-FARM type S."

We believe that it is more important for the Company to undertake business operations while sufficiently taking into account their possible impact on the environment and society at a time when our business areas and business fields have been expanding. Whenever necessary, we will review two types of KPIs under the current CSR indicators and materiality indicators, and appropriately evaluate our CSR activities. Furthermore, we will endeavor to make our activities based on the "Osaka Gas Group CSR Charter" more efficient, while upholding the CSR Promotion System.

We will continue to promote dialogue with stakeholders, work harder for the betterment of the environment, society and governance, and strive to raise the overall CSR level of our value chain networks 11, while stepping up appropriate information disclosure.

August, 2016