



These are painted by children who are learning designing at an NPO “Children Design Education.”

► <http://c0d0e.com/english/index.html>



#### Osaka Gas Co., Ltd.

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

For inquiries, contact the CSR & Environment

Department on +81-6-6205-4833

<http://www.osakagas.co.jp/en/index.html>

As of the end of August 2014, Osaka Gas is included in the following socially responsible investment (SRI) indices.

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## CSR REPORT

Design Your Energy 夢ある明日を  
**OSAKA GAS**  
GROUP

# OSAKA GAS GROUP CSR REPORT 2014



Published in September 2014  
(next report is due in August 2015)



# Notes about the Osaka Gas Group CSR Report 2014

## 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).

In the course of preparing this report, the Osaka Gas Group CSR Report 2014, we identified “materiality” for the Group after analyzing the current social situation and what society expects us to do, while repeatedly holding dialogue with stakeholders and people with expertise in certain fields. It is our pleasure to report the process of identifying materiality as well as opinions from stakeholders in this report.

Also, the report contains the identified materiality, the Group's CSR goals and the results of its CSR activities in fiscal 2014, organized by CSR Charter which is the guideline for management and employees to live up to.

### Reporting media



### Coverage and Materiality

The Osaka Gas Group continuously discloses information on its CSR activities to the public. Adding to our principle of materiality, feedback from readers and the opinions of various external organizations were also taken into consideration for selecting topics to cover in this report and define their priorities.

### 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.

The meanings of terms with this mark are provided in the glossary.

### 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 (IEMA).

### 【 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 76 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 FY2014 (from April 1, 2013 to March 31, 2014), some articles refer to efforts for FY2015.

### ● Guidelines Referred to

- ISO 26000
- Sustainability Reporting Guidelines (G4) of the Global Reporting Initiative (GRI)
- Environmental Reporting Guidelines 2012 of the Ministry of the Environment
- The United Nations Global Compact COP\* Policy

\*COP: Communication on Progress

### 03 The President's Commitment

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- CSR Management

### Major Activities in FY 2014

#### 21 Creating Value for Customers

- Fundamental Concept
- Management Structure
- Target & Results

[ Major Activities in FY 2014 ]

- Formulating a Business Continuity Plan (BCP) for Large-Scale Disasters and Accidents
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#### 25 Harmonizing with the Environment and Contributing to Realizing a Sustainable Society

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#### 33 Being a Good Corporate Citizen Contributing to Society

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#### 37 Complying with Laws and Regulations and Respect for Human Rights

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# As a Good Corporate Citizen, the Osaka Gas Group Strives to Invigorate Customers and Society



*H. Ozaki*

Hiroshi Ozaki  
President

## Plans for Contributing to a Sustainable Future - Medium-Term Business Plan “Catalyze Our Dreams”

In 2013, with the weak yen and strong stock prices in the background, the Japanese economy made a solid recovery, mainly thanks to buoyant consumer spending, increased capital expenditures by businesses, and resurgence of exports.

Within our business environment, there are a number of factors that affect our future considerably, such as liberalisation of the electricity and gas industries and the shale gas revolution. Our challenge is to realise sustainable growth by appropriately responding to these challenges in our business environment and by achieving increased business efficiency.

In March 2014, on the basis of the long-term management vision “Field of Dreams 2020,” we announced a new medium-term business plan, “Catalyze Our Dreams,” for the 2014–2016 period. Given the role of natural gas as an important environment-friendly energy source in the national energy policy, Osaka Gas intends to maximise the potentials of natural gas for the growth of the Group and contributing to the society. By combining natural gas with other energy forms, including electricity and LPG, with our high-quality technologies for reliable energy distribution, services and other solutions, we will evolve from a traditional gas distributor into a comprehensive energy services provider, offering wider choice of energy services and solutions. The Osaka Gas Group will also continue to explore opportunities in the non-energy domains such as fine chemicals and activated carbons, IT services and property/real estate, where our expertise and strength are fully taken advantage of.

## Business Focuses for the Years 2014 - 2016

### 1. Further Advancing Our Energy Business

#### Securing natural gas in a stable and economical manner and promoting upstream business

To secure a stable and economical supply of natural gas, we will procure liquefied natural gas (LNG) from a wider variety of suppliers, with diversified contract pricing formulae. A focus will also be made in promoting our upstream energy businesses, including the development of

Freeport LNG project in the United States to realise export of shale gas to Japan.

#### Promoting natural gas and distributed energy systems

In order to promote the use of natural gas, we will continue our work to disseminate gas cogeneration systems, gas air conditioning, and other advanced utilisation of natural gas. As a milestone in the household sector, for example, the total number of units of residential gas cogeneration systems installed (fuel cells and gas engines) reached 100,000 in August 2013. Through these efforts, we will assist our customers in enhancing their energy security, energy-saving, and reducing peak power demand.

#### Expanding electricity business

Osaka Gas will develop the electricity business as the second core energy business by constructing and acquiring power generation capacities. By broadening the choice of fuel from natural gas to renewables, and by extending the locations across the country or even outside Japan, we target to achieve our total power generation capacity of 6 GW in 2020s.

#### Expanding energy business both inside and outside Japan

Going beyond its conventional franchised area, Osaka Gas also intends to develop its energy business both at home and abroad. We will even cross national borders to offer energy solutions to meet the needs of customers using our experience and expertise. For this purpose, we will work in cooperation or alliance with incumbent local energy companies. For example, we launched a natural gas marketing business in Singapore in August 2013, and we became engaged in an energy service business in Thailand in January 2014. In broadening our scope of work, however, we will not simply seek size, but quality and profitability.

#### Ensuring stability and security of energy supply

Since the earthquake and tsunami in March 2011, there has been a rising concern over the security and safety of energy supply in Japan. As a leading energy supplier, we take our responsibility seriously and, for enhancing security of gas supply, we commissioned the Mie-Shiga pipeline in January 2014. We will continue to maintain and upgrade gas production and supply infrastructure, and improve our preparedness against natural disasters such as earthquakes and tsunamis. Osaka Gas will do its utmost to make its gas facilities stronger and more resilient.

### 2. Expanding Non-Energy (“Life & Business”) Solution Business

Osaka Gas is determined to diversify its business portfolio in the non-energy business domains. This will improve resilience and robustness of the managerial foundation of the group, and at the same time, it will help us utilise our in-house skills and expertise acquired through its energy business. Some of these businesses will complement the value of energy solutions for customers with respect to

comfort, convenience, assurance.

### 3. Strengthening the Business Platform

We are committed to improving and strengthening our management resources. We will pursue further improvement of energy efficiency and cost reductions throughout the range of our products and services; from fuel cells and other gas equipment to gas production and distribution facilities. With appropriate investment, we will continue to seek growth in chemicals, activated carbons and IT solution. At the same time, we will build up our capabilities in upstream business and power generation. By consolidating our strength along the energy value chain and combining it with non-energy solutions business, the business platform of the Osaka Gas Group will be made more robust.

## Towards Achieving a Higher Level of CSR

We believe that the business of Osaka Gas for over a century has been possible only by having the support and trust of our customers and society. What drives us forward is to maintain our ties with customers and to remain their company of choice. We have formulated, therefore, the Osaka Gas Group CSR Charter as the guiding principle for all of us to adhere to in conducting our businesses anywhere in the world. We recognise that each company in the group must make every effort to fulfill the requirements the Charter stipulates and to maintain trust through dialogue with stakeholders.

To attain this objective, we will reinforce our business activities in compliance with the ISO 26000, the United Nations Global Compact, and other international norms. We will also work to gain understanding for our efforts from those engaged in our business value chains both domestic and foreign.

In April 2013, we set up the Diversity Promotion Team, followed by the establishment of the Osaka Gas Group Diversity Policy in March 2014, providing support for women, the elderly, the disabled, foreign nationals, and sexual minorities. The Osaka Gas Group will create work environment where a wide range of individuals can demonstrate their capabilities to the fullest extent possible.

## Conclusion

As a Good Corporate Citizen, the Osaka Gas Group Strives to Invigorate Customers and Society; the goal we are determined to achieve.

This report describes the current and past CSR activities of the Osaka Gas Group. I hope you will find it informative, and I look forward to hearing any comments or opinions from the readers.

September 2014

# Realization of Value Creation Management

The Osaka Gas Group is making efforts to enhance value for all stakeholders, including customers and society, by practicing Value Creation Management - its management principle. We believe that realizing Value Creation Management will lead to the fulfillment of the Group's CSR.

## Formulation of the Principles of the Osaka Gas Group CSR Charter and Throwing Support behind the United Nations Global Compact

The Osaka Gas Group formulated the Osaka Gas Group CSR Charter in 2006 as the guiding principle for group executives and employees as part of its efforts to fulfill its corporate social responsibility (CSR). In 2007, we became the first utility in Japan to join the UN Global Compact. In 2008, we revised the Code of Conduct of the Osaka Gas Group, formulated in 2000 for group executives and employees, so that it would be in line with the principles of the UN Global Compact. In 2011, we also revised the code of conduct so as to address key issues raised under ISO26000. In addition, in 2009, we formulated and released

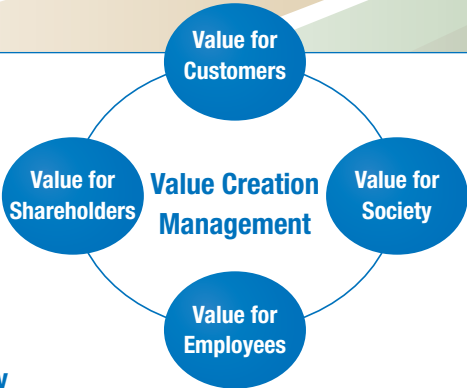
CSR indicators for each of the principles of the CSR Charter to promote and visualize CSR improvement. As committed in the Long-term Management Vision, we are making efforts to achieve those indicators for 2014 - 2016 (see p. 06).

## Identification of Materiality (Important Issues) and Strengthening of CSR Management

In FY2015, we will promote the management of CSR with set KPIs (key performance indicators) so as to focus on the issues we have identified as important among various CSR-related issues surrounding the Osaka Gas Group. The identification of these issues and KPIs involved the process of evaluating their importance (see p. 13).

## Management Philosophy

"Value Creation Management" is the core philosophy of the Osaka Gas Group. We will increase value for all stakeholders, including shareholders, society and employees, by ensuring fairness and transparency in our business operations, with a priority on maximizing value for our customers.



### Value for Customers

We meet the expectations of our customers by recognizing their individual needs in a timely fashion, and proposing attractive energy solutions. Supplying natural gas, electricity, liquefied petroleum gas and other types of energy in a form that meets their requirements, we provide customers with quality products and superior services enabling them to derive optimum use of energy that is also environment-friendly.

### Value for Shareholders

We will strive to satisfy the expectations of our shareholders by striving to constantly improve performance and maintaining stable dividend payments.

### Value for Society

To contribute to society, we endeavor to reduce environmental impact by promoting the greater and more sophisticated use of environment-friendly natural gas. We also promote the well being of society by revitalizing communities through our corporate activities. Along with these efforts, we enhance the transparency of our management through full compliance with laws and regulations and information disclosure.

### Value for Employees

Our management methods are based on human resource development that harnesses the individuality and self-initiative of employees. Our employees are constantly studying to improve themselves, seeking to meet the expectations of our customers, shareholders and society in general through the creation of value. Operating under a bond of mutual trust and enthusiasm between employees and management, we pursue the sound growth of the Osaka Gas Group.

Osaka Gas Group CSR Charter

Osaka Gas Group Environmental Activities Policy

Osaka Gas Group Code of Conduct

## Long-Term Management Vision

# “Field of Dreams 2020”

## Vision the Osaka Gas Group Pursues to Realize by 2020

The Osaka Gas Group has formulated Field of Dreams 2020, a long-term vision the Group pursues to realize by 2020. Among long-term goals envisaged under Field of Dreams 2020 is the pursuit of high-level CSR aiming for the higher level of corporate and business quality, which we are striving to practice as part of our management strategy.

## Long-Term Management Goals for the Osaka Gas Group

### Broadening of Business Fields

The Group establishes the three core businesses of “domestic and international energy business” and “life & business solution business” 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's lifestyles, 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, 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.

## Osaka Gas Group CSR Indicators

CSR Charter		CSR Indicators (FY2015-2017)
<b>I</b>	<b>Creating Value for Customers</b> 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 natural 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.	<b>Customer satisfaction level for seven customer service duties</b> Overall satisfaction rate 87% or more 84% or more in all satisfaction rates
	<b>II Harmonizing with the Environment and Contributing to Realizing a Sustainable Society</b> 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.	<b>Environmental Management Indicator</b> Environmental Management Efficiency 58 yen / 1,000 m³ or less
	<b>III Being a Good Corporate Citizen Contributing to Society</b> 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.	<b>Number of contacts and communication events</b> Number of events held (on-site dietary and energy/environment seminars, etc.): 1,000 times* Number of contacts (visitors to permanent facilities including Gas Science Museum): 60,000 people <b>Social contribution activities</b> Number of activities implemented: 600 times or more
	<b>IV Complying with Laws and Regulations and Respect for Human Rights</b> 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.	<b>Compliance awareness survey scores</b> (Individual) Level of understanding of the Code of Conduct: Higher than the previous year (Organization) Degree of penetration of compliance: Higher than the previous year <b>Percentage of employees receiving compliance training: 100%</b>
	<b>V Management Policy for Human Growth</b> 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. With discipline and self motivation, we will charge ourselves with the task of creating new value for customers, shareholders and society. Through mutual trust and decency, the group and its employees strive to achieve sound growth of the corporate group.	<b>Employee opinion survey</b> Maintaining sufficient levels in job satisfaction and sense of attachment to the company

\*Target for FY2015

## 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 prevention of corruption. The Osaka Gas announced its participation in this initiative.

### ISO26000

This is an international standard issued by the ISO in November 2010 concerning corporate 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.



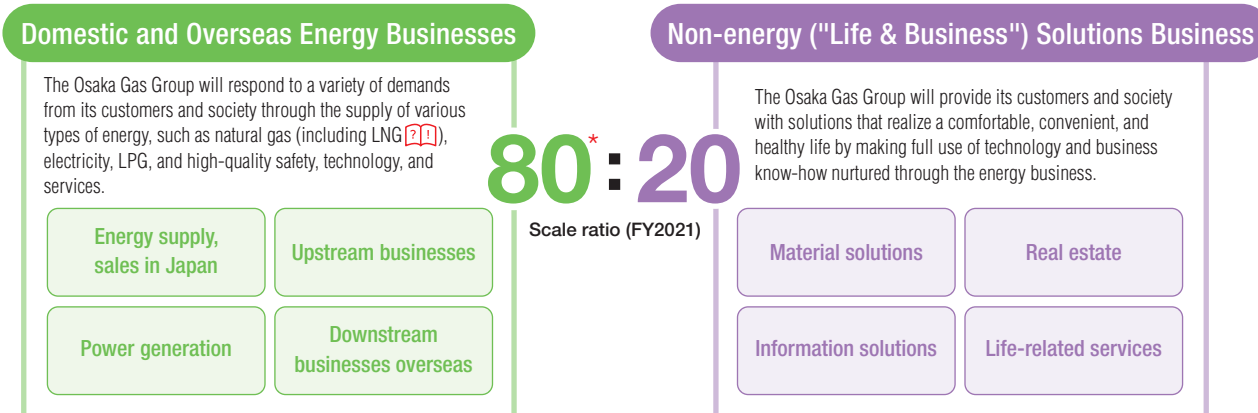
## Medium-Term Business Plan of the Osaka Gas Group (FY2015-2017)

# Catalyze Our Dreams

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 our long-term management vision, the Field of Dreams 2020. 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 liberalization of the electricity and gas industries.

## Vision for the Osaka Gas Group

Growing into a business group actively expanding its business fields by leveraging its strengths, enhancing various businesses to a world-class level and enriching customers’ lives and society.



\* Breakdown of business scale of domestic energy business and overseas energy business are 50 and 30, respectively.

## Concept of “Catalyze Our Dreams”

( Long-Term Management Vision )

Targets the Osaka Gas Group Aims to Achieve in "Field of Dreams 2020"

- Expansion of business fields
- Establishment of a solid business portfolio

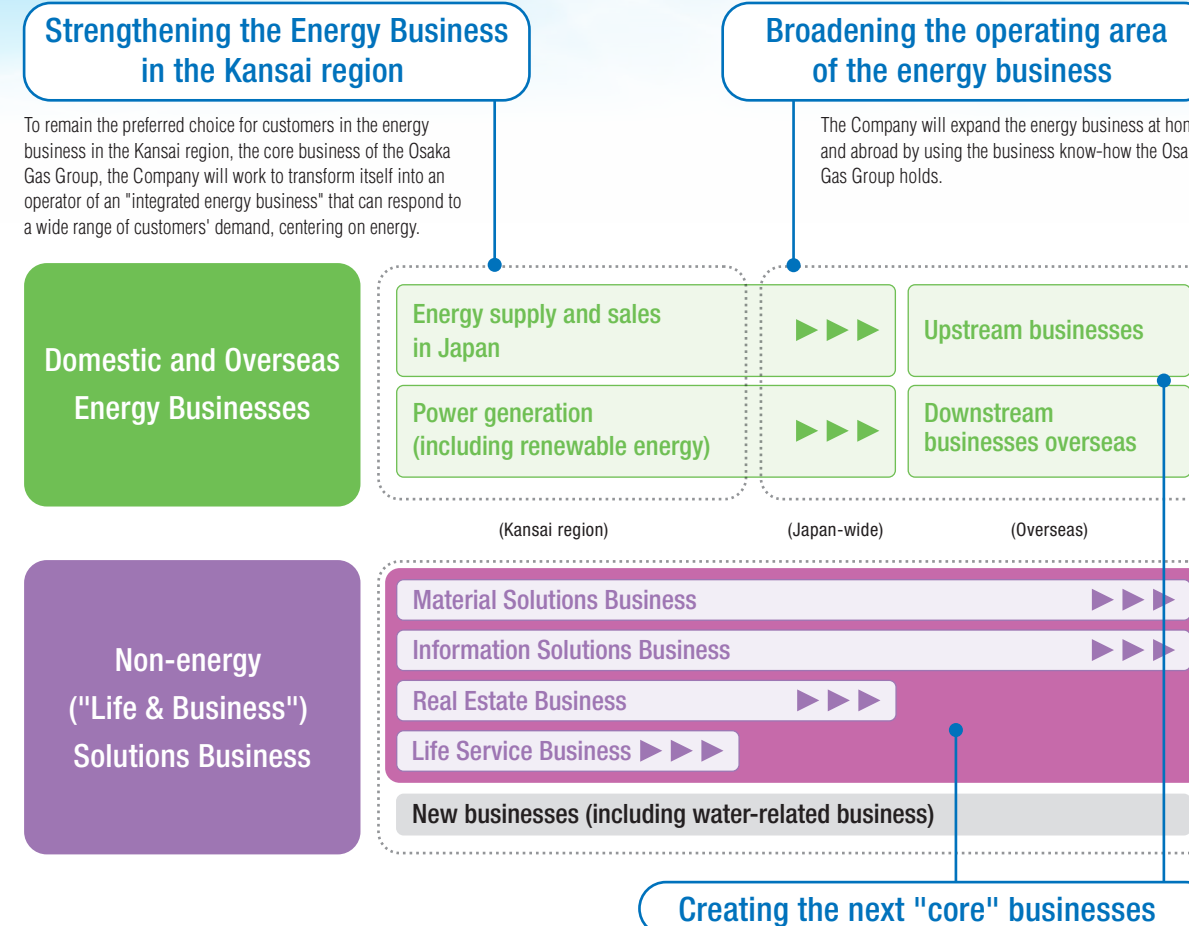
**Changing environment surrounding our businesses**  
The Great East Japan Earthquake, the electricity and gas industry regulatory reform, the shale gas revolution, etc.

**The Group will accelerate its efforts to realize the Vision for the Osaka Gas Group and develop its abilities to survive the competition.**

- With the electricity and gas industry regulatory reform in mind, the Group will evolve into a comprehensive energy business.
- To keep growing, the Group will actively try to expand its business fields that are expected to grow faster, namely power generation, overseas energy businesses, and material solution.

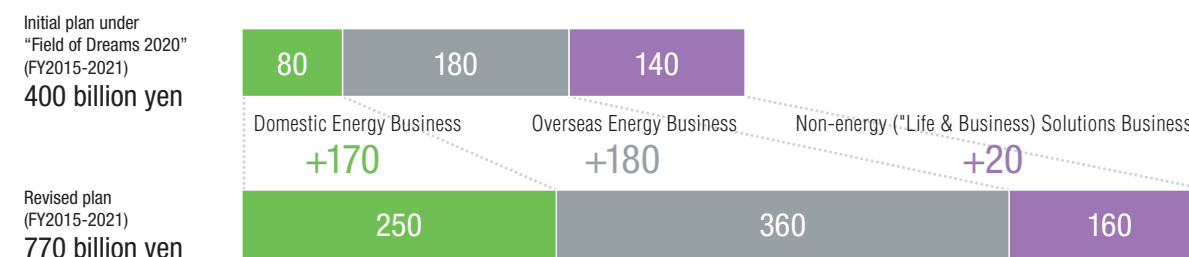
## Priority Themes in “Catalyze Our Dreams”

To realize its vision, the Company will work to strengthen the energy business in the Kansai region, broaden its operating area of energy business, and create a new ‘core’ business.



## Investment for Expansion, Greenfield and M&A (FY2015-2021) (unit: billion yen)

We plan to increase investment for expansion of new business by 370 billion yen compared to the initial plan under the “Field of Dreams 2020”.



# Natural Gas Value Chain of Osaka Gas Group

The Osaka Gas Group procures natural gas, which is an environmentally-friendly and stable energy source, from overseas suppliers, and provides gas to more than 7.1 million households and businesses, mainly in the Kansai region.

The Group secures the safety of customers and gives them peace of mind by procuring natural gas in a stable manner and building a solid security and accident-prevention system.

By participating in the overseas upstream / downstream businesses, the Group has been expanding the scope of its business fields and enhancing further its natural gas value chain<sup>[21]</sup>.

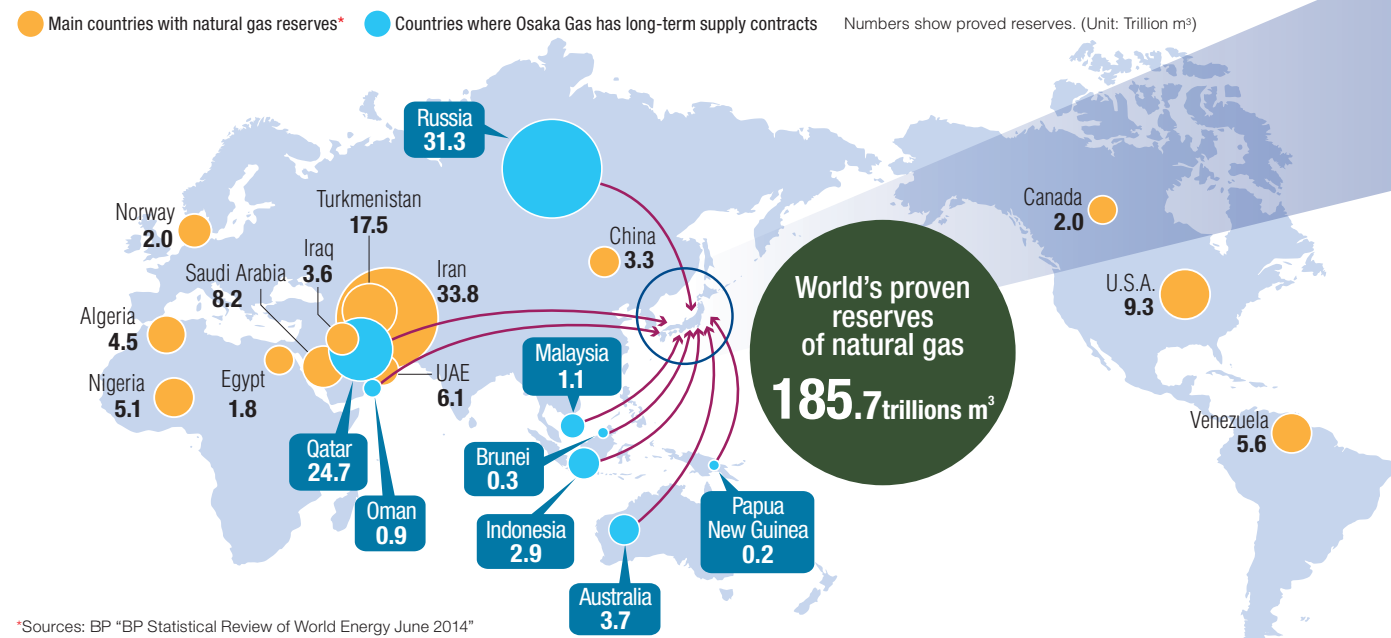
## Stable Procurement of LNG from 8 Countries

Unlike oil resources, which are unevenly concentrated in the Middle East, natural gas resources are spread worldwide. The number of years natural gas can be drilled for exceeds that of oil,\* giving the former a comparative advantage as an energy source. Osaka Gas started importing LNG<sup>[21]</sup> in 1972 from Brunei, and since then has diversified its procurement sources. The most recent suppliers are in Papua New Guinea, which began to supply gas to us in 2014. At present, we are procuring LNG from eight countries - Indonesia, Malaysia, Australia, Qatar, Oman and Russia, as well as Brunei and Papua New Guinea. We are set to embark on an LNG project in the U.S. state of Texas to import LNG in 2018.

## Stepped-up Efforts to Expand Business Fields

Other than midstream businesses such as gas imports and receipts, gasification at LNG terminals and the provision of gas to end-consumers through pipelines<sup>[21]</sup>, Osaka Gas' value chain includes upstream business such as the development of overseas gas fields and downstream business such as operation of LNG extraction terminals and power plants. We steadily forward those businesses as well as plan to join new project based on prudent risk assessment in the upstream business. Also, in the overseas downstream business, we intend to actively expand our energy business field in Southeast Asia.

## Countries with Natural Gas Reserves and Natural Gas Supply Sources for Osaka Gas



**8** countries  
forming long-term contracts with Osaka Gas

Approx. **7.75** million tons/year  
Amount of LNG imports

**12** projects  
Participation in upstream business such as LNG projects and gas field development

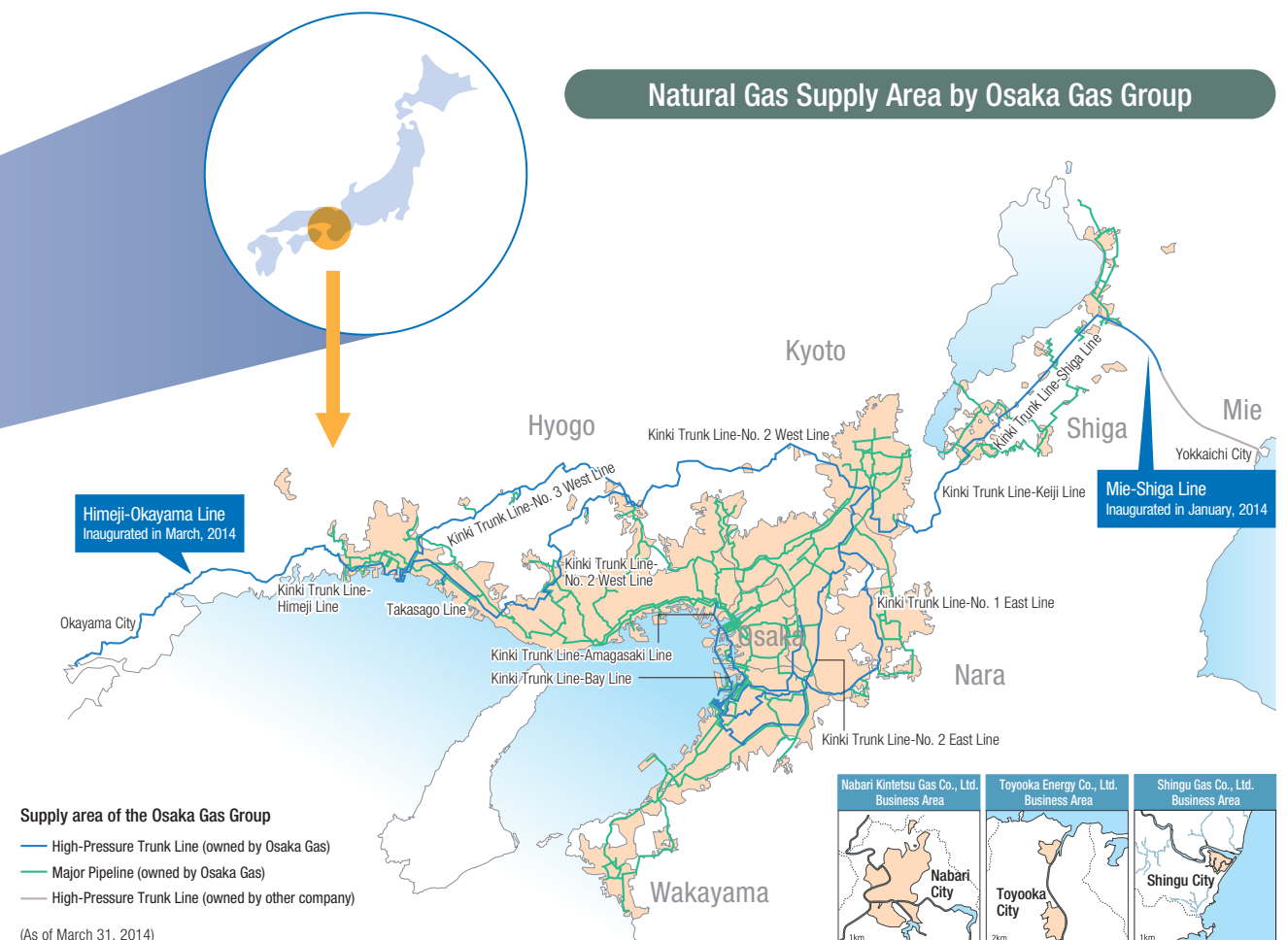
## Gas Supply to 7.16 Million Households and Businesses

Globally procured LNG is gasified and processed at domestic LNG terminals, and is provided to about 7.16 million households and businesses, mainly in the Kansai region, via gas pipelines of a total length of 61,300 km. The amount of gas to be shipped from our two main LNG terminals, located in Osaka and Hyogo, is determined according to the trend of gas demand - a mechanism aimed at securing stable gas supply to customers. We are monitoring the amount of gas reserved in each gas holder of our supply chain and their supply pressure on a real-time basis and in an integrated manner. We have established a 24-hour, 365-day emergency system against possible accidents and natural disasters.

## Preparation Against Possible Accidents

We have adopted a variety of anti-earthquake measures in the past, including the installation of various safety devices at LNG terminals, the adoption of gas pipelines made from durable and quake-resistant polyethylene<sup>[21]</sup>, and the spread of the use of a gas meter that can automatically stop gas supply in response to a quake. Also, we make efforts to deploy devices that automatically stop gas supply of designated areas, and devices remotely shut down gas supply in response to vibrations bigger than a certain level triggered by an earthquake. We have been also enhancing anti-tsunami measures at LNG terminals and supply facilities following the earthquake-tsunami disaster that hit eastern Japan in March 2011.

## Natural Gas Supply Area by Osaka Gas Group



Approx. **61,300** km  
Total length of gas pipelines

Approx. **7.16** million households  
No. of meters installed

**83** %  
Rate of gas pipelines resilient to earthquakes



Social Impact of Business Activities in Natural Gas Value Chain and Efforts to Reduce Such Impact

The value chain of the natural gas business is wide ranging, from drilling in gas fields, transportation via LNG tankers and gasification at LNG terminals, to gas supply via pipelines and consumption by end-users. Osaka Gas has been engaged in the LNG business while recognizing and taking into account its possible negative impact on society. To avoid and minimize such impact, Osaka Gas has been implementing a variety of measures in the areas of environment protection, human rights, labor, in the context of UN Global Compact and ISO 26000, jointly with its business partners who constitute the value chain. We will continue to place an emphasis on promoting dialogue with stakeholders in a bid to raise the level of efforts to reduce the social impact.

Drilling

In recent years, expectations are turning more toward natural gas. Under these circumstances, Osaka Gas has been working to diversify the sources from which natural gas is procured, and also the prices at which natural gas is procured, adding to participating in gas fields development. By doing so, we are striving to establish a system to procure LNG at reasonable prices and in a stable manner.

Transportation

The Osaka Gas Group efficiently operates LNG tankers it owns and those owned by other companies with the aim of ensuring more expeditious, safer and steady LNG transportation.

Processing

LNG terminals are a vital component of the LNG business, comparable to the human heart. Osaka Gas has established a solid processing system to gasify LNG, adjust thermal unit and add odorant before deliver gas to customers such as households and factories.

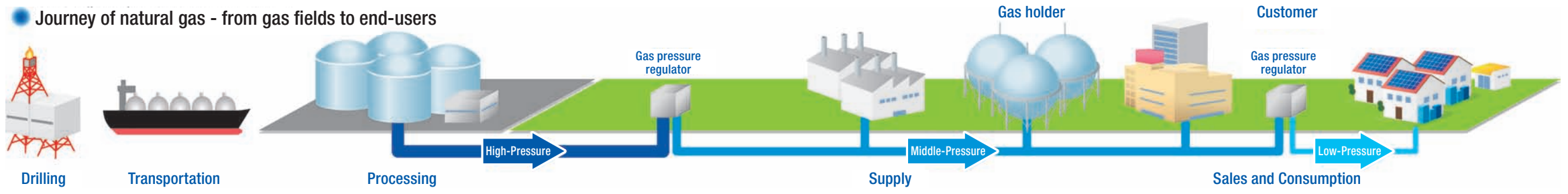
Supply

To ensure stable natural gas supply, Osaka Gas has been renovating processing facilities and building gas pipeline networks in accordance with meticulous plans. We have established a solid system monitoring gas supply in order that we can exercise safety and security measures 24 hours a day, 365 days a year in response to any emergency.

Sales and Consumption

In Japan, 60% of household energy such as electricity and gas is consumed for heating purposes, Osaka Gas is committed to further energy saving of its gas equipment and systems. We will also promote the use of high-efficiency gas air-conditioning systems and cogeneration systems, as a means of lessening impact on the environment at commercial and industrial customers' sites.

Source: Annual Report on Energy published by Ministry of Economy, Trade and Industry.



Main issues to be tackled

- Emissions of greenhouse gas (GHG) associated with energy consumption involved in drilling of gas resources
- Environmental nuisance and troubles caused during drilling of gas resources
- Impact on biodiversity in neighborhoods
- Safety, sanitary conditions and human rights for workers employed by gas suppliers

- Emissions of GHG associated with energy consumption involved in operations of LNG tankers
- Environmental problems caused during operations of LNG tankers
- Impact of ballast water used by LNG tankers on biodiversity
- Safety, sanitary conditions and human rights for crewmen working at LNG tankers

- Emissions of GHG associated with energy consumption at LNG terminals
- Safety in the neighborhoods of LNG terminals
- Production-related problems caused by natural disasters
- Safety and sanitary conditions for employees working at LNG terminals

- Drilling soil discharged during the laying of gas pipelines
- Supply problems caused by natural disasters
- Safety and sanitary conditions for workers laying gas pipelines

- Environmental load accompanying gas consumption
- Accidents on the customers' due to usage of unsafe equipment
- Provision of appropriate information regarding products and services
- Protection of personal information of customers
- Contribution to local communities via educational support

Major efforts  
Osaka Gas Group  
to reduce impact

Osaka Gas conducted a survey on LNG suppliers to the Osaka Gas Group in January 2011 to examine their conditions regarding such issues as human rights, labor standards, the environment, and prevention of corruption - all of which are part of the U.N. Global Compact 10 Principles. Subject to the survey were LNG suppliers who have concluded long-term supply contracts with us. The survey is planned to be conducted periodically.

CO<sub>2</sub> emissions during operations of LNG tankers are curbed through the efficient operations of LNG ships catering to our company, including those owned by other firms, and introduction of energy-efficient tankers, which is under construction, will lead to energy consumption reduction by more than 20% compared with conventional tankers. Osaka Gas is also attentive to maintaining biodiversity by ensuring that the environment is not affected by ballast water used by LNG tankers during transportation. We are also operating LNG tankers safely while giving consideration to their sanitary conditions.

The central control room of an LNG terminal operates and monitors all of its facilities 24 hours a day, 365 days a year. Safety in the vicinity of the LNG terminal is ensured through a system of guiding the tanker to the correct pier and safety measures for LNG tanks. In addition, various emergency training and drills are conducted in response to possible accidents. The LNG gasification process is designed to promote energy saving through the active use of energy that remains unused, such as LNG cryogenic energy and vapor pressure.

A host of safety measures are in place, including a block-by-block supply control system in which gas supply is automatically stopped in the event of accidents and other emergencies only in the block where the emergency originated, in order to limit the damage to the confined area. Reports on gas leakage are received by special phones 24 hours a day, 365 days a year, and are followed by action by police, firehouses and other relevant authorities with which Osaka Gas is in close cooperation, to deal with the emergency. We are also working to establish a system whereby drilling soil discharged during the gas pipelines works is recycled.

We are actively developing and marketing equipment and services aimed at cutting CO<sub>2</sub> emissions on the customers' sites, such as cogeneration systems. We are also striving to spread equipment with enhanced safety functions and increase lineup of services for safe use, while disseminating information on the safe use of such equipment. We are prepared to respond to consultations, complaints and opinions from customers expeditiously and sincerely.

# Materiality of CSR of the Osaka Gas Group — Report Based on the Guidelines —

This report has been compiled in line with procedures stipulated in the fourth edition of the Sustainability Reporting Guidelines (G4), global guidelines for sustainability reports.

These guidelines are designed to identify important aspects for a company and stakeholders surrounding it as “materiality ④,” and call for the disclosure of information regarding how materiality has been identified and how the company has been working on it.

This report explains how the Osaka Gas Group has identified the materiality of CSR and how the Group will try to manage it in the future.

## Study of Important Aspects (Materiality) for the Osaka Gas Group

The Osaka Gas Group believes that it is necessary for the energy provider to conduct its business while recognizing and managing the possible effects on society of its activities, and managing such effects that have already appeared. Parties affected by the Group’s activities are wide-ranging, including customers, local communities, corporate clients, shareholders and employees. As part of the social responsibility of the Osaka Group, in line with the procedures shown in the G4, we identify

important aspects in business activities as materiality taking into account the characteristics of Group activities and operational areas, and heeding views and opinions presented by stakeholders, and then compile a report based on priority items. We will promote efforts for appropriate management of each materiality, and reinforce them as necessary. The result of our efforts are to be reported year by year. If necessary, the materiality is to be reviewed so as to reflect changes in society.

### G4 Sustainability Reporting Guidelines

G4 Sustainability Reporting Guidelines is published by "Global Reporting Initiative", an international NGO, aiming for encouraging businesses to make efforts for building a sustainable future.

It shows efforts that should be made and information that should be disclosed on aspects that fall into categories related to sustainability of society, such as Economic, Environmental and Social which is sub-categorized with Labor Practices and Decent Work, Human Rights, Society and Product Responsibility.

It has been revised several times after publication of the first edition in 2000, and the G4, the latest version, was released last year. The G4 features a concept of the "materiality" - aspects that are important for both businesses and society, and recommends disclosing how materiality is identified and managed.

## How Osaka Gas Identified Its CSR Materiality

In accordance with the procedures shown in G4 guidelines, Osaka Gas went through a process of identifying materiality.



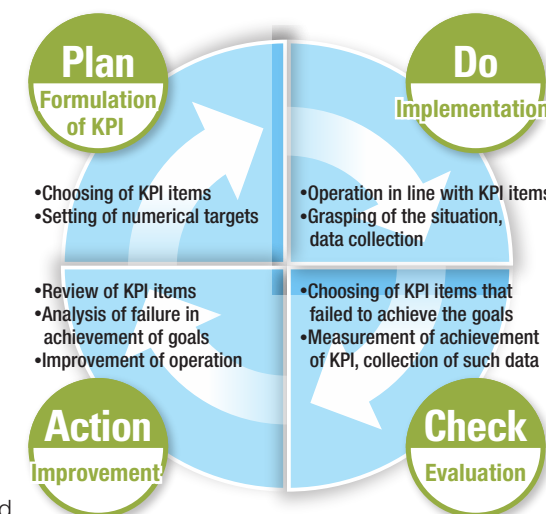
## What We Do in the Future

Important aspects identified as materiality are subject to review, depending on changes in the business environment and progress of CSR efforts.

The identified materiality will be evaluated over time based on key performance indicators (KPI). If necessary, additional indicators may be introduced.

The materiality will be reviewed, possibly in FY2017, in accordance with changes in the business environment and progress of CSR efforts.


Aspects not chosen as materiality under the latest evaluation will continued to be managed without lowering the current management level, except for those judged as the least important. Information will continue to be collected and disclosed .

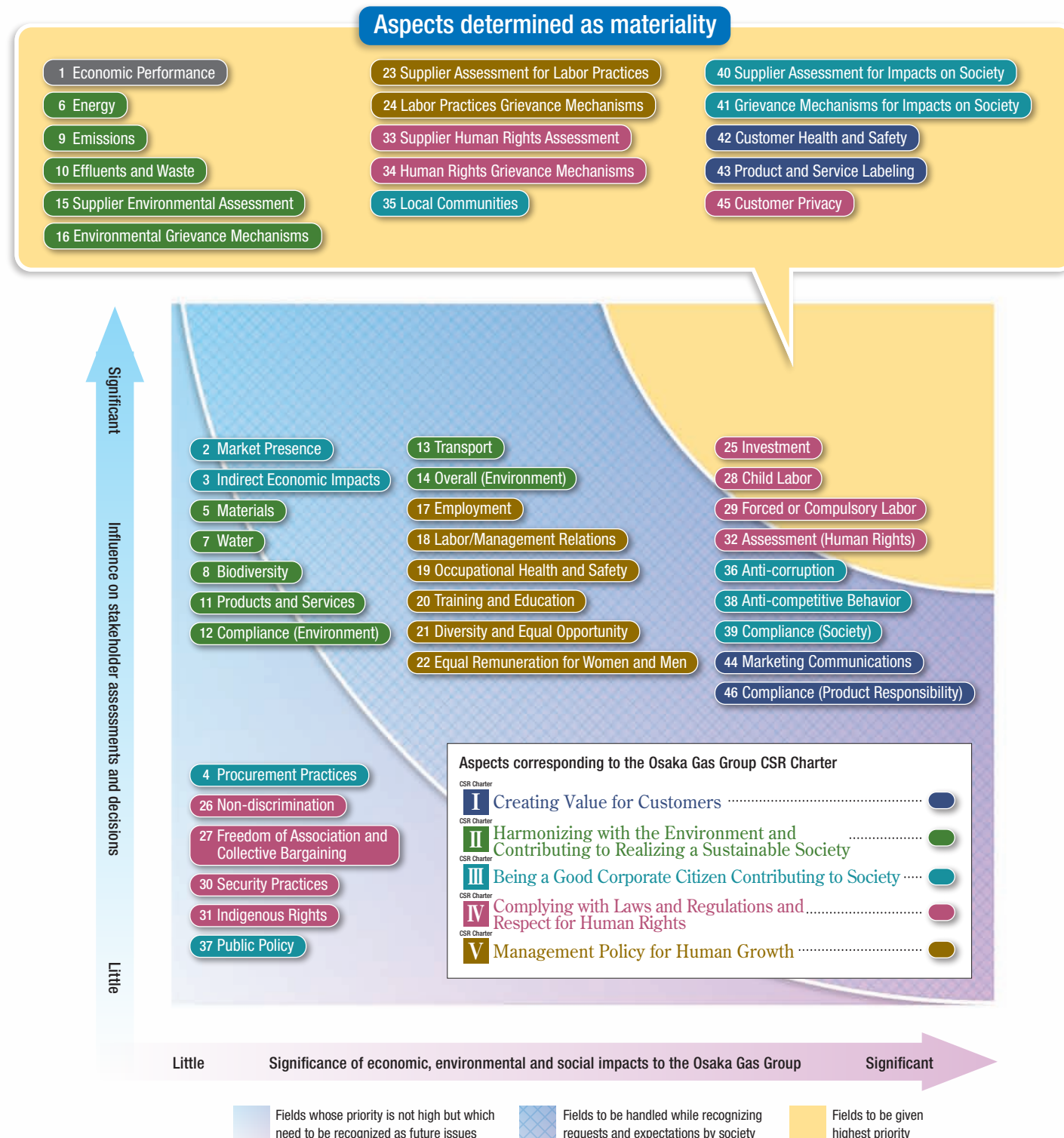




## Materiality Analysis Map

Analyzed materiality is organized in accordance with the Osaka Gas Group CSR Charter, and then, results of the assessment made from the viewpoints of the Group and stakeholders to measure the importance of 46 aspects for society are dotted on the materiality analysis map. As shown in the process of

determining the materiality , aspects judged important for society by both the Group and stakeholders have been chosen as needing to be given the highest priority, or “materiality.” These selected aspects are given special attention in this report.




## Materiality and Key Performance Indicators (KPI)

G4 guidelines call for policies, promotion systems and KPI to be formulated for each aspect while seeking management of their progress.

When the Osaka Gas Group adopted the latest Sustainability Reporting Guideline (G4), aspects identified as “materiality” were sorted out according to the Osaka Gas Group CSR Charter, and their relations with the current efforts by the Osaka Gas Group on CSR were clarified.

In the past, the Group has set CSR indicators for each chapter of the Osaka Gas Group CSR Charter and has stepped up CSR efforts and disclosure in line with the indicators. In the future, the Group will also promote disclosure of KPI, listed below.

In the future, the Osaka Gas Group will build a CSR system in line with the guidelines and step up information disclosure while taking advantage of the know-how of its business activities, accumulated through cooperation with its stakeholders.

CSR Charter	Aspects Determined as Materiality	Key Performance Indicators (KPI)
<b>I</b>	Customer Health and Safety	Percentage of significant product and service categories for which health and safety impacts are assessed for improvement
	Product and Service Labeling	Results of surveys measuring customer satisfaction
<b>II</b>	Energy	Energy consumption within the organization Energy intensity (unit of GHG  discharge, calculation method, intensity by energy type)
	Emissions	Direct GHG emission (scope 1) Energy indirect GHG emission (scope 2)
	Effluents and Waste	Total weight of waste by type and disposal method
	Supplier Environmental Assessment	Percentage of new suppliers that were screened using environmental criteria
	Environmental Grievance Mechanisms	Number of grievances about environmental impacts filed, addressed, and resolved through formal grievance mechanisms
<b>III</b>	Local Communities	Percentage of operations with implemented local community engagement, impact assessments, and development programs
	Supplier Assessment for Impacts on Society	Percentage of new suppliers that were screened using criteria for impacts on society
	Grievance Mechanisms for Impacts on Society	Number of grievances about impacts on society filed, addressed, and resolved through formal grievance mechanisms
<b>IV</b>	Customer Privacy	Total number of substantiated complaints regarding breaches of customer privacy and losses of customer data
	Supplier Human Rights Assessment	Percentage of new suppliers that were screened using human rights criteria
	Human Rights Grievance Mechanisms	Number of grievances about human rights impacts filed, addressed, and resolved through formal grievance mechanisms
<b>V</b>	Supplier Assessment for Labor Practices	Percentage of new suppliers that were screened using labor practices criteria
	Labor Practices Grievance Mechanisms	Number of grievances about labor practices filed, addressed, and resolved through formal grievance mechanisms
—	Economic performance	Direct economic value generated and distributed (revenues, operating cost, employee wages and benefits, payments to providers of capital, payments to government, community investments)



## Stakeholder Views on Validity of Identified Materiality



### Views from an expert on CSR management

#### Dr. Katsuhiko Kokubu

Professor, Dean of Graduate School of Business Administration, Kobe University

I would like to express my respect for the Osaka Gas Group's efforts to identify important aspects as materiality [\[2\]](#) in an advanced and sincere manner. Such efforts will be meaningful only if they are continued. I hope that in the future your company will establish a PDCA cycle to identify materiality. Suppliers to your company are wide-ranging and are capable of having significant effects on their regional communities, which makes it extremely important for the Group to appropriately manage its supply chains [\[2\]](#) if it is to pursue sustainable growth. In light of expanding overseas operations, it will be important for the Group to endeavor to create social values through business activities as well as undertaking business operations while heeding each region's situation, if it is to promote global operations. Striking a balance between the fulfillment of CSR and the creation of social values is necessary. I hope that the newly crafted materiality analysis map will be utilized so as to strike such a balance.



### Views from a customer

#### Mr. Hideo Iida

Representative of organizers, Council of the Kansai Consumers' Association

Projects to develop energy-saving devices and technologies to improve the efficiency of such devices are already under way. For such technologies to be further enhanced and spread to society, appropriate dissemination of relevant information is necessary. What kind of philosophies the Osaka Gas Group - a company having much to do with people's lives - would have regarding workplace safety, environmental preservation and protection of privacy when it conducts business activities is important for winning confidence from customers. I therefore believe that the Group should formulate training programs and compile a code of conduct for employees of affiliated companies and outsourcing companies. Voices from consumers and people, and cases of consumption-related accidents should be regarded as a treasure house that provides sources of innovative business projects in the future. What is important for the Group is to become wise enough to listen to such voices sincerely. I hope that the Osaka Gas Group will keep responding to the needs and demands of consumers and customers.



### Views from an expert on the environment

#### Dr. Koji Shimada

Professor, Department of Economics at Ritsumeikan University

Energy consumption and greenhouse gas (GHG [\[2\]](#)) emissions are expected to rise in view of expanding power-generation businesses by the Osaka Gas Group, which makes it imperative for the Group to appropriately manage GHG emissions toward their reduction. Meanwhile, the demand side has a significant role to play in reducing GHG emissions through the shift to alternative energy sources and energy conservation efforts, which makes it necessary for the Osaka Gas Group to join hands with stakeholders in developing products and services. The Group is likely to be asked to give consideration to possible effects on the environment in terms of biodiversity of the ballast water [\[2\]](#) used by LNG [\[2\]](#) tankers. In the future, the Group is expected to expand its overseas energy business, including acquiring rights to develop shale gas [\[2\]](#) fields in the United States. Under these circumstances, I hope that the Osaka Gas Group and its suppliers will collaboratively promote environmental assessment and management at stages of resources development, LNG processing and LNG transportation.



### Views from an NGO

#### Ms. Kaori Kuroda

Executive Director of CSO Network Japan

An internationally active business corporation is asked to recognize both the positive and negative effects on the local society, the environment and the economy from its business activities. If necessary, such a company needs to explain its activities' possible impact on the local community, take preventive measures, and respond appropriately to problems. Taking remedial measures for affected individuals and local communities is necessary. In that case, involvement by stakeholders such as local experts, local municipalities and local people is indispensable, because any actions need to be backed by full understanding of local practices, tradition and culture, as well as relevant local law. In addition, it is advisable to establish a mechanism through which complaints from local people on matters other than products and services are acceptable. I hope that the Osaka Gas Group will become a company that can contribute to local development by providing solutions to local problems.

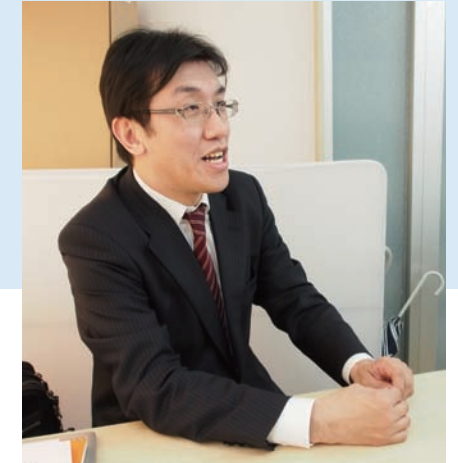


### Views from a human rights expert

#### Ms. Emi Sugawara

Associate Professor at Faculty of Law, Osaka University of Economics and Law

A due diligence [\[2\]](#) process on human rights is necessary in the case of human rights violation both in the event of rights being directly violated by a business operator or its business activity, and in the event of rights violation resulting from its relations with suppliers. In that sense, it is necessary to incorporate the evaluation of a company's human rights situation in the management of internal auditing, risk management and supply-chain operations. Recently, companies have been required to grasp human rights situations at their main suppliers in order of priority. They are now required to clarify what percentage of their suppliers are covered by their efforts to recognize human rights situations. If there are no human rights violations, companies are even required to explain how they can claim that to be the case. What I hope for the Osaka Gas Group is that it will provide human rights education not only for the interest of its employees and those being employed but also for the interest of customers and local people the Group is meeting on a daily basis.



### Views from an expert on diversity of human resources

#### Mr. Taro Tamura

Representative Director, Institute for Human Diversity Japan

The Osaka Gas Group is doing more than the average Japanese company regarding the issue of diversity [\[2\]](#) of human resources, such as disclosure of the percentage share of women with managerial positions and the recruitment of handicapped people in excess of the minimum legal requirement, all of which domestic stakeholders are interested in addressing. But challenges remain intact in terms of issues international stakeholders want to see addressed. Such issues include the possibility of disclosing more about human diversity in the fields of employment and labor affairs, and the attitude of the entire supply chain in responding to problems. Regarding diversity, issues and goals related to LGBT [\[2\]](#) and ethnicity [\[2\]](#), and disclosure of improvement processes are the fields drawing keen attention from overseas observers. Japanese companies are being encouraged to cover not only their head offices in Japan but also group companies in the diversification of human resources. I hope that the Osaka Gas Group will work out its policy direction for human diversity while broadening the scope of fields and matters covered by the policy.



# CSR Management

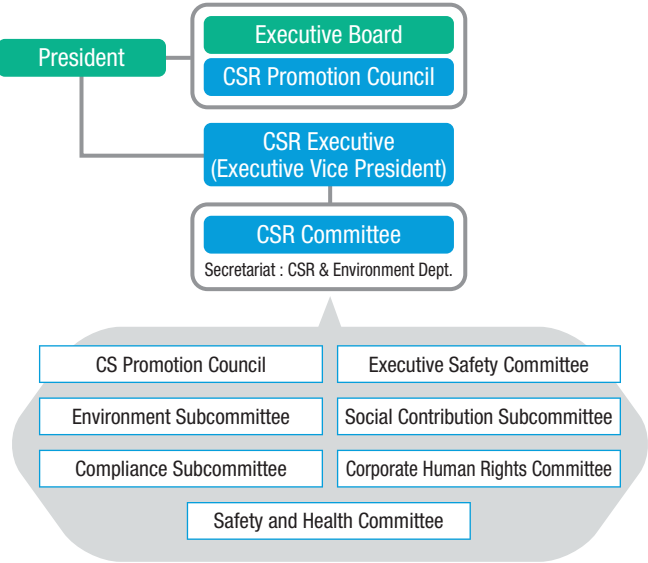
Osaka Gas Group is fully aware that it is necessary for us to promote CSR in a systemic manner in order to realize “Value Creation Management.” The Group recognizes what stakeholders are interested in addressing, sets targeted indexes, and establishes a system for receiving third-party inspections, while pushing ahead with the CSR Promotion System, a main structure for CSR activities. By so doing, the Group is implementing effective PDCA management.

## CSR Promotion System

In FY2011, the Osaka Gas Group initiated a new system and established a place for dialogue with internal and external stakeholders as occasion warrants depending on the topic to enable flexible and appropriate responses to the demands of society. The CSR Promotion Council, consisting of executives, deliberates CSR plans and reports on results of activities under the supervision of the President of Osaka Gas. From the viewpoint of integrating the promotion of overall CSR activities, we established the CSR Committee to coordinate and advance Group-wide CSR activities. The committee, led by the CSR Executive, is composed of the heads of business units.

Prior to FY2010, the Group’s CSR activities are focused on the areas of the environment and compliance. In FY2011, the Group reviewed the CSR system so as to cover all of the five fields stipulated under the Osaka Gas Group CSR Charter, leading to the creation of a secretariat for that purpose, named the CSR & Environment Department. In addition, the Group established the Social Contribution Subcommittee to discuss on the Group’s social contribution activity plans and reports in a cross-departmental manner. All these moves represent the Osaka Gas Group’s efforts to strengthen CSR activities in line with the CSR Charter and to live up to higher social expectations from society.

CSR Promotion System



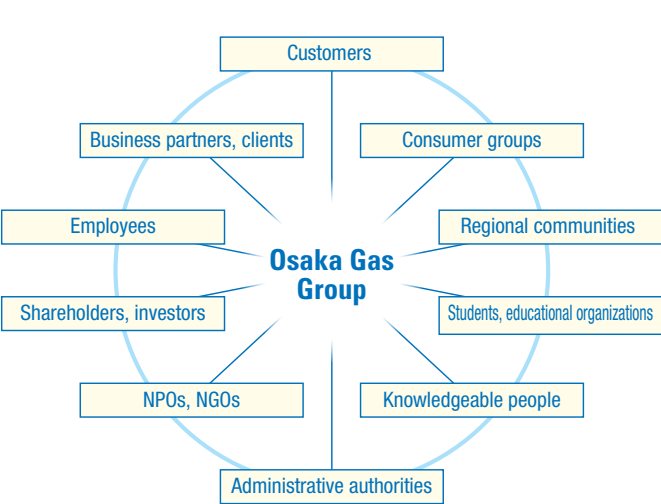
## Dialogue and Cooperation with Stakeholders

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 Group’s labor union. Furthermore, the Group is sharing information with the Japan network of the United Nations Global Compact, is actively taking part in the formulation of various policy measures by the government and municipalities, and is participating for compilation of various policy proposals as a member of WBCSD, a group of businesspeople aimed at achieving sustainable development.

One of the results of such engagement is that 5 business associations comprised of partner companies undertaking gas-related services established the Code of Ethics respectively in response to the Group’s policy. The Group is also actively engaging with various stakeholders, such as businesses, universities and NPOs.

Stakeholders of Osaka Gas Group



## CSR Activities in FY2014 - Target and Results

### Osaka Gas Group CSR Indicators

The Osaka Gas Group has introduced CSR indicators since 2009 under each chapter of the CSR Charter, to promote CSR activities and visualize the process. The latest CSR indicators covered the FY2013-2014 period. In the final year of FY2014, all targeted goals for the CSR indicators were achieved, except for the opinion survey among employees which is planned to be conducted in FY2015.

Much higher goals have been set for FY2015-2017 with some numerical targets being revised based on the results of the past CSR activities. Based on the G4 guidelines, materiality for CSR of the Group has been identified and key performance indicators (KPI) have been selected. (Refer to p.16) The Osaka Gas Group will work to achieve the goals in the future by linking the new CSR indicators (refer to p.6) and the KPI.

CSR Charter	CSR Indicators <FY2013 – FY2014>	FY2014 Result	Achieved
<b>I</b> Creating value for customers	<b>Customer satisfaction level for seven customer service duties</b> Overall satisfaction rate 85% or more 82% or more in all satisfaction rates	<b>Customer satisfaction level for seven customer service duties</b> Overall satisfaction rate 91.0% Achieve over 82% in all satisfaction rates	○
<b>II</b> Harmonizing with the environment and contributing to realizing a sustainable society	<b>Environmental Management Indicator</b> Environmental Management Efficiency: 68 yen / 1,000 m³ or less	<b>Environmental Management Indicator</b> Environmental Management Efficiency: 60 yen / 1,000 m³	○
<b>III</b> Being a good corporate citizen contributing to society	<b>Number of contacts and communication events</b> Number of events held (on-site dietary and energy / environment seminars, etc.): 1,000 times Number of contacts (visitors to permanent facilities including Gas Science Museum): 70,000 people or more <b>Social contribution activities</b> Number of activities implemented: 600 times or more	<b>Number of contacts and communication events</b> Number of events held (on-site dietary and energy / environment seminars, etc.): 2,068 times Number of contacts (visitors to permanent facilities including Gas Science Museum): 70,087 people <b>Social contribution activities</b> Number of activities implemented: 692 times	○
<b>IV</b> Complying with laws and regulations and respect for human rights	<b>Compliance awareness survey scores</b> (Individual) Level of understanding of the Code of Conduct: Higher than the previous year (Organization) Degree of penetration of compliance: Higher than the previous year <b>Percentage of employees receiving compliance training:</b> 100%	<b>Compliance awareness survey scores</b> (Individual) Level of understanding of the Code of Conduct: 2.4p improved (73.8%) (Organization) Degree of penetration of compliance: 3.2p improved (86.0%) <b>Percentage of employees receiving compliance training:</b> 100%	○
<b>V</b> Management policy for human growth	<b>Employee opinion survey</b> Maintaining sufficient levels in job satisfaction and sense of attachment to the company	<b>Employee opinion survey</b> Maintained sufficient level (Result of FY2013. Next survey is scheduled for FY2015)	—



# I

## Creating Value for Customers

### Fundamental Concept

**We will endeavor to ensure security so that customers can utilize our products and services safely and with peace of mind, and to actively disseminate information.**

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 the provision of a reliable and safe supply of natural gas and other energies 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.

#### Specific Materiality

- Customer Health and Safety
- Product and Service Labeling

#### Relevant Osaka Gas Group policies, etc.

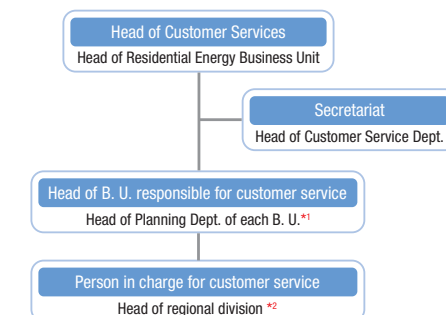
- Osaka Gas Group Code of Conduct  
"9. Ensuring Safety of Products and Services"
- Product Safety Voluntary Action Plan

## Management Structure

Throughout our natural gas value chain, each business unit is responsible for security and safety of its business domain of extraction, transportation, gasification, distribution and sales. The Head of Safety and the District Safety Administrators function to give advice for cross organizational security and safety issues.

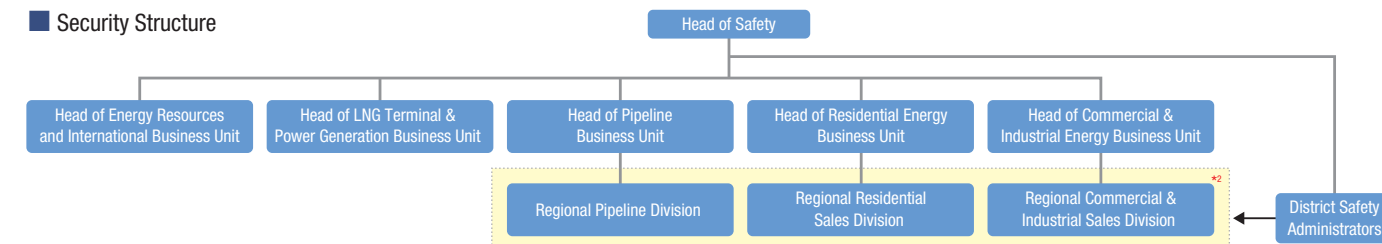
A CS (Customer Satisfaction) Promotion Council and an Executive Safety Committee have been established under the CSR Committee. The CS Promotion Council shares information from "C-VOICE", a database system for collecting customer opinions through the Customer Center and other means, and considers measures to respond customers' requests. The Executive Safety Committee shares information and considers security measures so that customers can use natural gas securely.

#### CS Operating Organization



\*1 Pipeline Business Unit, Residential Energy Business Unit, Commercial & Industrial Business Unit  
\*2 Regional responsibility correspond to the service areas divided into 5 regions.

#### Security Structure



## Target & Results

CSR Indicator :

### Customer Satisfaction Survey : Seven Customer Service Duties

1. Overall satisfaction rate  
2. Each satisfaction rate

#### 1. Overall satisfaction rate

Target for FY 2014

**85% or more**

FY 2014 Result

**91.0%**

#### 2. Each satisfaction rate for seven customer service duties

Target for FY 2014

**82% or more**  
in all the seven customer  
service duties

FY 2014 Result

**Achieve over 82.0%**  
in all the 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 customer assessments received are then collated.

Customer satisfaction is graded on a scale of one to six, and "overall satisfaction" is the ratio of responses in the top two grades to the total number of responses.

#### FY2014 Results Overview

With the aim of improving service quality, Osaka Gas has conducted customer satisfaction surveys since fiscal 1989. The overall satisfaction rate was 91.0% in fiscal 2014. We continue striving to improve our services so as to provide services that best meet the needs of our customers, based on customer feedback.

#### Toward the Future

Ensuring safety and providing safe and socially useful products and services will remain an important mission for us as a company handling natural gas and a broad range of other energies. We will strive to enhance the levels of security and disaster prevention within our energy production/supply infrastructure, and to promote safe and secure appliances and services. We will also continue and upgrade our human resources development so that all employees have a proper awareness of security and can implement security measures at their respective workplaces.

We will pay close attention to the opinions voiced by customers, revamp our operations and develop new products so that we qualitatively improve our products and services, as well as we will proactively disseminate information.





Emergency vehicle



Earthquake drill

## Formulating a Business Continuity Plan (BCP) for Large-Scale Disasters and Accidents

In July 2013 the Osaka Gas Group formulated the “Business Continuity Plan (BCP 2014)” in the Event of Large-scale Disasters and Accidents” and shared it across the Group to improve its ability to respond to accidents and disasters.

The BCP will in principle be reviewed once a year, in addition to earthquake drills, education/training via e-learning and other means to foster greater understanding among employees.

## “BCP-Lite” to Support Business Continuity for Small Office Buildings in the Event of a Disaster

“BCP-Lite,” is an energy system that allows even small office buildings without emergency power generators to continue the minimally necessary business activities in the event of disaster. It is now under operation at the Fukiai Office East Building, an Osaka Gas office building in Kobe, Hyogo Prefecture. “BCP-Lite” is the collective term for systems that utilize a

self-sustained gas engine heat pump (GHP) to maintain electric power supply even during blackouts caused by disasters. In addition to energy-saving proposals, we will recommend “BCP-Lite” to small commercial buildings as a simple system for supporting business continuity during emergencies.

## Safeguarding Customers by Ensuring all Employees are Knowledgeable about Security

Convinced that the foundation of its gas business lies in concerted efforts by employees to ensure security, the Osaka Gas Group is implementing “All-Employee Gas Safety Initiative” involving all employees. Through these activities employees seek to accurately respond to questions from customers and to ensure that gas leaks and unsafe appliances are not overlooked.

The company intranet informs all employees which safety measures to take, and gives basic information about the safety of gas and gas appliances to familiarize all employees with these. We have also distributed pocket-sized booklets to persons working at our subcontracting companies, such as construction companies, service shops, etc.



All-Employee Gas Safety Initiative poster

## Utilizing “The Behavioral Observation” Method in Surveys

Osaka Gas has developed “The Behavioral Observation” method as a means of making innovation happen in business field. “The Behavioral Observation” is a scientific method which propose and implements solution based on the insights which are acquired by analyzing observed facts and knowledge through academic perspective.

We have conducted a cumulative total of 634 “behavioral observation” surveys since the start of service in FY2006.

In June 2014 we established K-Lab, Inc., and have been developing even more sophisticated observation methods, training observation researchers, and engaging in exchange with companies and universities.



Discussion at the Research Institute of Behavior Observation

## Spreading the Use of “Si” Sensor-Equipped Cooking Stoves with Four Safety Functions

With the aim of eradicating fire accidents that are caused by gas stoves, since 1st, April 2008 gas sector in Japan has equipped detection sensors with four safety features\* for preventing cooking oil from overheating, ensuring flame failure safety, and automatically turning off the flame when the user forgets to do so for all of its cooking stoves. We have been working to spread the use of this appliance, called the “Si” Sensor-Equipped Cooking Stove.

We have been using diagrams including those shown below in our catalogs and websites to explain to users these respective assurance/safety functions.



\* Four automated features for safety



1. Controlling the gas flame size if the temperature of the pan bottom reaches about 250 degrees



2. Turning off the gas if the flame goes out during cooking



3. Turning off the gas in case of being left for a certain time



4. Turning off the gas when the temperature of the pan bottom rise sharply, preventing burning of food

## Accuracy in Advertising

Recognizing that our customers rely on our advertisements and product descriptions in choosing products and services, as laid out in its Code of Conduct of the Osaka Gas Group, Osaka Gas strives for complete accuracy and total honesty in its literature.

Responding to rising popularity and demand among our customers for environmentally friendly products, whenever the degree of environmental friendliness of a product is printed in our catalog, we ensure the accuracy by double-checking with the manufacturers.

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

## Fundamental Concept

We will contribute to the development of a sustainable society by realizing the efficient use of energy and resources.

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 FY2007, we do our business activities by keeping in mind what are shown below.

We aim to reduce the environmental impacts of our business activities. To this end, the Osaka Gas Group will strengthen its environmental management system and promote internal activities aimed at saving energy and natural resources. And, by offering more environmentally friendly natural gas compared to other fossil fuels, and services which contribute to reducing environmental impact, we are making our efforts in partnership with our customers to achieve environmental impact reduction. To this end, we will strive to develop energy-saving systems which contribute to environmental conservation.

Osaka Gas Group aims to take an active part in environmental conservation activities in areas wherever we conduct business, locally, nationally and internationally and contribute to the development of a sustainable society by aiming through our business activities to achieve harmony with the environment and realize the efficient use of energy and resources.

### Specific Materiality


- Energy
- Emissions
- Effluents and Waste
- Supplier Environmental Assessment
- Environmental Grievance Mechanisms

### Relevant Osaka Gas Group policies, etc.

- Osaka Gas Group Code of Conduct
  - “6. Consideration to the Environment”
  - “13. Developing Our Partners’ Understanding on Our Code of Conduct”
- Osaka Gas Group Environmental Activities Policy
  - 1 : Reducing Environmental Impacts of Our Business
  - 2 : Reducing Environmental Impacts of Our Products and Services
  - 3 : Contributing to Environmental Conservation Locally, Nationally and Internationally
- Osaka Gas Environmental Policy
- CSR Purchasing Guidelines
- Green Purchasing Guidelines
- Osaka Gas Group Biodiversity Policy

## Management Structure

### Addressing the Environmental Management System (EMS)

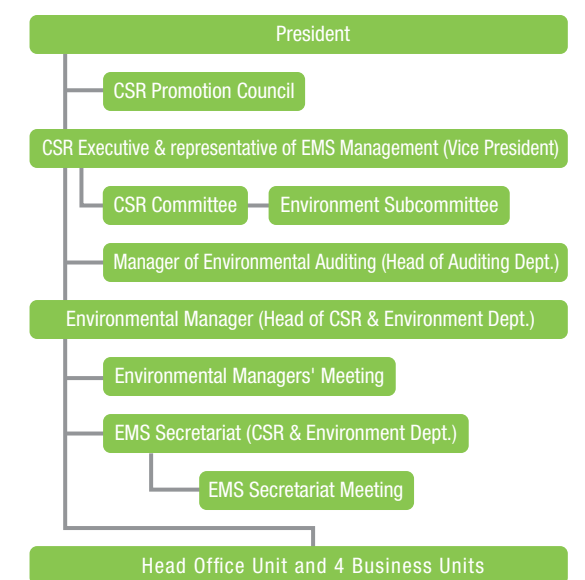
Osaka Gas began efforts in FY1998 to obtain ISO14001 certification for individual departments, and was able to cover the entire company by FY2006. Integrating a company-wide environmental management system (EMS ) from FY2007, Osaka Gas received company-wide integrated certification in December 2007, which it has maintained ever since. We are seeking through our EMS to reduce the environmental impact of our business activities and ensure compliance with environmental laws and regulations by all employees.

As a general, all affiliates (83 companies) in Japan have constructed and operate an EMS, and these efforts are based on the group common rules Environmental Management Rules. In addition, the Osaka Gas Group has been offering e-learning programs for all employees to give them access to the necessary knowledge on basics of environmental issues, and on Group environmental measures, targets, and activities.

### Measures to Address Environmental Risk

To counter environmental risk, we properly manage all chemical substances in compliance with relevant laws and regulations, and we are engaged in ongoing soil and groundwater conservation at former coal gas production plant sites. We received no administrative dispositions for violations of laws, regulations or ordinances in FY2014 as well.

### Environmental Management Promotion Organization




## Target & Results

CSR Indicator :

### Environmental Management Indicators : 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 six 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.

\* Six environmental impacts: GHG  emissions, NOx emissions, COD (chemical oxygen demand), final disposal of general and industrial waste, final disposal of excavated soil from pipeline works, and chemical substance emissions.

### FY2014 Results Overview

We strove to save more energy at the LNG terminals and in office buildings, and to reduce the amount of excavated soil for final disposal. Thanks to these efforts, the monetary equivalent value of environmental impact, which is the numerator in the formula for calculating the environmental management efficiency, was 513 million yen. The denominator, the volume of gas sold, was 8,524 million m³. Therefore, the environmental management efficiency stood at 60 yen/1,000 m³, significantly exceeded the fiscal 2014 target of 68 yen/1,000 m³.

### Toward the Future

We will move forward GHG reduction through our internal activities such as utilization of cryogenic power generation systems  at LNG  terminals, the Green Gas Building Promotion  activities aimed at saving energy in the office buildings, the introduction of fuel-efficient LNG ships and so on.

Also, we will contribute to GHG emission reduction at customers' sites by endeavoring to develop and expand technology to further improve the efficiency and reduce the costs of products and systems such as fuel cells and other cogeneration systems that help save energy.

Bearing in mind that all of our business activities are deeply connected to the environment, we carry out our business with due consideration to the environment through collaborative efforts with business partners such as promotion of 3Rs (Reduce, Reuse and Recycle).









Environmental Action Targets and FY2014 Results

Third-party verification completed.  
Osaka Gas underwent a third party verification by Bureau Veritas Japan Co., Ltd.

FY2014 marked the deadline for attaining our Environmental Action Targets (with the exception of certain indicators), and we did achieve the majority of our targets. From FY2015 we will be undertaking better environmental action on the basis of new environmental action targets.



Area	Indicator		Target for FY 2014	FY 2014 Results		
Integrated indicator	Environmental management efficiency	Environmental impact of gas business per gas sold (Monetary value (yen) of GHG  , excavated soil, waste, NOx, COD, chemical substances,water consumption / gas sold (1,000 m³))		68 or less (26% decrease compared to FY2009)	60	
Low-carbon society	Reducing CO2 emissions from our business activities	Gas business	LNG terminals (CO2 emissions per 1 million m³ of gas sold) ( t-CO2/1 million m³)	12.3 or less (5% decrease compared to FY2009)	10.1	
			Office buildings (CO2 emissions per 1,000 m² floor space) (t-CO2/1,000 m²)	75.9 or less (6% decrease compared to FY2009)	66.3	
		Group companies' businesses	Electricity business (including renewable energy sources) (CO2 emissions per electricity generated)	15% decrease in FY2021 compared to FY2009	31% decrease	
			Other businesses (CO2 emissions per sales) (t-CO2 /10 million yen)	10.3 or less (3% decrease <sup>*1</sup> compared to FY2010)	8.7	
	Reducing CO2 emissions on customer sites and throughout the value chain 	Customer sites <sup>*2</sup>	—Centered on natural gas, we seek to reduce greenhouse gas emissions and contribute to the energy security of society— <ul style="list-style-type: none"><li>Promote the widespread use of high-efficiency residential fuel cells.</li><li>Spread the use of equipment for Smart Houses promoting energy creation/conservation* and energy visualization. <sup>*1</sup>Fuel cells, photovoltaic power generation, high-efficiency water heaters</li><li>Spread the use of sophisticated energy management systems.</li><li>Introduce and expand the use of equipment and systems with outage response functions. (Residential) cogeneration systems (including fuel cells) (Commercial/industrial) emergency-generator and cogeneration systems and GHP with stand-alone power supply function, etc.</li><li>Promote the use of cogeneration / gas air-conditioning systems, which can contribute to reducing peak electricity demand.</li><li>Promote the spread of renewable energy such as solar power and biogas.</li></ul>		<ul style="list-style-type: none"><li>Sales of new ENE-FARM (PEFC) and ENE-FARM type S (SOFC)</li><li>Sales of ENE-FARM and ECOWILL PLUS with self-sustained operation functions</li><li>Cumulative sales achieved: ENE-FARM 23,000, PV 11,000, W power generation 16,000</li><li>"Motto save" adopted for BEMS aggregators<sup>*3</sup></li><li>Introduction of BCP -compatible GENE-LIGHT</li><li>Development of "Solar Link Excel" GHP with PV-adjustment power generation functions</li><li>Start of Japan's first solar power and biogas cogeneration power generation businesses</li><li>Development of solar power business utilizing SOLAR-ECOWAVE</li></ul>	
			Transportation / logistics <sup>*2</sup>	<ul style="list-style-type: none"><li>Promote energy-efficient and eco-friendly operation (lower CO2 emissions) and equipment improvements for existing Group-owned LNG  tankers; introduce new technologies into newly-built tankers.</li><li>Promote the use of natural gas powered vehicles (including large vehicles) for distributing products/services at Group companies and business partners.</li></ul>	<ul style="list-style-type: none"><li>Launch of world's first peapod-shaped LNG carrier</li><li>Expanded introduction of natural gas vehicles to transport companies and business partners</li></ul>	
	Resource recycling	Promoting 3Rs in our business	Gas business	Industrial waste from LNG terminals (final disposal rate)	0%	1.0%
				Industrial waste from offices (final disposal rate)	2% or less	1.2%
				General waste from LNG terminals and offices (final disposal rate)	5% or less	2.8%
Excavated soil (final disposal rate)				Approx. 2%	1.2%	
Polyethylene pipes (recycling rate)				100%	100%	
Gas meters (reuse rates)				97% or more	99.3%	
Group companies (core affiliates <sup>*4</sup> )		Industrial waste/general waste (final disposal rate)	9% or less	9.5%		
Efforts throughout the value chain		Promote the 3Rs of used equipment at our customers, in cooperation with our business partners (residential gas equipment, gas alarms, packing materials, renovation waste, commercial/industrial equipment, etc.)			<ul style="list-style-type: none"><li>Reduced excavated soil by about 40% compared with conventional construction methods, reused 99% of used gas meters, and recycled about 90% of gas equipment and 100% of PE pipes</li></ul>	
Biodiversity <sup>*2</sup>	In accordance with the Osaka Gas Group Biodiversity Policy, we take biodiversity into consideration in all of our business activities.			<ul style="list-style-type: none"><li>Undertook biodiversity efforts at sites of LNG terminals and head office rooftop</li></ul>		
Technology development <sup>*2</sup>	Promote the development of technologies that contribute to a low-carbon society and energy security. <ul style="list-style-type: none"><li>Aim to improve distributed energy technologies (smart energy houses, smart energy networks, etc.).</li><li>Aim to develop high-efficiency equipment and systems including next-generation fuel cells.</li><li>Aim to develop renewable energy-related technologies.</li></ul>			<ul style="list-style-type: none"><li>Launched a demonstration of demand response through cogeneration systems.</li><li>Conducted a long-term living experiment of the Smart Energy House, which runs on three types of batteries.</li><li>Completed a demonstration project for the optimal combination of distributed energy systems.</li><li>Sold "HYSERVE" compact-type hydrogen generators to hydrogen-filling stations</li></ul>		
Green procurement / purchasing <sup>*2</sup>	Promote green purchasing in cooperation with business partners, and the Green Partner Initiative.			<ul style="list-style-type: none"><li>Expanded green purchasing items and performed green partner renewal audits</li></ul>		

<sup>\*1</sup> The base year for CO2 reductions is FY2009, but Group companies use FY2010 (after EMS introduction had been completed) as the base year   <sup>\*2</sup> Results shown for FY2013 and FY2014  
<sup>\*3</sup> Energy management support service company   <sup>\*4</sup> Osaka Gas Urban Development, OG Chemicals (excluding CF Materials Division), OGIS-RI, Liquid Gas

Contributing to Realizing a Sustainable Society

Efforts for Energy System Development and Environmental Conservation


“ENE-FARM” Home-use Fuel Cell Cogeneration System

“ENE-FARM” is a high-efficiency energy system that generates electricity by a chemical reaction between hydrogen extracted from gas and oxygen in the air and effectively uses the heat generated in the power generation process for hot water supply and space heating. As of the end of FY2014, a total of 23,258 units (based on orders placed with our company) had been introduced, reducing our customers’ CO2 emissions by an estimated 33,000 tons annually<sup>\*1</sup> (equating to the planting of 2.37 million Japanese cedar trees<sup>\*2</sup>). April 2014 saw the launch of “ENE-FARM,” a home-use fuel cell (polymer electrolyte fuel cell: PEFC ) that has achieved a world-class (based on our survey) total efficiency of 95%<sup>\*1</sup>, and the new model “ENE-FARM type S” (solid oxide fuel cell: SOFC ) , a home-use fuel cell with a world-class (based on our survey) power generation efficiency of 46.5%<sup>\*3</sup>. We hope to continue helping customers cut their CO2 emissions even further.



<sup>\*1</sup> Estimate by Osaka Gas for a single-family house with a family of four, equipped with a gas water/space heater, a gas hot-water floor heating system (living room, dining room), an electric air conditioner (for heating/cooling rooms other than the living and dining rooms), a gas hot-water bathroom heater/dryer with mist sauna function, and a gas stove, with the gas water/space heater using “ENE-FARM.” CO2 emission coefficients of 0.69kg-CO2/kWh of electric power (“Interim Summary by the Target Attainment Scenario Sub-committee, Global Environment Committee, Central Environment Council,” July 2001) and 2.29kg-CO2/m³ of gas (Osaka Gas data) were used.  
<sup>\*2</sup> CO2 absorbed by a cedar tree: 13.9kg-CO2/tree annually (from 1997 Forestry White Paper; 50-year-old Japanese cedar with a diameter of 26cm and a height of 22m)  
<sup>\*3</sup> Lower heating value standard

Introduction of Two Renewable Energies Via the “Kobe W Eco Power Generation Project”

Energy Bank Japan Co., Ltd. (EBJ), a wholly-owned subsidiary of Osaka Gas, is working with the City of Kobe on the “Kobe W Eco Power Generation Project,” Japan's first power generation project using solar power generation and biogas cogeneration. In March 2014, the installation of solar power generation system (approx. 2,000kW) and biogas  cogeneration system (350kW) was completed at the Tarumi Wastewater Treatment Plant and the sale of electric power has begun. EBJ will raise funds and install/operate power generation system via a financial scheme it developed independently, while the City of Kobe will provide a project site and supply biogas. EBJ has concluded a power sales agreement under the clean energy feed-in tariff system, a fixed price purchasing system, under which EBJ will pay a consideration to the City of Kobe from the profits made from power sales in accordance with the quantity of power sold.

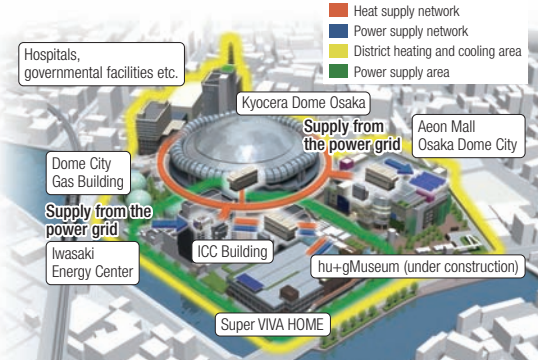


Solar power generation system at Tarumi Wastewater Treatment Plant

Smart Energy Network Project Launched in Iwasaki District

In a redevelopment area owned by the Osaka Gas Group in the Iwasaki District of Osaka's Nishi Ward, Osaka Gas has built a Smart Energy Network combining newly built facilities including a shopping mall, a hardware store and Osaka Gas’ showroom (the Aeon Mall, Super VIVA HOME and the hu+gMUSEUM), and the existing heat supply facilities of the adjacent Kyocera Dome Osaka, etc. The heat supplied by the gas cogeneration systems installed or to be installed in the Aeon Mall, Super VIVA HOME, and hu+gMUSEUM, and that supplied by the solar panels to be installed in the hu+gMUSEUM mutually circulate within the district.


In July 2013, Creative Techno Solution Co., Ltd., a wholly-owned subsidiary of Osaka Gas, began business as a specified electric utility<sup>\*</sup> supplies electricity to five facilities in the District utilizing the power generated by gas cogeneration systems combining with the grid power.



Smart Energy Network Project in the Iwasaki District in Osaka City

<sup>\*</sup> A utility that supplies power to meet demand in a specified supply zone using its own power generation system and power lines.

### Pursuing 3R Efforts in the Value Chain

Osaka Gas is pursuing the “3Rs”, which are “reduce” (reducing excavated soil during piping installation), “reuse” (reusing used gas meters after they undergo disassembly, maintenance and inspection), and “recycle” (recycling used gas appliances and polyethylene pipes  from piping installation).

In FY2014 we reduced excavated soil by about 40% vis-à-vis conventional construction methods, and recycled about 90% of gas appliances and 100% of polyethylene pipes. We also have begun recycling all gas alarms and foam packaging materials used for appliances to refuse paper and fuel plastic (RPF).



Above: Used gas alarms and foam packaging materials  
Bottom: refuse paper and fuel plastic (RPF)

### Biodiversity Efforts

The Himeji LNG Terminal has won accolades for creating a habitat for living organisms and engaging in educational activities, and it received the 2013 “Greenery Day” Minister of the Environment’s Award for Merit in the Service of the Natural Environment. This award is presented to individuals and groups who have made notable achievements in conserving the natural environment, and the 2013 award recognized the Himeji LNG Terminal’s creation of an area within the plant for rare local plant species to thrive and its educational activities for local elementary school students utilizing this habitat.

From now on as well, we will raise awareness for local environment conservation through environment education for children as well as promote addressing biodiversity by utilizing greenery area in the plant.



Rare Plant Species Conservation Area  
in Himeji LNG Terminal

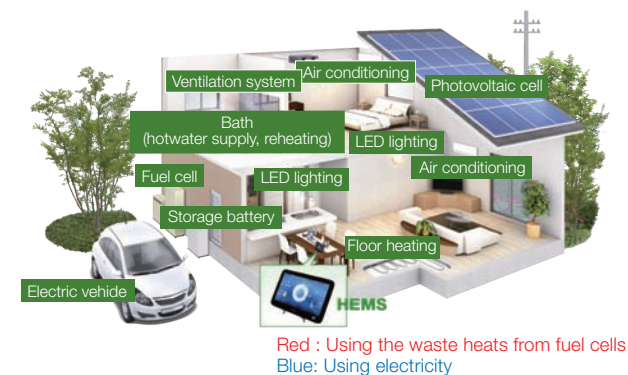
## Contributing to Realizing a Sustainable Society

### Technology Development by the Osaka Gas Group

#### Long-term Habitation Experiment at Three-battery “Smart Energy House”

Osaka Gas is working on the development of the Smart Energy House, which runs on three batteries a residential fuel cell, a solar power system, and a storage battery and uses IT to achieve “smart” management to create, store, and use electricity and heat, thus offering comfortable and environmentally friendly living.

It has been verified at the living experiment house with Sekisui House, Ltd. that, in the year-long period since February 1, 2012, the introduction of a three-battery system yielded 103%\* reduction in CO<sub>2</sub> emissions and the function of Home Energy Management System (HEMS) realized both comfort for residents as well as energy saving.



Blueprint of Smart Energy House

\*In addition to CO<sub>2</sub> emission reduction to net zero, CO<sub>2</sub> emissions are expected to be further decreased by another 3% through the use of the three batteries and by exporting electricity generated by the solar cell back to the grid.

#### The "NEXT 21" Phase-4 Habitation Experiment Launched

The NEXT 21 (Tennnoji-ku, Osaka City) was constructed in October 1993 by Osaka Gas to propose an ideal neo-futuristic urban multiple-unit housing under the concept of “Achieving both comfortable and convenient life and energy-saving/environmental preservation.” The demonstration experiments were conducted in three phases over the past 15 years, with Osaka Gas’s employees and their families residing in the housing. Each phase was designed to meet the theme suited to the times.

In the fourth phase from June 2013, we will be pursuing “eco-friendly and spiritually affluent living” premised on urban multiple-unit housing until around 2020. To that end, we will undertake a habitation experiment that entails creating ties among people, rebuilding connections between people and nature, and achieving energy-saving smart living.



Experimental residential complex “NEXT 21”

#### Developing HYSERVE, a compact hydrogen generator

Osaka Gas has developed a compact-type hydrogen generator system with hydrogen production capacities of 300 m<sup>3</sup>N/h (product name: HYSERVE-300) responding to rising demand for on-site hydrogen supply equipment to be installed at commercial hydrogen stations to supply hydrogen to hydrogen fuel cell vehicle.

Features in HYSERVE-300 are that conversion rate from raw material to hydrogen has been improved to a world-class rate (based on our survey) of 79% and total system cost has been reduced by 50% compared with installing several conventional units.

From now on as well, we will contribute to realizing a low carbon society as well as strive to develop more efficient, affordable and compact hydrogen generator systems.

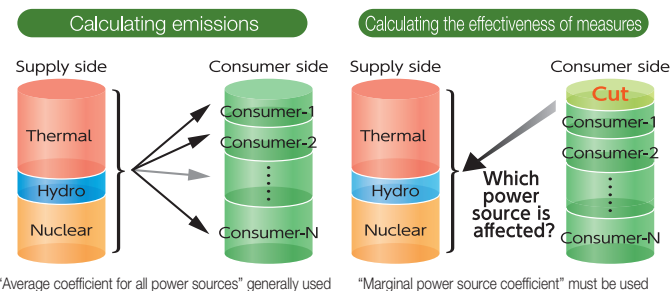


HYSERVE-300

### Appropriate Method for Calculating CO<sub>2</sub> Reduction by Power Conservation Using the "Marginal Emission Factor"

#### Calculating the Effect of Power Conservation

When assessing the CO<sub>2</sub> emission associated with using power, calculated as if CO<sub>2</sub> is emitted at users’ sites, not the power plant the electricity is generated. Coefficient of electricity is various among power sources. When users cut their use of electricity, it is necessary to consider which power source’s generation is affected.



\*Average coefficient for all power sources\* generally used

\*Marginal power source coefficient\* must be used

#### Appropriate Assessments Using Marginal Coefficient

Thermal power generation is considered a marginal power source in Japan because production is adjusted to suit demand, so it is reasonable to use a thermal power source coefficient, a CO<sub>2</sub> emissions coefficient for marginal power sources (marginal coefficient), when calculating the reduction in CO<sub>2</sub> emissions by lowering electricity use.

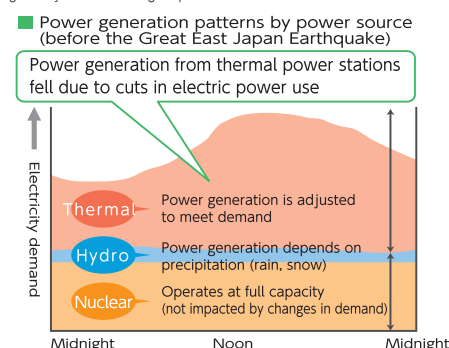
The use of a marginal coefficient in calculating the CO<sub>2</sub> reduction effect from cuts in purchased electricity is the standard approach taken internationally, and is the method that has been adopted for compiling government data in Japan.

\*CO<sub>2</sub> emission coefficient

Average coefficient for all power sources : 0.36kg-CO<sub>2</sub>/kWh

Marginal coefficient (thermal power source coefficient) : 0.69kg-CO<sub>2</sub>/kWh

Source: Interim Summary, Target Attainment Scenario Subcommittee, Global Environment Group, Central Environment Council (2001)

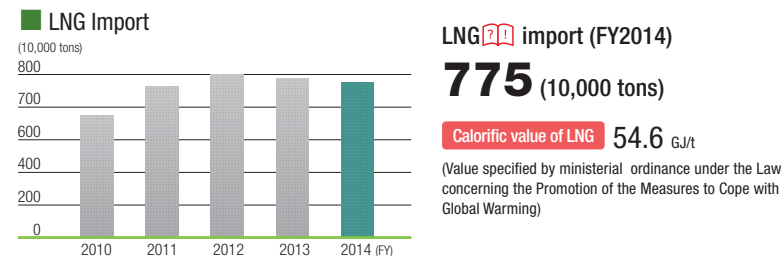




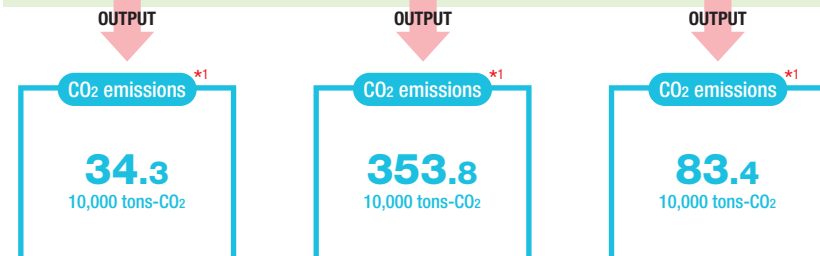
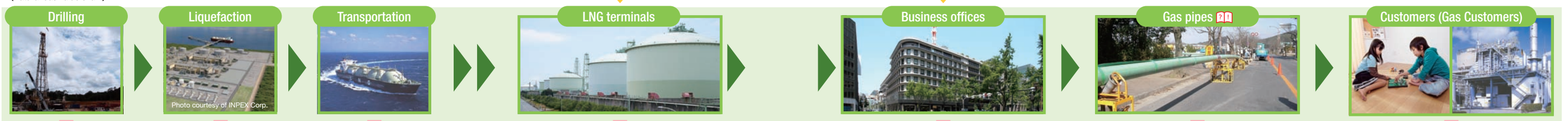
## Environmental Impact of Our Natural Gas Value Chain (FY2014)

Throughout its value chain<sup>21</sup>, Osaka Gas makes various efforts for reducing environmental impact by our business.

## Overseas



## Natural Gas Value chain

<sup>\*1</sup> These values are estimated according to the below table as reference.LCA<sup>\*2</sup> Comparison of GHG Emissions among Fossil Fuels

Natural gas is highly expected as clean energy with the least environmental impact among fossil fuels.

Table: Comparison of greenhouse gas emissions at each stage from fossil fuel production to combustion

	(g-CO <sub>2</sub> /MJ, HHV)			
	Coal	Oil	LPG	LNG (Natural Gas)
Production	4.58	4.06	4.94	9.17
Transport	1.71	0.79	1.80	1.97
Infrastructure	0.11	0.08	0.11	0.04
Combustion	88.53	68.33	59.85	49.40
<b>Total</b>	<b>94.93</b>	<b>73.26</b>	<b>66.70</b>	<b>60.58</b>
<b>Ratio</b>	<b>157</b>	<b>121</b>	<b>110</b>	<b>100</b>

Source: Future Forecast for Life Cycle Greenhouse Gas Emissions of LNG and City Gas 13A  
(Energy and Resources, Vol. 28, No. 2, March, 2007)<sup>\*2</sup> LCA (Life Cycle Assessment)

A comprehensive quantification 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.

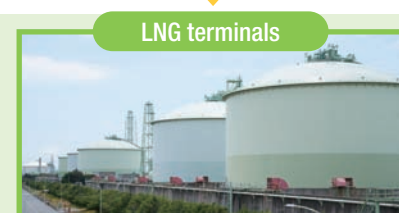
## In Japan

**Utility**

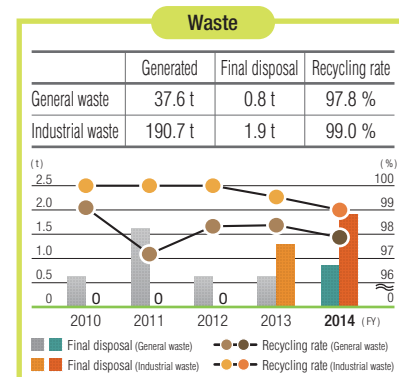
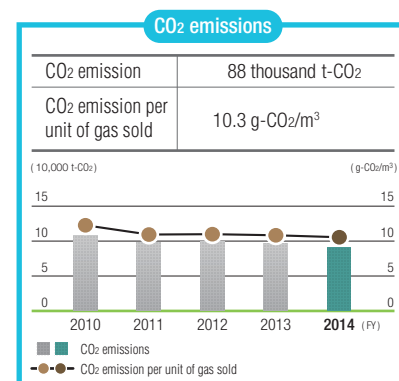
Purchased electricity	85.75 million kWh <sup>*3</sup>
Natural gas	12.16 million Nm <sup>3</sup>
General and industrial water	1.36 million m <sup>3</sup>
Sea water	396.28 million m <sup>3</sup>

<sup>\*3</sup> Cut purchased power by 85.34 million kWh by using LNG cryogenic energy and gas pressure to generate power

## INPUT



## OUTPUT



## Chemical substance, etc.

Quantity of chemical substance handled/released	Xylene	1.70 t
	Toluene	0.14 t
Air and water quality	COD	3.10 t
	NOx	4.11 t

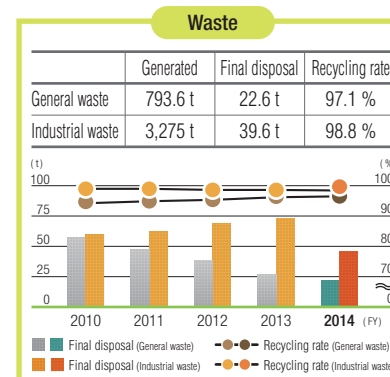
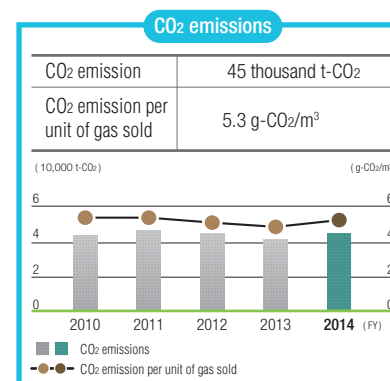
## Utility

Purchased electricity	33.12 million kWh
Natural gas	7.71 million m <sup>3</sup>
Vehicle fuel consumption	Gasoline 1,022 kl
	Natural gas 0.318 million m <sup>3</sup>
	Diesel 40 kl
General water	0.35 million m <sup>3</sup>

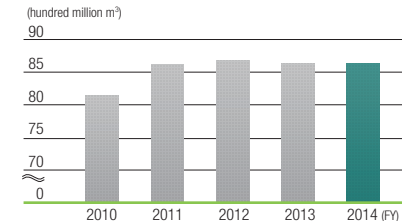
## INPUT



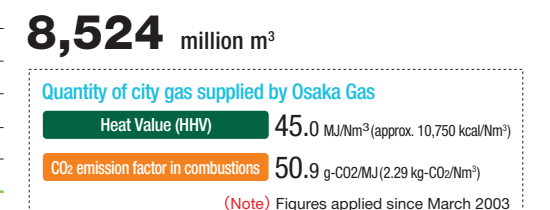
## OUTPUT



## Gas Sales



## Gas sales

Legend : Utility CO<sub>2</sub> Emissions Waste, etc.

Third-party verification completed. Osaka Gas underwent a third party verification by Bureau Veritas Japan Co., Ltd.

# Being a Good Corporate Citizen Contributing to Society

## Fundamental Concept

We are continuing to utilize our unique assets to contribute locally in terms of living, the environment and the community.

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 through various opportunities to communicate as a good corporate citizen 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 local communities and boost the pride of our employees.

\*"Small Light" Campaign is an inhouse initiative started in 1981 with intent to raise interest of employees in communities around us arranging opportunities for them to involve in solving various issues in society. The feature of this Campaign lies in that each employee organizes, participates and continues the project on a voluntary basis.

### Specific Materiality

- Local Communities
- Supplier Assessment for Impacts on Society
- Grievance Mechanisms for Impacts on Society

### Relevant Osaka Gas Group policies, etc.

- Osaka Gas Group Code of Conduct
  - "11. Contributing to Society"
  - "13. Developing Our Partners' Understanding on Our Code of Conduct"
  - "15. Disclosure of Information"
- CSR Purchasing Guidelines

## Management Structure

The Osaka Gas Group is making efforts to develop a sustainable society by providing socially useful products and services. The Group is also continuing charitable and community contribution activities such as its long-running "Small Light" Campaign. By doing so, we are actively addressing the problems facing society as a whole by utilizing the Osaka Gas Group's resources in collaboration with local communities, NPOs, and other organizations. To advance these efforts, we will also strive to improve employee awareness of the importance of social contributions and create a scheme to support voluntary efforts.

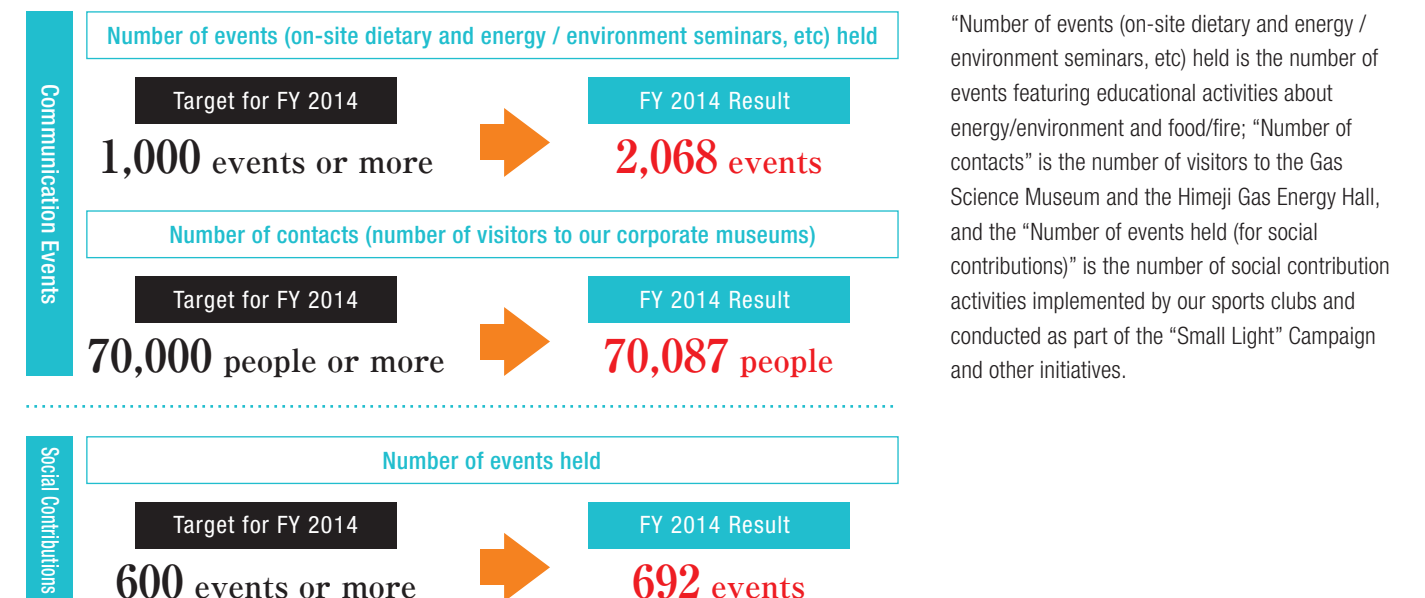
### Social Contribution Promotion System



## Target & Results

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 held (for social contributions)" is the number of social contribution activities implemented by our sports clubs and conducted as part of the "Small Light" Campaign and other initiatives.

### FY2014 Results Overview

Regarding programs to foster the next generation, the number of dietary education and energy/environment education seminars held in FY2014 was about double our target number, while classes by our baseball and athletic sports clubs held actively. On the cultural side, we supported the reproduction and radio play adaptation of OMS Drama Award-winning works, and held cultural promotion programs by story-telling extensively in Osaka and Kobe, and implemented other social contribution activities unique to the Osaka Gas Group.

### Toward the Future

As our business area expands beyond the Kansai region and even extends overseas, we recognize the importance of ascertaining the involvement and impact of our businesses on local communities. Against the backdrop of social need for programs engaging in a dwindling birth rate and an aging population and the need for compact cities, we will strive more than ever to pursue activities that emphasize dialogue and collaboration so that we can help resolve the social issues faced by communities.





## Teaming up with NPOs to Institute Next-generation Educational Programs for Experiencing Activities Related with Primary Industries

It is said that the next generation, which will be responsible for creating a sustainable society, is said to be lacking in fundamental (nature, everyday-life, and social) experiences. Accordingly, the Research Institute for Culture, Energy and Life (CEL) of the Osaka Gas prepared a curriculum offering a range of experiential learning opportunities relating to the farming, forestry and fishing industries as well as to day-to-day living, and demonstration tests have been conducted to verify its feasibility and effectiveness.

The curriculum has been under development since FY2012, and in FY2014 we implemented 32 programs for university students constituting demonstration tests in cooperation with the Ministry of Agriculture, Forestry and Fisheries and consumer cooperatives as part of a joint research project between the NPO Learning and Ecological Activities Foundation for Children (LEAF) and our company. It became apparent that activities offering experience in farming,

fishing and forestry, including fire-starting and fish-cleaning, as well as research paper presentation meetings enhanced university students' sensitivity to nature, their capability of living, and even their communication and teamwork skills.

We will be carrying out further assessments and improving the curriculum via demonstration tests, and giving consideration to creating a framework for sustainable educational programs.



Class on cleaning fish

## Conducting "Energy & Environment Education" Visiting Classes Taught by Current and Former Employees

Osaka Gas has since FY2007 been offering visiting classes on "energy & environment education" for elementary, junior high and high school students. About 40 current and former employees serve as instructors, visiting schools to hold these classes. This program offers seven types of classes that can be selected in keeping with the students' grade and ability. Participants are able to enjoy learning about energy and global environmental issues through experiments, games, cooking and other activities, and these classes have become quite popular. A cumulative total of 238,049 students have joined in these classes through FY2014.



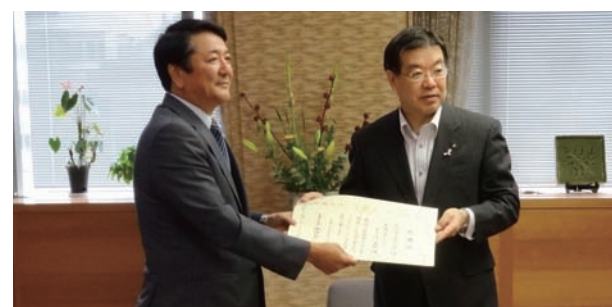
Pamphlet text:  
"Let's Think Together  
about the Global  
Environment and Energy!"



Program brochure:  
"Energy & Environmental  
Education"

## Relief Funds Donated to Assist Areas Hit by Typhoon Man-yi ("Small Light" Campaign)

Typhoon Man-yi came ashore on September 16, 2013, subjecting Kyoto and Shiga prefectures to record rainfalls and causing above-floor flooding and other damage to customers' premises. Relief funds were solicited by the Osaka Gas Group's "Small Light" Campaign jointly with the Community Relations Offices located in Kyoto and Shiga, and, combined with relief funds from the company, a total of 3 million yen was donated to local governments in Kyoto Prefecture, Kyoto City, and Shiga Prefecture.



Masaki Fujita, Director and Senior Executive Officer, receives a letter of appreciation from Kyoto Prefecture Governor Keiji Yamada

## Bazaar to Assist Persons and Communities Afflicted by the Great East Japan Earthquake

The "Midosuji Tohoku Reconstruction Assistance Bazaar" was held jointly with Resona Bank, Ltd. over two four-day periods in May and October 2013 to assist persons and communities afflicted by the Great East Japan Earthquake, and this effort ended on a high note.

As with previous bazaars, fishery products, confectionaries, and general merchandise made in Tohoku were displayed for sale all along the Osaka Gas Building. Numerous persons stopped by, and the total sales for 2013 came to about 1,590,000 yen.

The "Book Recycling Corner" featured many used books provided by employees of the Osaka Gas Group and other companies in the vicinity. The money raised through sales and

contributions at the bazaar venue totaled 494,497 yen, which was donated to the Ashinaga Scholarship Society to be used in the construction of a "Tohoku Rainbow House," a mental health-care center for orphans of the Great East Japan Earthquake.



"Book Recycling Corner" bustling with customers

## The Osaka Gas Baseball Club Donated Baseballs Recycled by Welfare Workshop

The Osaka Gas Baseball Club started a new social action program – the "Heartball Project" – to donate recycled baseballs to high school baseball teams in Nishinomiya City. In this project, baseballs with frayed string or ripped seams from practice by baseball teams are repaired by paid work of persons with disabilities working at welfare workshops, and the recycled baseballs are donated to high school baseball teams. The "Heartball Project" was given that name to convey the idea of warm-heartedness being relayed through recycled baseballs. More than 1,000 baseballs were donated to 11 high schools over a year-long period.

We hope to expand this project in future, possibly donating baseballs to other high schools and expanding the scope of groups participating in this project (amateur baseball teams, university/high school baseball clubs, etc.).



Donating recycled baseballs to a high school baseball club in Nishinomiya City

## "Hajimaru-kun"® Providing Job Assistance and IT Support for the Handicapped

"Hajimaru-kun"®, a social contribution activity begun in 2009 by OGIS-RI Co., Ltd., to provide job opportunity and IT support for the disabled, has now been underway for five years and, as of the end of March 2014, a cumulative total of 1,026 personal computers have been supplied to 653 facilities/groups.

"Hajimaru-kun"® collects personal computers no longer being used as well as donations (to cover the actual recycling costs, etc.) from supporting companies, cleans up these PCs at welfare workshops, and then donates them to welfare facilities and other recipients. At present 29 companies and three groups are supporting this program, and the PCs recycled at 12 welfare workshops were donated to welfare facilities and to families evacuated to the Kansai region following the Great East Japan Earthquake.



The disabled works with a help from staff giving lectures



## Complying with Laws and Regulations and Respect for Human Rights

### Fundamental Concept

We are aiming as a company to be regarded as a trustworthy member of society known for our decent behavior.

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.

#### Specific Materiality

- Supplier Human Rights Assessment
- Human Rights Grievance Mechanisms
- Customer Privacy

#### Relevant Osaka Gas Group policies, etc.

- Osaka Gas Group Code of Conduct
  - “1. Respect for Human Rights”
  - “5. Respect for International Rules and Regulations as well as International Norms Including Human Rights”
  - “13. Developing Our Partners’ Understanding on Our Code of Conduct”
  - “14. Use of Information and Information Systems”
- CSR Purchasing Guidelines



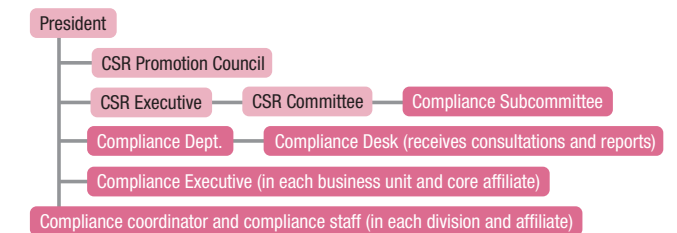
## Management Structure

The Compliance Subcommittee under the CSR Committee leads the cross-organizational study of measures and sharing of information. The Compliance Department is in charge of promoting compliance awareness. Each of the Osaka Gas business unit and core affiliate appoints a Compliance Executive. There is also a compliance coordinator and his or her staff in each Osaka Gas division and affiliate.

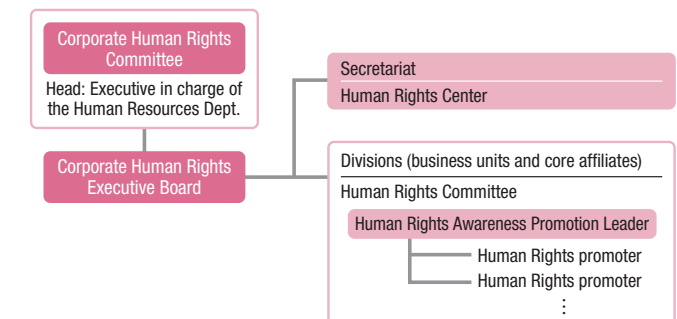
To promote human rights awareness throughout the Group, Osaka Gas established the Corporate Human Rights Committee headed by the director responsible for the Human Resources Department. This committee decides all basic policy with regard to human rights.

Based on this basic policy, the Human Rights Center of the Human Resources Department plans and runs numerous efforts and events, such as human rights training for all job levels, training in all company divisions, human rights lectures, and human rights slogan contests.

### Organization for Strengthening Compliance



### Systems for Human Rights Promotion

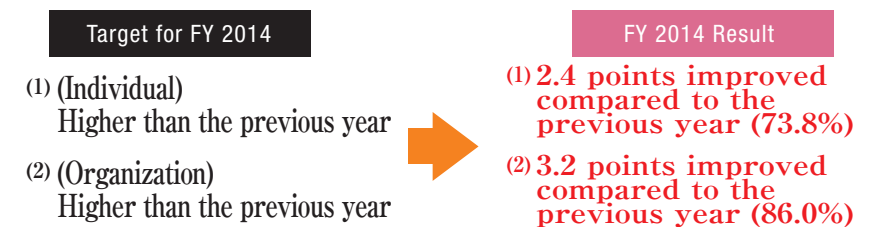


## Target & Results

CSR Indicator :

### Scores on Compliance Awareness / Percentage of Employees Receiving Compliance Training

(1) Understanding level of Code of Conduct (2) Penetration level of compliance in the organization



(3) Percentage of employees receiving compliance training



### FY2014 Results Overview

#### Scores on Compliance Awareness

We have shown the better outcome this year than in the previous year for both “Understanding level of Code of Conduct” and “Penetration level of compliance in the organization”, though the score of the former is still in the low 70s.

In fiscal 2015, we will continue activities to improve the level of understanding of the Code of Conduct, by ensuring that all employees understand the Code of Conduct through compliance training programs and by other means.

#### Percentage of Employees Receiving Compliance Training

Each organization and affiliate held training programs tailored to its workplace and workflow, and strengthened measures to ensure that employees failing to take the training could receive it. As a result, we achieved our target of 100%.

In fiscal 2015, we will continue to work diligently to further improve compliance.

### Toward the Future

All of our organizations and affiliate companies are seeking to become self-reliant and self-driven through activities designed to ensure a culture of compliance in which all employees not only understand intellectually the importance of compliance but can also ensure compliance as a matter of course. As the Group expands its overseas business, we will work with an even more global perspective to incorporate respect for human rights and other efforts into our supply chain.

Since fiscal 2013, we have been using the following three perspectives as key indicators to promote compliance.

- (1) Understanding level of Code of Conduct**  
Does each and every employee understand the Osaka Gas Group Code of Conduct, which serves as the foundation for our compliance?
- (2) Penetration level of compliance in the organization**  
Do employees recognize that compliance awareness permeates throughout their organization?
- (3) Percentage of employees receiving compliance training**  
Are trainings effectively implemented?

As for indicators (1) and (2) above, the Osaka Gas Group has been conducting compliance awareness surveys that was introduced in fiscal 2004 and aims to obtain higher scores in the survey than in the previous year. Concerning indicator (3), we work to ensure that all employees receive compliance training.





Seminar for persons in charge and promoters of compliance

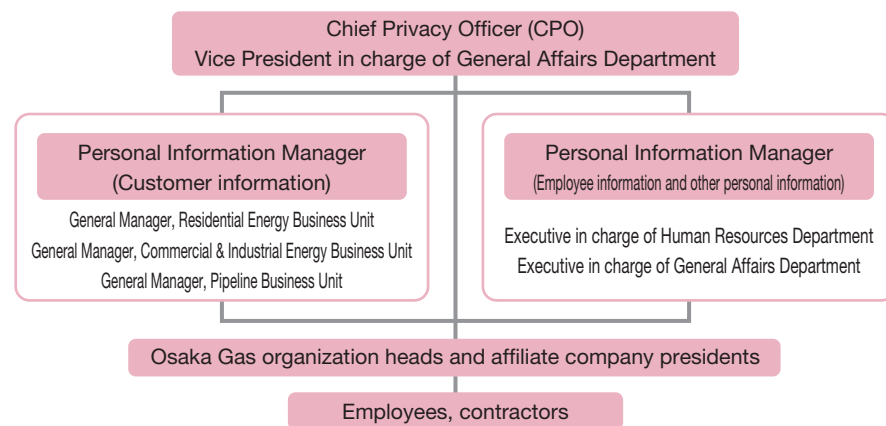


Compliance Desk poster

## Structure for Strengthening Protection of Personal Information Including Affiliates and Contractors

The Osaka Gas Group handles a considerable amount of personal information, and has therefore been establishing regulations to protect this information and implementing a variety of safeguard measures. With the vice president in charge of the General Affairs Department serving as the Chief Privacy Officer, we have developed a personal information protection structure that extends to contractors, and we are committed to managing personal information properly to prevent improper disclosures.

### Personal Information Protection Structure



## Conducting Human Rights Training at All Levels

In addition to soliciting suggestions for human rights mottos and engaging in other educational activities, the Osaka Gas Group conducts human rights training sessions tailored to executives, managers, and new employees. For example, training for new managers addresses specific case studies in light of current human rights issues, and outside experts are brought in to offer presentations on human rights to organizational heads and managerial personnel.

### Group-wide Human Rights Training – Participants

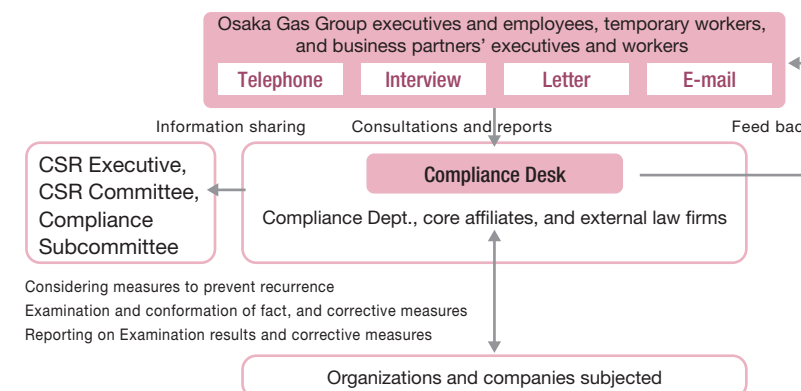
Persons to undergo training	Implementation period	Total number of persons
Executives	November	28
Organization heads, managers	April - December	1,389
New employees	April, May, November	300
Training for all employees	August - March	16,640
Other (HR Committee members, directors, etc.)	July - February	869
<b>Total</b>		<b>19,226</b>

## Reporting Channel at Head Office, Core Affiliates, and Law Offices

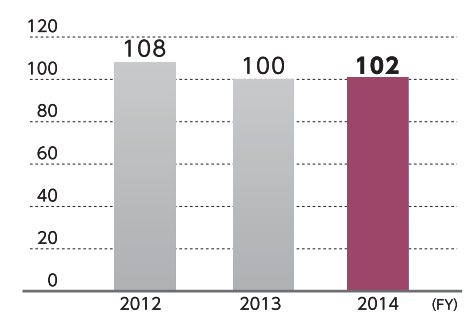
The Osaka Gas Group has established Compliance Desks at the Head Office, core affiliates, and law offices outside the company to provide a channel for persons who need a place to seek advice on, and report matters of compliance with laws

and internal rules. Not only executive officers and employees of the Group, but also executive officers and employees of business partners and temporary workers can seek advice or make reports by phone, email, or in writing anonymously.

### Organization of Compliance Desk



### Number of Consultations and Reports



## Holding Case-method Training Programs to Enhance Corporate Ethics

Since fiscal 2013, Osaka Gas has been holding “case method training” programs to enhance corporate ethics. Approximately 8,500 employees participated in these training programs in fiscal 2014.

The case method is a teaching approach that develops the ability of ethical thinking. Trainees are presented with cases that include ethical dilemmas and thus involve difficult judgments, and group discussions are held to discover and analyze problems and to make decisions. We believe that the promotion of training using the case method will help improve the ethical standards of employees and create a workplace climate characterized by open communication in which employees can freely exchange views.



Case method training

## Conducted Compliance Training Based on Business Expansion Overseas

In light of its business expansion overseas, the Osaka Gas Group held a seminar to deepen basic understanding of compliance risks and social responsibilities in countries/regions with differing cultural norms, business practices and legal/regulatory systems.

Teppei Mogi, an attorney with Oh-Ebashi LPC & Partners, was invited to the seminar to talk on the major compliance risks overseas and other points to keep in mind. In addition, the CSR & Environment Department provided participants with country-specific information on human rights/labor laws and regulations. As our Group continues to broaden its global presence, we will be enhancing our compliance program to make it all the more effective.



Global Compliance Seminar



# Management Policy for Human Growth

## Fundamental Concept

**We will respect the individuality and autonomy of employees and create a corporate environment in which a diversity of values is accepted.**

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 a “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.

### Specific Materiality

- Supplier Assessment for Labor Practices
- Labor Practices Grievance Mechanisms

### Relevant Osaka Gas Group policies, etc.

- Osaka Gas Group Code of Conduct
  - “1. Respect for Human Rights”
  - “2. Creating Pleasant Work Environment”
  - “13. Developing Our Partners’ Understanding on Our Code of Conduct”
- CSR Purchasing Guidelines
- Osaka Gas Group Diversity Policy

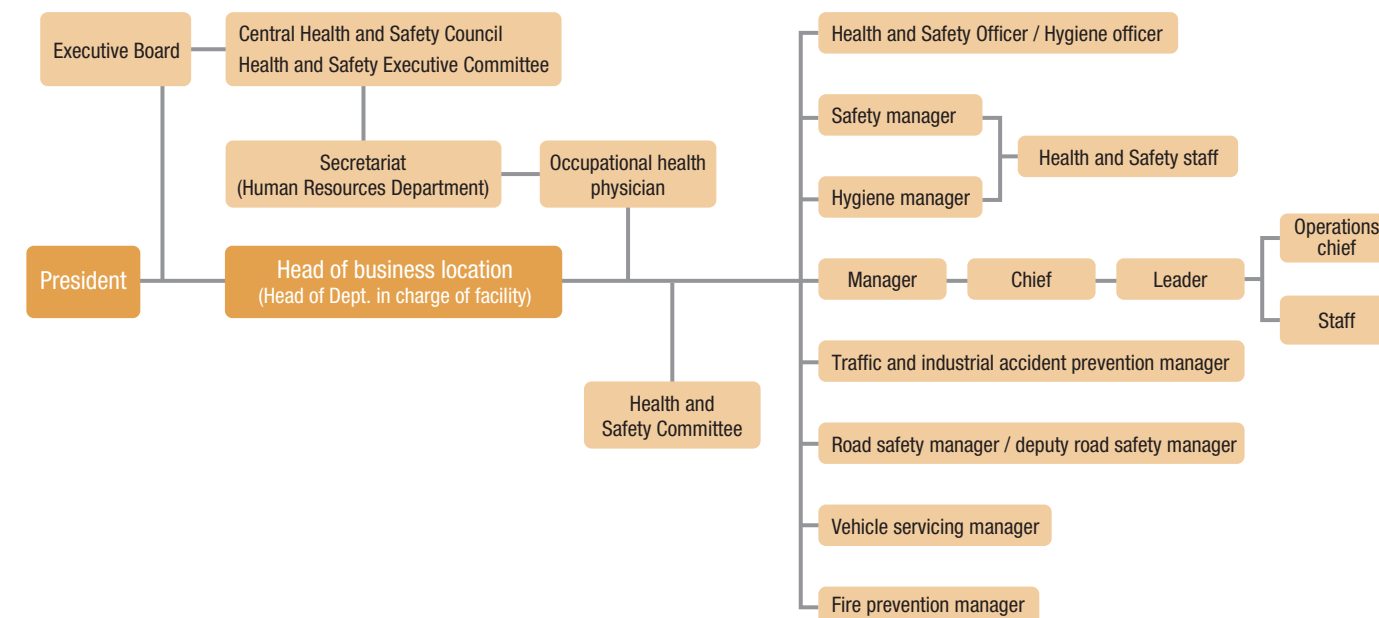
## Management Structure

We have set up a Central Health and Safety Council that considers measures to prevent work accidents and maintain/enhance health, and that shares information in this regard.

For the sake of occupational health and safety, we have

established the “Osaka Gas Group Safety and Health Promotion Regulations” and the “Osaka Gas Safety and Health Management Regulations,” and the Osaka Gas Group is working with cooperating companies and business partners to improve safety and health levels.

### Organization of Health and Safety Management at Osaka Gas



## Target & Results

CSR Indicator :

### Employee Opinion Survey (Job Satisfaction and Attachment to the Company)

Employee Opinion Survey (job satisfaction and attachment to the company)

Target for FY 2014

Maintain  
sufficient levels



FY 2014 Result

Maintained  
sufficient levels

(Result of FY2013 survey is shown.  
The next survey is scheduled in FY2015.)

### FY2014 Results Overview

An “Employee Opinion Survey” was conducted in FY2013, and next survey is to take place in FY2015. The goal of the Employee Opinion Survey in FY2013 is to confirm changes over time in employee opinions and the progress made in adopting/implementing the human resources systems introduced in FY2012. The FY2013 results surpassed the results of the previous survey (FY2010) in the CSR indices of “job satisfaction/attachment to company” and “degree of satisfaction with human resources systems.”

### Toward the Future

With the Osaka Gas Group internationalizing and its business becoming more diverse, it is essential that its human resources become similarly diversified. We will strive to ensure that personnel can play active roles at the Osaka Gas Group regardless of sex, age, disability, or nationality. In terms of human resources development, we are also working out means of passing on the safety and accident prevention knowledge/experience of veteran employees approaching mandatory retirement age.





## “Diversity Training Sessions” Held to Ensure Our Company Allows a Variety of People to Play an Active Part

The Osaka Gas Chemicals Group is aiming to be a world-class chemical company at which women, foreign nationals, and others can create a diversity of ideas and take on important roles. As part of this policy, we held “Diversity Training Sessions” for supervisors/managers on May 28 and June 20, 2013. These sessions were led by Ms. Yoshie Komuro of Work Life Balance Co., Ltd., who organized group discussions and devised other approaches to address the topic of dealing with situations when a member of one’s own family or a subordinate’s needs nursing care.



Group discussion at training session with instructor Yoshie Komuro (lady in center)

## Hiring the Disabled, Rehiring Employees after Retirement

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 made up 2.14% of our workforce as of April 2014, well above the legal minimum of 2.0%.

Of the 41 affiliate companies, 16 have achieved the legal minimum.

Osaka Gas has a system, called the Short-Term Contract

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 working needs of a wider range of employees. All Osaka Gas Group companies have similar systems for the reemployment of retirees.

## Mental Health Education and Self-Care Efforts

Osaka Gas has mental health measures that include education for all supervisors and managers. This education has been open to employees of affiliates as well. In training for newly appointed supervisors and managers, mental health care for subordinates is now a required subject.

To promote self-care, we have been conducting stress checks of all persons undergoing medical checkups as well as following up on individual cases as needed, providing advice or suggesting examinations to examinees whose stress levels were particularly high on specific items in order to discover mental disorders early on. We are also providing stress checks to all new employees to prevent or promptly detect any workplace maladjustment.

Check form used in stress level examination for new employees



The President meets employees in their workplace

Employee taking Nurturing Leave to spend time with his children.

## Training According to All Career Tracks, Job Levels and Job Descriptions

Osaka Gas has training programs for all employee levels that are designed to spur motivation and personal growth.

We have a wide range of training for all positions and job descriptions. In addition to a training system divided by career

track courses that employees select to pursue, we have different training programs for junior and new employees, mid-level employees, and executives, as well as a variety of elective training courses.

### Training Courses by Career Track

Meister Course

Management Course

General Course

Specialist Course

### Training for All Job Levels

Orientation and Follow-Up Training for Junior and New Employees

Mid-level Employees Awareness Program

Management Strengthening Training



Orientation and Follow-Up Training for junior and new employees

## Training for Developing Human Resources with Global Capability

To develop individuals who can play an active role overseas, Osaka Gas runs various education and training programs. Examples are the training for employees who are assigned to work overseas, the trainees program in which employees have opportunities to work at overseas affiliated companies.



Our employee working overseas in the trainees program (Left)

Corporate Governance

System of Corporate Governance

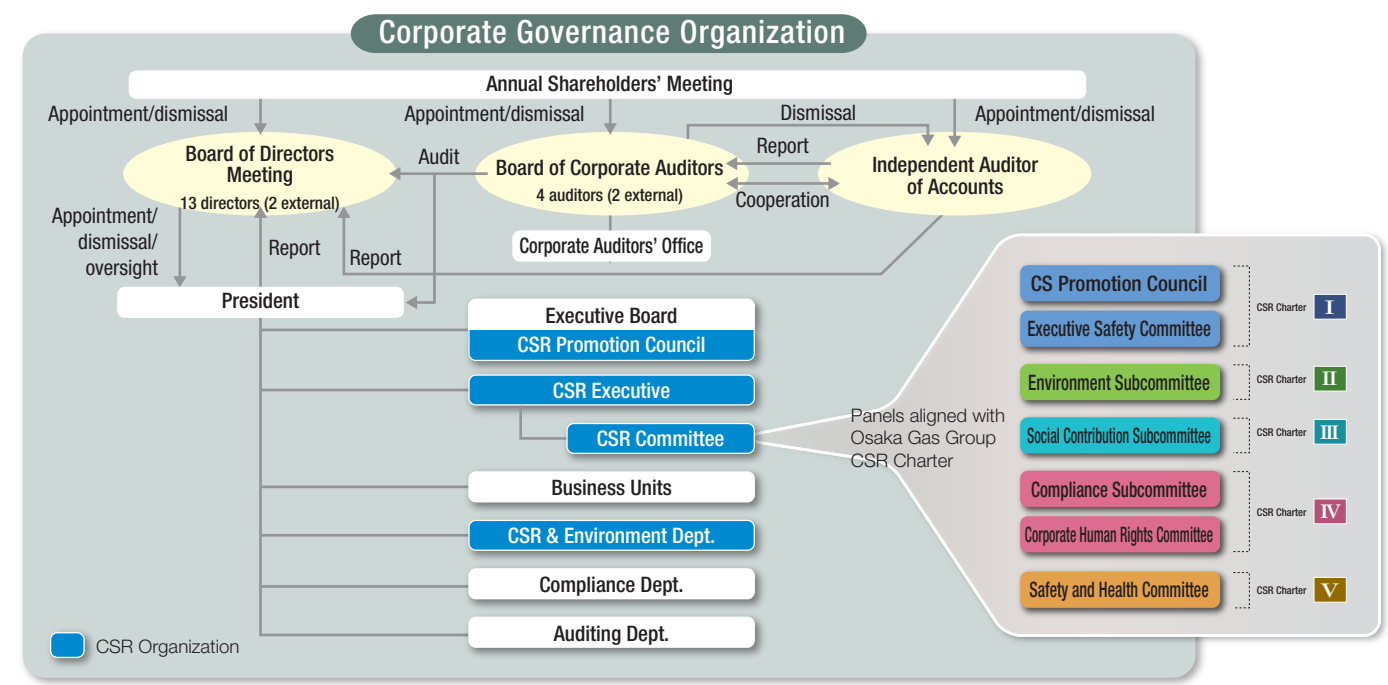
Following the internal regulations stipulated by such internal organizations as the Board of Directors, Osaka Gas thoroughly deliberates and makes decisions upon relevant issues after careful scrutiny from a technical perspective conducted by the Executive Board, which is composed of executive directors and senior executive officers. The Board of Directors consists of 13 directors (including two outside directors). Its mission is to make swift and appropriate decisions concerning important matters that affect the Group as a whole including affiliates and to fulfill supervisory functions efficiently. The Company has adopted an executive officer system under which executive officers perform duties determined by the Board of Directors, while some representative directors and directors concurrently serve as executive officers. This serves to further strengthen the

supervisory functions of the Board of Directors and enhance their performance in the execution of their duties. Osaka Gas has adopted the corporate auditor system. The Board of Corporate Auditors is comprised of four members, including two outside corporate auditors, who monitor and audit the duties and performance of directors. Matters pertaining to the appointment of directors and corporate auditors as well as remuneration paid to directors are determined after taking into consideration deliberations by the Management Advisory Committee. As a part of efforts to ensure transparency and objectivity, the Management Advisory Committee is composed of a majority of outside directors. For its accounting audit, Osaka Gas has concluded a contract agreement with KPMG Azsa LLC.

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 internal organizations with advice and recommendations. 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 commonly shared by Group companies more clearly define the roles and duties of internal auditors. Moreover, auditors evaluate internal controls over financial reports based on the Japanese Financial Instruments and Exchange Law, and report to management.

The Corporate Auditor's Office, composed of four full-time staff operating outside the directors' chain of command, has been established to strengthen the role played by corporate auditors. It assists in investigations of corporate auditors to further ensure that their duties are fully and properly executed. Corporate auditors, accounting auditors and the Auditing Department meet on a regular basis to discuss annual audit plans and audit reports, and also convene as required to exchange audit information to ensure the effectiveness of the auditing activities.



Outside Directors and Outside Auditors

Osaka Gas has two outside directors and two outside corporate auditors. In determining a particular appointment, the company maintains specific predetermined criteria to ensure an appropriate level of independence to the effect that outside directors and corporate auditors do not have any conflicts of interest with the general shareholders. The outside directors take part in decision-making process as members of the Board of Directors and are expected to further enhance the auditing and monitoring functions of the Board of Directors. The outside corporate auditors are expected to fulfill their duties as corporate auditors by monitoring execution of operations by directors from

a strictly independent standpoint. The concrete roles of outside directors and outside 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, and holding hearings on the status of CSR at the Board of Directors meetings or other occasions. They also confirm the content of audit reports compiled by the independent auditor of accounts.

Risk Management

Organizational Risk Management Structure

The basic unit for risk management in the Osaka Gas Group is each business division, subsidiary or affiliate. The head of each unit is responsible for managing the risks of loss and conducts relevant checks on a regular basis. In addition, the management

organization for risk management common to the Group supports the implementation of risk management tasks within each division and business unit across the entire group.

Regular Reviews and Monitoring | Operating G-RIMS, Our Own Self-Assessment System

In fiscal 2007, the Osaka Gas Group introduced G-RIMS (Gas Group Risk Management System), which systematizes the self assessment of risk management practices. Each division conducts a self-assessment annually using a check list comprising about 180 items. Based on the self-assessment result, the division head and managers, responsible for taking action to resolve issues that have been identified, properly

operate PDCA (plan-do-check-act) cycle for improvement. Following the annual self-assessment by each division, the secretariat (Auditing Department, Compliance Department, Corporate Strategy Department and Affiliated Business Dept.) holds discussions with each division to monitor implementation. The results of G-RIMS and issue identification are reported to management.

G-RIMS (Gas Group Risk Management System) Check List

1. Finance and accounting risks	8. Personnel management risks	15. Risk of inappropriate contact
2. Credit and Accounts Receivable management risks	9. Disaster damage prevention and safety risks	16. Risk of insider trading
3. Purchase, accounting and tax risks	10. Product safety risks	17. Risk of compliance violation in business execution
4. Risks in electronic banking*	11. Report-related risks	18. Business risks
5. Information management risks	12. Lawsuit risks	19. Other risks on business practices
6. Personal information management risks	13. Environmental problem risks	20. Intellectual properties management risks
7. Information disclosure management risks	14. Risks related to unfair trading and subsidies	21. Risks concerning internal control

\*Electronic banking: Financial services carried out over the Internet or via telephone

Ongoing Improvement and Regular Reviews | Reinforcing Internal Management Initiatives

Each division head and manager is responsible for taking action on issues identified in the course of risk management reviews and to provide periodic follow-ups on the improvement processes. In addition, the auditor in each business unit and major affiliated company serves as a focal point for discerning

issues for internal audit and promotes managers' self-assessment to reinforce internal risk management initiatives. We ensure an effective PDCA cycle (plan, do, check and act) through these risk management activities across the entire group.



## Third Party Review



The President is being interviewed. (On the far left is Mr. Kokubu, while the second from left is Ms. Nashioka.)

The Osaka Gas Group contracted with the Institute for Environmental Management Accounting (IEMA) for a third party review, including recommendations as well as simple audits.

IEMA interviewed Masato Kitamae, Executive Vice President and CSR Executive, regarding the planning and implementation of CSR activities at the Osaka Gas Group.

Based on these interviews and documents submitted, IEMA prepared and presented a report which summarized the IEMA's overall evaluation and advice regarding the Osaka Gas Group's CSR activities.

### Evaluation and Opinion of CSR Management at Osaka Gas Co., Ltd.



#### Purpose of the Review and Overview of Procedures

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 2014 by evaluating all the CSR initiatives that are not related to environmental management. We interviewed Masato Kitamae, Executive Vice President/CSR Executive, to clarify the planning and implementation of CSR management (excluding environmental management) at Osaka Gas and the evaluation and utilization of the performance data that indicates the results of these activities and serves as the basis for disclosed information.

#### Evaluation and Opinion

In 2014, Osaka Gas released "Catalyze our Dreams (2014–2016)," a set of measures specifying a Medium-Term Management Plan, as a means of steadily implementing "Field of Dreams 2020 (FoD 2020)," the Long-Term Management Vision. Incorporated in "Catalyze our Dreams" are strengthened anti-disaster measures taken in the wake of the March 2011 earthquake-tsunami disaster in northeastern Japan, what to do with a shale gas development project in the United States, and business plans in response to moves to deregulate the power and gas markets. These measures are designed to highlight current efforts by Osaka Gas with corporate social responsibility (CSR) – the process of achieving FoD 2020. Ideas shown in GRI-G4—guidelines for CSR information disclosure released last year—are reflected in the Report which sorted out respective matters that Osaka Gas and stakeholders (society) each considers important. Osaka Gas identified and publicized "materiality" (important aspects) in its management of CSR. This is very innovative in Japan and is likely to become a model case in the country for CSR information disclosure regarding GRI. In 2014, the first year of this attempt, Osaka Gas released its materiality and the process of how the utility had chosen it. What is important

next year and after is how Osaka Gas will act in line with its materiality and how such activity will be evaluated publicly. KPIs (key performance indicators) are used to measure the progress of materiality. If Osaka Gas manages its CSR while taking into account the results of KPIs, a higher level of CSR activity can be expected.

Osaka Gas has disclosed KPIs regarding the five themes set under the Osaka Gas Group CSR Charter. If each year's KPIs are examined, one can understand how Osaka Gas has achieved the goals set under the charter. Osaka Gas should be highly commended for continuously disclosing the themes and KPIs. It has become clear that Osaka Gas, in addition to expanding its business operations and launching new businesses, has implemented a range of measures to ensure stable energy supply in the Kansai region—an important social mission assigned to the utility as shown in the charter—from procuring materials to establishing supply networks. Also highly commended are its overseas business operations, which should be evaluated not only from the viewpoint of procuring materials but also from the utility's efforts as an energy provider to promote energy conservation worldwide based on its domestic experience and the technologies it has built up through its domestic operations.

Osaka Gas has been ahead of other companies in promoting CSR activities under value chains. In promoting such activities, the utility has been starting from where it can do the most. It is anticipated that the company will do more in advancing CSR.

July 3, 2014

**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 confirm that the data was sufficiently reliable and consistent for the purpose of the Report.

#### Scope of work

Osaka Gas Head Office: Functions for data aggregation  
Energy Technology Laboratories, Osaka Gas Co., Ltd. : R & D  
Kobe Energy Center, Creative Techno Solution Co., Ltd.: District heat supply  
Active Life Ltd.: Operation of nursing homes for the elderly, consignment operation of such facilities, in-home care service  
Osaka Gas Security Service Co., Ltd.: Security and emergency response service on a consignment basis, marketing of home security systems



#### Verification work

Bureau Veritas conducted the following evaluation based on agreement with Osaka Gas at:

- Head Office:**
1. The reliability and adequacy of the overall data collection and aggregation processes and systems, and the effectiveness of internal verification checks
  2. The accuracy of the aggregated data for FY2014 (from April 2013 to March 2014)
- Operational sites:**
1. The appropriateness of the scope of data selected for inclusion in the Report
  2. The effectiveness of data measurement, collection and aggregation methods, and the effectiveness of internal verification checks
  3. The accuracy and reliability of measured, compiled and aggregated final data

This verification was conducted using Bureau Veritas' standard procedures and guidelines for external verification of non-financial reporting based on current best practice, informed by the International Standard on Assurance Engagements 3000 (2005) in providing a limited assurance for the scope of work stated herein.

#### Opinion

As a result of the above scope of work Bureau Veritas is of the opinion that:

- The environmental data reported at sites' level is measured, collected and aggregated based on established and effective internal systems and processes.
- All errors in reported data identified during the verification process have been duly corrected.
- Therefore, nothing comes to our attention to suggest that there are any data that are not free from significant error.

### Enhancement of Resilience of the Osaka Gas Group

At a time when it is feared that a powerful earthquake may strike in the Nankai Trough off central and western Japan, the word "resilience" has been drawing public attention. "Resilience" means being strong and flexible. The government has been making full-fledged efforts to concretize a "national resilience" project to prevent devastating damage in the event of disasters.

Likely to be helpful in realizing the "national resilience" project is the gas cogeneration systems [\[2\]](#), whose role in Japan's initiative against disasters is expected to increase sharply in the future because it can contribute to the building of a disaster-tolerant energy systems, and is also environmentally friendly. An independently operated self-supporting energy system that can generate electricity in the event of power outage has been spreading in Japan. The Osaka Gas Group aims to install 200,000 units of the Ene-Farm fuel cell system for household use and cogeneration systems with a combined power capacity of 2 million kilowatts by FY2021. To achieve these goals, we are working on developing technologies that can make these products even more energy efficient, more compact and more reasonably priced.

We will also have a meticulous plan to build a solid manufacturing system and a stable supply network, including the maintenance and reinforcement of such systems, as well as anti-quake and tsunami measures. Also, in July last year, the Osaka Gas Group compiled its business continuity plan (BCP [\[2\]](#)) in response to possible large-scale disasters and accidents. This is part of our efforts to strengthen our resiliency against disasters. In natural gas business and the LP gas business, the entire Osaka Gas Group has been striving to enhance its emergency response ability so that our business operations in these fields can be resumed soon after a major disaster hits.

We believe that building a resilient society that is strong against disasters and contributing to environmental protection through business activities are the most fundamental part of our CSR. By fulfilling the responsibility of an utility and strengthening the Group's resilience against disasters, we will help create a society with sustainable development.

Based on the fourth edition of the GRI guidelines, published in May 2013, the Osaka Gas Group promoted dialogue with stakeholders in various fields and chose important aspects of our business as "materiality." We will further accelerate CSR activities and information disclosure on CSR while involving the entire value chain [\[2\]](#).



**Masato Kitamae**

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

# Outline of the Osaka Gas Group

## Corporate Profile of Osaka Gas

(As of March 31, 2014)

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

**Establishment :** April 10, 1897

**Commencement of operations :** October 19, 1905

**Number of employees :**

[ Non-consolidated ] 5,861

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

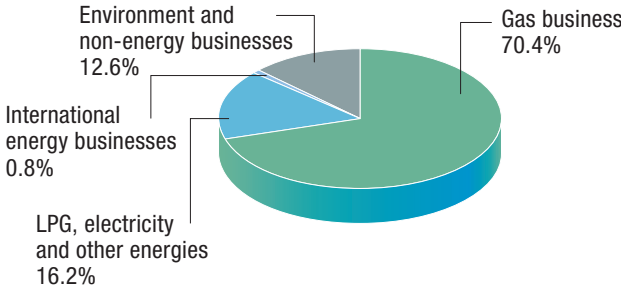
[ Consolidated ] 21,250

**Capital :** 132,166 million yen

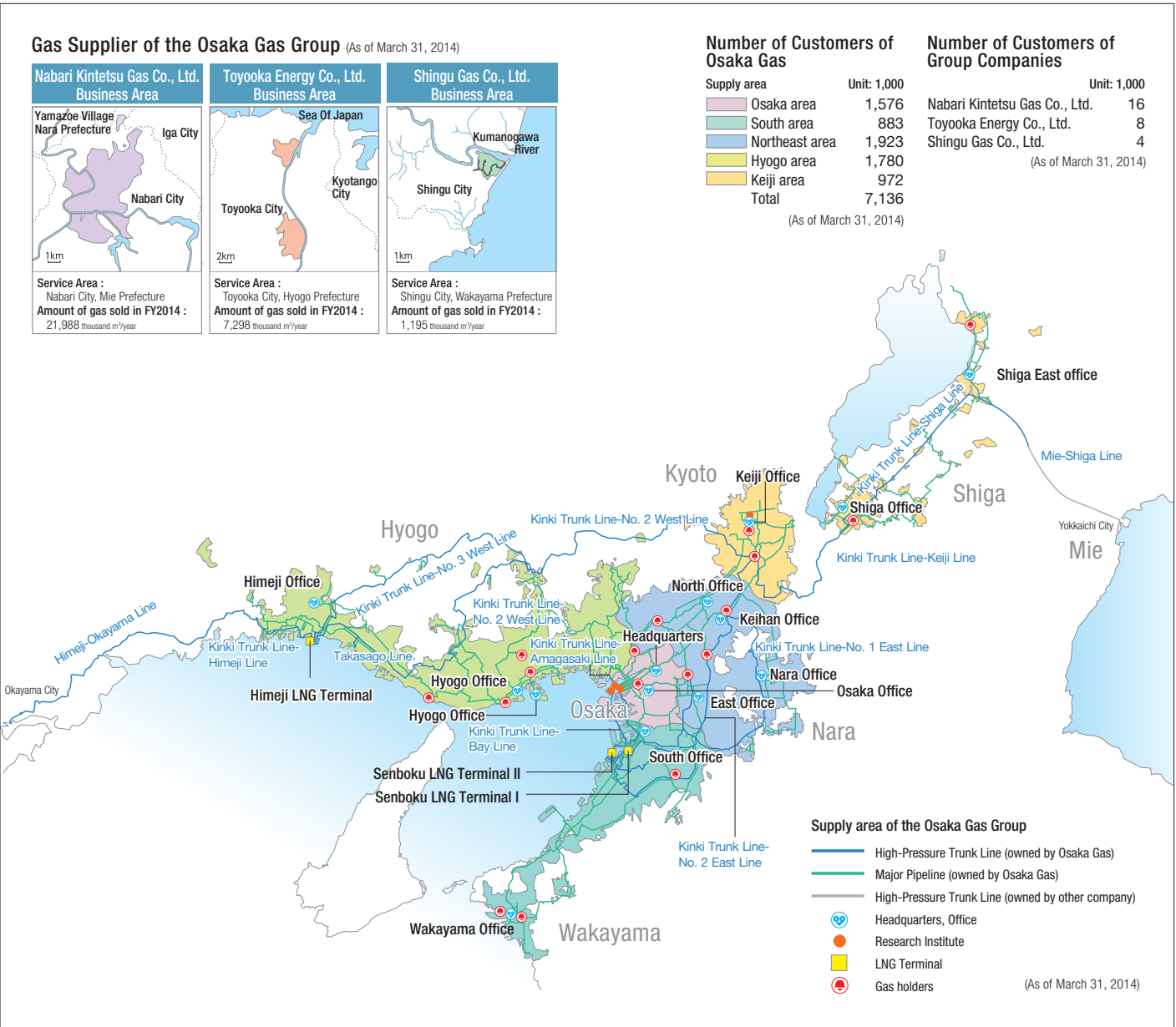
**Major business fields :**

1. Manufacture, delivery and sale of gas
2. Delivery and sale of LPG
3. Generation, delivery and sale of electric power
4. Sale of gas appliances
5. Installation of gas pipes

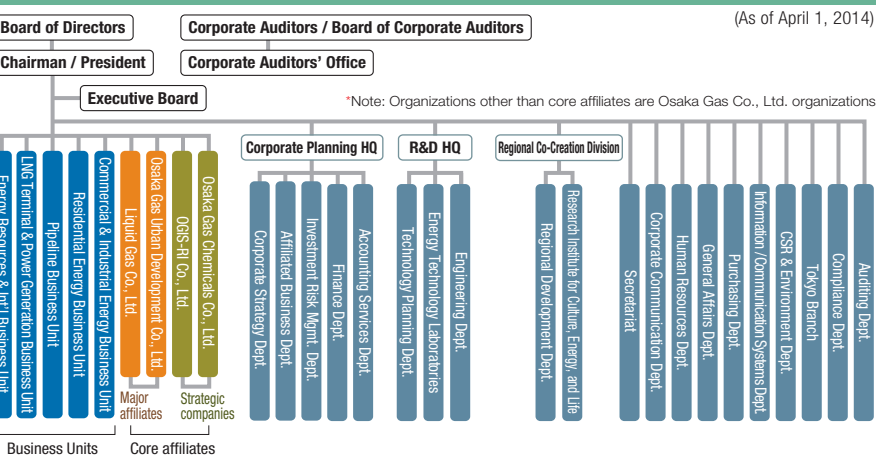
## Sales by Segment of the Osaka Gas Group



## Osaka Gas Group Business Area



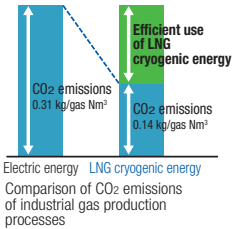
## Osaka Gas Group Management Structure



## Business Fields of Affiliated Companies

### Industrial Gas/LPG/LNG Business (Liquid Gas Group)

Involved in a wide range of businesses, including industrial gas businesses using LNG cryogenic energy, the production and sale of dry ice, and cryogenic grinding using liquefied nitrogen. Also involved in the wholesale and retail sale of liquefied petroleum gas (LPG) mainly to customers outside the natural gas supply area, and the transportation of dry ice, and cryogenic grinding using LNG.



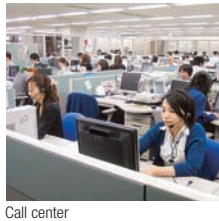
### Real Estate Business (Osaka Gas Urban Development Group)

Involved in the development/leasing/sale of real estate owned or newly purchased by the Osaka Gas Group, including office buildings and houses, and management/maintenance/commissioned construction of building facilities (including energy conservation/services related to CO<sub>2</sub> emissions reduction). Also involved in the Kyoto Research Park Project, which aims to establish a base for government-industry-academia collaboration to foster new industries.



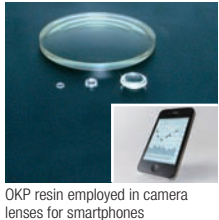
### IT Service Business (OGIS Research Institute Group)

Established mainly for developing systems for Osaka Gas's gas businesses. In recent years, this group has provided customers in various industries, including manufacturing, distribution and financial services, with a wide array of services, such as design/consulting, and development/operation/maintenance of information systems. The group has also been working to expand and improve IT services in China, Singapore and the Philippines.



### Materials Solutions Business (Osaka Gas Chemicals Group)

Specializing in the materials solution business. This group supplies customers in a broad range of industries, from electronics to environmental business, with high-function materials that use coal chemistry technologies, which have been accumulated through our gas business. The group also offers valuable proposals that meet various needs of customers.

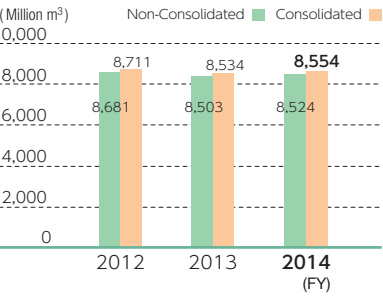


### Life Support and Outsourcing Service Business

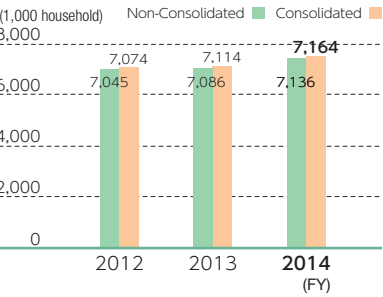
Provides a wide range of high quality services to meet all needs of customers, including behavior observation business, leasing of cars, etc., facility management, temporary staffing, and operation of sport facilities, wedding halls, and private nursing homes. We seek to enhance the brand value of the Osaka Gas Group by conducting a diverse range of businesses that support people's comfortable lifestyles and the prosperity of businesses.



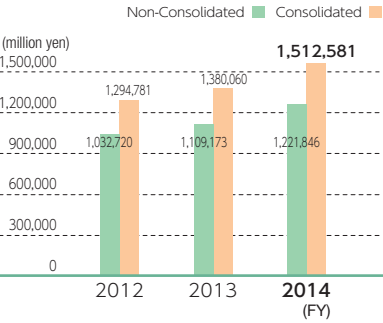
## Gas Sales by Volume



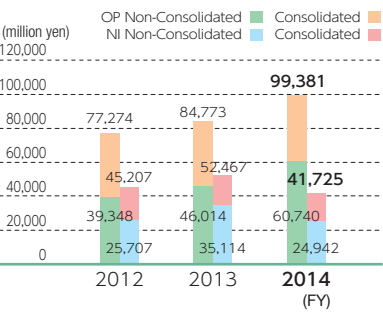
## Number of Customers



## Operating Revenues



## Operating Profit and Net Income



## Number of Employees

