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

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

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.

[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 (SRG) of the Global Reporting Initiative (GRI)
- Environmental Reporting Guidelines 2012 of the Ministry of the Environment
- The United Nations Global Compact (GCP) Policy
  - CSR Communication on Progress

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.

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).
The President’s Commitment

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

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 numerous 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 potential 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 2020.

   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 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 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, transparency and 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.

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.

Long-term Management Goals for the Osaka Gas Group

Broadening of Business Fields

The Osaka Gas Group has established 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).

Increasing Corporate Value

To continue to be a company chosen by all stakeholders, Osaka Gas Group is committed to making efforts to score sustainable 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

<table>
<thead>
<tr>
<th>CSR Charter</th>
<th>CSR Indicators (FY2015-2017)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Customer satisfaction level for seven customer service duties</td>
<td>Customer satisfaction level for seven customer service duties</td>
</tr>
<tr>
<td>80% or more in all satisfaction rates</td>
<td>80% or more in all satisfaction rates</td>
</tr>
<tr>
<td>Environmental Management Indicator</td>
<td>Environmental Management Efficiency</td>
</tr>
<tr>
<td>50 yen / 1,000 m3 or less</td>
<td>50 yen / 1,000 m3 or less</td>
</tr>
<tr>
<td>Number of contacts and communication events</td>
<td>Number of contacts and communication events</td>
</tr>
<tr>
<td>1,000 times*</td>
<td>1,000 times*</td>
</tr>
<tr>
<td>Compliance awareness survey scores (Individual Level of understanding of the Code of Conduct)</td>
<td></td>
</tr>
<tr>
<td>Environmental/Corporate Social Responsibility (Organization)</td>
<td>100%</td>
</tr>
<tr>
<td>Percentage of employees receiving compliance training</td>
<td>100%</td>
</tr>
<tr>
<td>Employee opinion survey</td>
<td>Employee opinion survey</td>
</tr>
<tr>
<td>Maintaining sufficient levels in job satisfaction and sense of attachment to the company</td>
<td>Maintaining sufficient levels in job satisfaction and sense of attachment to the company</td>
</tr>
</tbody>
</table>

| Management Policy for Human Growth                                         | Management Policy for Human Growth |
| 60,000 people                                                            | 60,000 people |
| 2,000 people                                                            | 2,000 people |
| Osaka Gas Group CSR Charter                                               | Osaka Gas Group CSR Charter |
| Formulation of the Principles of the Osaka Gas Group CSR Charter and Throwing Support behind the United Nations Global Compact | Formulation of the Principles of the Osaka Gas Group CSR Charter and Throwing Support behind the United Nations Global Compact |
| Value for Customers                                                       | Value for Customers |
| Value for Society                                                         | Value for Society |
| Value for Employees                                                       | Value for Employees |
| Osaka Gas Group Environmental Activities Policy                           | Osaka Gas Group Environmental Activities Policy |
| Osaka Gas Group Code of Conduct                                           | Osaka Gas Group Code of Conduct |

OSAKA GAS GROUP CSR REPORT 2014
CSR 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” represents our commitment toward changes to our business and if we are becoming 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.

The Osaka Gas Group will respond to a variety of demands from its customers and society through the supply of various types of energy, such as natural gas (including LNG), electricity, LPG, and high-quality safety, technology, and services.

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 solutions.

Non-energy (“Life & Business”) Solutions Business

The Osaka Gas Group will provide its customers and society with solutions that make a comfortable, convenient, and healthy life by making full use of technology and business know-how nurtured through the energy business.

- Non-energy (“Life & Business”) Solutions Business
- Domestic and Overseas Energy Businesses

80: 20 Scale ratio (FY2021)

Material solutions
Information solutions
Real estate
Life-related services

Energy supply, sales in Japan
Upstream businesses
Power generation
Downstream businesses overseas

Non-energy (“Life & Business”) Solutions Business

To remain the preferred choice for customers in the energy business in the Kansai region, the core business of the Osaka Gas Group, the Company will work to transform itself into an operator of an “integrated energy business” that can respond to a wide range of customer demand, centering on energy.

The Company will expand the business fields to fields of faster growth expected, such as overseas business, non-energy (“Life & Business”) solutions business, leveraging the strengths of the Osaka Gas Group.

Investment for Expansion, Greenfield and M&A (FY2015-2021)

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”.

Initial plan under “Field of Dreams 2020” (FY2015-2021)
400 billion yen

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>80</td>
<td>180</td>
<td>140</td>
<td></td>
</tr>
<tr>
<td>250</td>
<td>360</td>
<td>160</td>
<td></td>
</tr>
</tbody>
</table>

Revision plan (FY2015-2021)
770 billion yen

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>80</td>
<td>180</td>
<td>140</td>
<td></td>
</tr>
<tr>
<td>+170</td>
<td>+180</td>
<td>+20</td>
<td></td>
</tr>
<tr>
<td>250</td>
<td>360</td>
<td>160</td>
<td></td>
</tr>
</tbody>
</table>
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 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.

• Participating in overseas upstream/downstream businesses, the Group has been expanding the scope of its business fields and enhancing further its natural gas value chain.

Stable Procurement of LNG from 8 Countries

LNG of our overseas suppliers, which are located in eight countries—Indonesia, Malaysia, Australia, Qatar, The United States, U.K., Indonesia, and Australia—

is wide ranging, from drilling in gas fields, production, supply and transportation.

Gas Supply to 7.16 Million Households and Businesses

Globally procured LNG is gasified and processed at LNG terminals, to gas supply via domestic LNG terminals, and is provided to about 7.16 million households and businesses, mainly in the Kansai region, as gas pipelines of a total length of 65,000 km. The amount of gas to be shipped from our two main LNG terminals, located in Osaka-ken and Kure, is about 7.16 million households and businesses.

Gas Supply to Seven Million Households and Businesses

We have adopted a variety of anti-earthquake measures in the plant, including: the installation of various safety devices to LNG terminals, the adoption of gas pipelines made from durable and quake-resistant piping materials, and measures to reduce 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 device monitoring shut down gas supply in response to deviations bigger than a certain level triggered by an earthquake.

We have also been enhancing anti-quake measures at LNG terminals and supply facilities following the earthquake disaster that hit eastern Japan in March 2011.

Gas Supply to 7.16 Million Households and Businesses

Global procured LNG is gasified and processed at LNG terminals, and is provided to about 7.16 million households and businesses, mainly in the Kansai region, as gas pipelines of a total length of 65,000 km.

The amount of gas to be shipped from our two main LNG terminals, located in Osaka-ken and Kure, is about 7.16 million households and businesses.

Stable Procurement of LNG from 8 Countries

LNG of our overseas suppliers, which are located in eight countries—Indonesia, Malaysia, Australia, Qatar, The United States, U.K., Indonesia, and Australia—

is wide ranging, from drilling in gas fields, production, supply and transportation.

Gas Supply to 7.16 Million Households and Businesses

Globally procured LNG is gasified and processed at LNG terminals, to gas supply via domestic LNG terminals, and is provided to about 7.16 million households and businesses, mainly in the Kansai region, as gas pipelines of a total length of 65,000 km. The amount of gas to be shipped from our two main LNG terminals, located in Osaka-ken and Kure, is about 7.16 million households and businesses.

Gas Supply to Seven Million Households and Businesses

We have adopted a variety of anti-earthquake measures in the plant, including: the installation of various safety devices to LNG terminals, the adoption of gas pipelines made from durable and quake-resistant piping materials, and measures to reduce 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 device monitoring shut down gas supply in response to deviations bigger than a certain level triggered by an earthquake.

We have also been enhancing anti-quake measures at LNG terminals and supply facilities following the earthquake disaster that hit eastern Japan in March 2011.

Gas Supply to 7.16 Million Households and Businesses

Global procured LNG is gasified and processed at LNG terminals, and is provided to about 7.16 million households and businesses, mainly in the Kansai region, as gas pipelines of a total length of 65,000 km. The amount of gas to be shipped from our two main LNG terminals, located in Osaka-ken and Kure, is about 7.16 million households and businesses.

Gas Supply to Seven Million Households and Businesses

We have adopted a variety of anti-earthquake measures in the plant, including: the installation of various safety devices to LNG terminals, the adoption of gas pipelines made from durable and quake-resistant piping materials, and measures to reduce 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 device monitoring shut down gas supply in response to deviations bigger than a certain level triggered by an earthquake.

We have also been enhancing anti-quake measures at LNG terminals and supply facilities following the earthquake disaster that hit eastern Japan in March 2011.

Gas Supply to 7.16 Million Households and Businesses

Global procured LNG is gasified and processed at LNG terminals, and is provided to about 7.16 million households and businesses, mainly in the Kansai region, as gas pipelines of a total length of 65,000 km. The amount of gas to be shipped from our two main LNG terminals, located in Osaka-ken and Kure, is about 7.16 million households and businesses.

Gas Supply to Seven Million Households and Businesses

We have adopted a variety of anti-earthquake measures in the plant, including: the installation of various safety devices to LNG terminals, the adoption of gas pipelines made from durable and quake-resistant piping materials, and measures to reduce 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 device monitoring shut down gas supply in response to deviations bigger than a certain level triggered by an earthquake.

We have also been enhancing anti-quake measures at LNG terminals and supply facilities following the earthquake disaster that hit eastern Japan in March 2011.
Natural Gas Value Chain of Osaka Gas Group

The Osaka Gas Group processes natural gas, 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 furthering its natural gas value chain.

Stable Procurement of LNG from 8 Countries

LNG is a clean energy that is energy-competitive in the Middle East, natural gas reserves are spread worldwide. The number of LNG suppliers is free from the restrictions of oil, giving the former a comparative advantage as an energy source. Osaka Gas Group’s long-term contract-based supply system includes upstream business such as the development of overseas gas fields and downstream business such as operation of LNG transportation terminals and power plants. We steadily forward those businesses as well as green business projects, based on prudent risk assessment in the upstream business. Also, in the overseas downstream business, we intend to actively expand our energy business in South Asia.

Stopped-up Efforts to Expand Business Fields

Other than upstream businesses such as gas imports and receipts, gasification at LNG terminals and the provision of gas to end-customers through operating gas pipelines (making up the natural gas chain) includes upstream business such as the development of overseas gas fields and downstream business such as operation of LNG transportation terminals and power plants. We steadily forward those business as well as green business projects, based on prudent risk assessment in the upstream business. Also, in the overseas downstream business, we intend to actively expand our energy business in South Asia.

Major effects Osaka Gas Group to reduce impact

8.2% 3.6% 9.3%

Oman

Egypt

Venezuela

Norway

China

Nigeria

Natural Gas Value Chain of Osaka Gas Group

The value chain (2) of the natural gas business is as follows: ranging from drilling in gas fields, transportation via LNG (liquefied natural gas) and cooling, and gasification at LNG terminals, to gas supply via pipeline network. In order to steadily forward those business fields, Osaka Gas has been involved in the LNG business while recognizing and taking into account the possible negative impact on society. To avoid and minimize such impacts, Osaka Gas has been implementing a variety of measures in the areas of the environment protection, human rights, labor, in the context of its Global Compact and ISO 26000, jointly with the business partners who constitute the value chain. We will continue to place an emphasis on promoting dialogue with stakeholders in a bid to take the fewest efforts to reduce the social impact.

Sales and Consumption

We are actively developing and promoting activities that contribute to reducing the environmental impact of gas supply and sales, including publicizing to raise awareness of gas consumption and sales, creating efficient customer-use solutions, such as cogeneration systems. We are also performing efforts to promote and actively promote the improvement of safety factors and increase times of service availability of supply gas, while disclosing information on the sales use of such gas.

Journey of natural gas - from fields to end-users

The oil and gas sector is facing multiple challenges as more consumers are demanding more sustainable and safer energy solutions. This article presents a comprehensive overview of the oil and gas industry, including the supply chain, production, transportation, processing, and marketing of oil and gas products.

10.1098/rsfs/1109.1223
CSR of the Osaka Gas Group

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 “materiality,” and call for the disclosure of information regarding how materiality has been identified and how the company has been working on it. This report explores 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. Furthermore, the Group’s activities are wide-ranging, including customers, local communities, corporate clients, shareholders and employees. As a part of the social responsibility of the Osaka Gas Group, in line with the procedures shown in the G4, we identify important aspects in business activities as materiality being into account the characteristics of Group activities and operational areas, and feedbacks and opinions presented by stakeholders, and then compile a report based on priority items. We will promote efforts for appropriate management of such materiality, and reinforce them as necessary. The result of our efforts are to be reported yearly. If necessary, the materiality is to be reviewed so as to reflect changes in society.

G4 Sustainability Reporting Guidelines

G4 Sustainability Reporting Guidelines (G4 SRG) is a guideline for reporting sustainability-related information and is a milestone in the international sustainability reporting process. In order to improve the accuracy of reporting and consistency, the guidelines help companies report on their sustainability performance and management. The guidelines are based on global consensus, and are designed to be relevant to a wide range of stakeholders, including investors, customers, and employees.

How Osaka Gas Identified Its CSR Materiality

The Osaka Gas Group has identified its materiality through a systematic and comprehensive process. The process includes the following steps:

1. Clarification of boundaries of social effects from business activities and fields
2. Analysis of importance, long-term setting of priorities based on the Group’s own view
3. Confirmation of priorities and materiality
4. Determination of goals and medium-term “materiality.”

By looking into the “materiality analysis map” mentioned above, topics regarded as the most important from the viewpoint of the Group and the stakeholders have been determined as materiality. Sufficient discussions have been held between relevant departments of the Group over the reporting of the key performance indicators (KPIs) and efforts related to materiality. Final approval of this materiality came at a meeting of the CSR Promotion Council, the Osaka Gas Group’s highest decision-making body on CSR. (Refer to p. 49)

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 (KPIs) 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 continue to be managed without lowering the current management level, whereas 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)

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

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.
I would like to express my respect for the Osaka Gas Group’s efforts to identify important aspects as materiality 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 if it is to pursue sustainable growth. In this sense, it is necessary for the Osaka Gas 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 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. Energy consumption and greenhouse gas (GHG) 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 used by LNG tankers. In the future, the Group is expected to expand its overseas energy business, including acquiring rights to develop shale gas 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.
CSR of the Osaka Gas Group

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.

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 [9] 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.
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 customers, wishes in order to be a corporate group that continually evolves and develops alongside its customers.

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.

Target & Results

CSR Indicator:

Customer Satisfaction Survey: Seven Customer Service Duties

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

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 quantitatively improve our products and services, as well as we will proactively disseminate information.

Specific Materiality

- Customer Health and Safety
- Product and Service Labelling

Relevant Osaka Gas Group policies, etc.

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

CSR Charter
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)” 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.

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.

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 of 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.

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 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 48

- 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”
- 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.

Target & Results

CSR Indicator : Environmental Management Indicators : Environmental Management Efficiency

Environmental Management Efficiency

Target for FY 2014: 68 yen/1,000m³ or less

FY 2014 Result: 60 yen/1,000m³

Environmental Management Efficiency

FY2014 Results Overview

We strive 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 Yen 513 million, 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 cogenerative 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

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

<table>
<thead>
<tr>
<th>Area</th>
<th>Indicator</th>
<th>Environmental impact of gas business per gas sold</th>
<th>FY2014 Target</th>
<th>FY2014 Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Energy management efficiency</td>
<td>CO2 (tons)</td>
<td>CO2 emissions per 1 m3 sold (ton/100 m3)</td>
<td>60</td>
<td>60</td>
</tr>
<tr>
<td>Gas business</td>
<td>Office buildings</td>
<td>CO2 emissions per 100 m2 of floor space (ton/100 m2)</td>
<td>2.5</td>
<td>1.0</td>
</tr>
<tr>
<td>Resource efficiency</td>
<td>Electricity business (including renegy equipment)</td>
<td>Electricity use per unit of revenue (kWh/million yen)</td>
<td>0.15</td>
<td>0.37</td>
</tr>
</tbody>
</table>

Low-carbon society

Customer site emissions on customer sites and throughout the value chain

Customer site CO2 emissions have been reduced by 26% compared to FY2009.

Promotion of 3Rs in our business

Promoted the 3Rs of used equipment at our customers, in cooperation with our business partners.

Group companies (customer site) emissions

Industial waste, office waste, and office waste (final disposal rate) have been reduced by 99.3% and 100% respectively.

Transportation / logistics

Industrial waste from LMG terminals (final disposal rate) has been reduced by 1.0%.

Gas business

Industrial waste from offices (final disposal rate) has been reduced by 1.2%.

Recycling

Promoted the development of technologies that contribute to a low-carbon society and energy security.

Smart energy network project

Announced the introduction of a sophisticated energy management system.

**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 customers’ CO2 emissions by an estimated 33,000 tons annually.\(^1\) (equating to the planting of 2.37 million Japanese cedars\(^*2\)).

*1 Estimated 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 rooms, dining room), an electric air conditioner for heating/cooling rooms other than the living rooms and dining rooms, a gas hot water bathroom heater with hot water tank, and a gas stove, with the gas space heater using "ENE-FARM." CO2 emission coefficients of 0.69kg-CO2/kWh of electric power (value determined by the Target Assessment Scenarios Sub-committee, Global Environment Council, Central Environment Council, July 2011) and 2.29kg-CO2/m3 of gas (Osaka Gas data) were used.

*2 CO2 absorbed by a ceder 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)

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

Energy Bank Japan Co., Ltd. (EJB), 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.

EJB will raise funds and install/oporate power generation system via a financial scheme it developed independently, while the City of Kobe will provide a project site and supply biogas. EJB has concluded a power sales agreement under the clean energy feed-in tariff system, a fixed price purchasing system, under which EJB will pay a consideration to the City of Kobe from the profits made from power sales in accordance with the quantity of power sold.

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 Aeolis Mall, Super WVA HOME and the hguMUSEUM), 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 Aeolis Mall, Super WVA HOME, and hguMUSEUM, and that supplied by the solar panels to be installed in the hguMUSEUM mutually circulate within the district.

In July 2013, Creative Techno Solution Co., Ltd. (‘CTS’), a wholly-owned subsidiary of Osaka Gas, began business as a specified electric utility supplying electricity to five facilities in the District utilizing the power generated by gas cogeneration systems combining with the grid power.

A utility that supplies power to end users through a specified supply zone using its own power generation system. EJB operates a wide range of businesses, including power sales. It is one of the few companies that generate and sell electricity directly to end users and the first utility to introduce remote power generation and supply systems.
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 have also begun recycling all gas alarms and foam packaging materials used for appliances to 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 education for children as well as promote addressing biodiversity by utilizing greenery area in the plant.

Appropriate Method for Calculating CO2 Reduction by Power Conservation Using the "Marginal Emission Factor"

Calculating the Effect of Power Conservation

When assessing the CO2 emission associated with using power, calculated as if CO2 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.

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 CO2 emissions coefficient for marginal power sources (marginal power coefficient), when calculating the reduction in CO2 emissions by lowering electricity use.

The use of a marginal coefficient in calculating the CO2 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.

*In addition to CO2 emission reduction to net zero, CO2 emissions are expected to be further decreased by another 5% through the use of the three-batteries and by exporting electricity generated by the solar cell back to the grid.

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 CO2 emissions and the function of Home Energy Management System (HEMS) realized both comfort for residents as well as energy saving.

The “NEXT 21” Phase-4 Habitation Experiment Launched

The NEXT 21 (Tennoji-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” promised on urban multiple-unit housing until around 2020. To that end, we will undertake a habitation experiment that entails creating ties among people, rethinking connections between people and nature, and achieving energy-saving smart living.

Developing HYSERVE, a compact hydrogen generator

Osaka Gas has developed a compact-type hydrogen generator system with hydrogen production capacities of 300 m³/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.
Throughout its value chain, Osaka Gas makes various efforts for reducing environmental impact by our business.

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

#### In Japan

<table>
<thead>
<tr>
<th>Natural gas</th>
<th>Liquefaction</th>
<th>Transportation</th>
<th>LNG terminals</th>
<th>Business offices</th>
<th>Gas pipes BD</th>
<th>Customers (Gas Customers)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>OUTPUT</strong></td>
<td><strong>OUTPUT</strong></td>
<td><strong>OUTPUT</strong></td>
<td><strong>OUTPUT</strong></td>
<td><strong>OUTPUT</strong></td>
<td><strong>OUTPUT</strong></td>
<td><strong>OUTPUT</strong></td>
</tr>
<tr>
<td>CO2 emissions</td>
<td>CO2 emissions</td>
<td>CO2 emissions</td>
<td>CO2 emissions</td>
<td>CO2 emissions</td>
<td>CO2 emissions</td>
<td>CO2 emissions</td>
</tr>
<tr>
<td>(thousand t-C02)</td>
<td>(thousand t-C02)</td>
<td>(thousand t-C02)</td>
<td>(thousand t-C02)</td>
<td>(thousand t-C02)</td>
<td>(thousand t-C02)</td>
<td>(thousand t-C02)</td>
</tr>
<tr>
<td>88 thousand t-C02</td>
<td>45 thousand t-C02</td>
<td>10.3 g CO2/kWh</td>
<td>5.3 g CO2/kWh</td>
<td>37.6 t</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### Source: Future Forecast for Life Cycle Greenhouse Gas Emissions of LNG and City Gas 13A

#### LCA*: Comparison of GHI 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

<table>
<thead>
<tr>
<th>Stage</th>
<th>Gas Type</th>
<th>CO2 Emissions (thousand t-C02)</th>
<th>CO2 emission per unit of gas sold (g-C02/MJ, HHV)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Drilling</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Liquefaction</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Transportation</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LNG terminals</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Business offices</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gas pipes BD</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Customers (Gas Customers)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### Source:

1. Future Forecast for Life Cycle Greenhouse Gas Emissions of LNG and City Gas 13A
3. Figures applied since March 2003
4. Gas sales: 8,524 million m³
5. Quantity of city gas supplied by Osaka Gas

---

* LCA: Life Cycle Assessment

---

**Table:**

- **LNG Import:** 775 (10,000 tons)
- **CO2 Emissions:** 54.6 (thousand t-C02)
CSR Charter

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.

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.

Target & Results

CSR Indicator : Number of Communication / Social Contributions Events

<table>
<thead>
<tr>
<th>Communication Events</th>
<th>Social Contributions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of events (on-site dietary and energy / environment seminars, etc) held</td>
<td>Number of contacts (number of visitors to our corporate museums)</td>
</tr>
<tr>
<td>Target for FY 2014</td>
<td>Target for FY 2014</td>
</tr>
<tr>
<td>1,000 events or more</td>
<td>70,000 people or more</td>
</tr>
<tr>
<td>FY 2014 Result</td>
<td>FY 2014 Result</td>
</tr>
<tr>
<td>2,068 events</td>
<td>70,087 people</td>
</tr>
</tbody>
</table>

“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.

Target for FY 2014

- 600 events or more
- 70,000 people or more

FY 2014 Results Overview

Regarding programs to foster the next generation, the number of dietary education and energy/environment education seminars held in FY 2014 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.
CSR Charter

Being a Good Corporate Citizen Contributing to Society

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 (CELI) 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.

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.

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 rainfall 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.

Pamphlet text: “Let’s Think Together about the Global Environment and Energy!”

Program brochure: “Energy & Environmental Education”

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

Class on cleaning fish

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

The “Midoriyuki 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 1,980,000 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.

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.).

“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 Kansa region following the Great East Japan Earthquake.

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

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

The disabled works with a help from staff giving lectures.

Book Recycling Corner” bustling with customers.

Image 1

Image 2
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.

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.

Target & Results

CSR Indicator:

Scores on Compliance Awareness / Percentage of Employees Receiving Compliance Training

<table>
<thead>
<tr>
<th>(1) Understanding level of Code of Conduct</th>
<th>(2) Penetration level of compliance in the organization</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1) Individual Higher than the previous year</td>
<td>(2) Organization Higher than the previous year</td>
</tr>
<tr>
<td>(3) Percentage of employees receiving compliance training</td>
<td></td>
</tr>
</tbody>
</table>

Target for FY 2014

FY 2014 Result

(1) 100% of employees received compliance training

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 were 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.

It is important for each employee to understand the Osaka Gas Group Code of Conduct through compliance training programs and by other means.

Percentage of Employees Receiving Compliance Training

Each organization and affiliate hold training programs tailored to its workplace and workforce, and strengthened measures to ensure that employees taking 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.

Specific Materiality 88

- 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.

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

Target for FY 2014

FY 2014 Result

(1) 100% of employees received compliance training

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 were 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.

It is important for each employee to understand the Osaka Gas Group Code of Conduct through compliance training programs and by other means.

Percentage of Employees Receiving Compliance Training

Each organization and affiliate hold training programs tailored to its workplace and workforce, and strengthened measures to ensure that employees taking 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.
Conducting Human Rights Training at All Levels

In addition to soliciting suggestions for human rights motives and temporary workers, making excellence in the new employees. For example, training for new employees, the Osaka Gas Group conducts human rights training sessions tailored to executives, managers, and new employees. For example, training for new employees 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.

Respect for Human Rights

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.

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. Trainers 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.

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.
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”
  “3. Developing Our Partners' Understanding on Our Code of Conduct”
- CSR Purchasing Guidelines
- Osaka Gas Group Diversity Policy

Target & Results

CSR Indicator:
Employee Opinion Survey (Job Satisfaction and Attachment to the Company)

Osaka Gas periodically conduct employee opinion surveys to understand how employees satisfy with their job, workplace environment, superiors, company systems, and so on. Employees are asked to rate their satisfaction level on a five-point scale for 21 categories (“job satisfaction,” “attachment to the company,” etc.) and to leave an open comment. The most recent opinion survey was given to all employees in fiscal 2013.

Target for FY 2014

Maintain sufficient levels

FY 2014 Result

Maintained sufficient levels

FY 2014 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 (FY2013) 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.
Management Policy for Human Growth

"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. Yoshe 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.

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.

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

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 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 that standpoint, this report examines the relationship 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 that involves exploration taking place 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 create a “national resilience” project to prevent devastating damages in the event of disasters. Likely to be helpful in realizing the “national resilience” project is the gas cogeneration systems, 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.

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 create a “national resilience” project to prevent devastating damages in the event of disasters. Likely to be helpful in realizing the “national resilience” project is the gas cogeneration systems, 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.

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 an agreement with Osaka Gas at:

- The reliability and adequacy of the overall data collection and aggregation processes, and the effectiveness of internal verification checks.
- The accuracy of the aggregated data for FY2013 from April 2013 to March 2014
- The appropriateness of the scope of data selected for inclusion in the Report
- The effectiveness of data measurement, collection and aggregation methods, and the effectiveness of internal verification checks
- The accuracy and reliability of measured 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 practices, 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 works, Bureau Veritas is of the opinion that:

- The information presented at all 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.
Outline of the Osaka Gas Group

Corporate Profile of Osaka Gas

Head Office: 4-1-2 Hanawacho, Chuo-ku, Osaka 541-0046, Japan
Establishment: April 15, 1897
Concentration of operations: October 19, 1905
Number of employees: (Non-consolidated) 5,861
   (Consolidated) 21,250
Capital: 132.166 million yen

Major businesses:
1. Manufacturing, 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

Gas Supplier of the Osaka Gas Group

- Amount of gas sold in FY2014:
  - Nabari City, Mie Prefecture
  - Toyooka City, Hyogo Prefecture

Himeji LNG Terminal

Outline of the Osaka Gas Group

Gas Business Area (As of March 31, 2014)

Number of Customers of Osaka Gas

<table>
<thead>
<tr>
<th>Area</th>
<th>Number of Customers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Osaka area</td>
<td>883</td>
</tr>
<tr>
<td>Mie area</td>
<td>4,781</td>
</tr>
<tr>
<td>Shiga area</td>
<td>972</td>
</tr>
<tr>
<td>Total</td>
<td>6,536</td>
</tr>
</tbody>
</table>

Number of Customers of Group Companies

<table>
<thead>
<tr>
<th>Group</th>
<th>Number of Customers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Osaka Gas</td>
<td>1,780</td>
</tr>
<tr>
<td>Osaka Gas Chemicals</td>
<td>923</td>
</tr>
<tr>
<td>Total</td>
<td>2,703</td>
</tr>
</tbody>
</table>

Real Estate Business (Osaka Gas Urban Development Group)

Involved in the development/buy/sell of real estate owned or newly purchased by the Osaka Gas Group, including office buildings, residential buildings, investment properties and redeveloped properties, as well as the leasing of commercial buildings.

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 IT services to various industries.

Life Support and Outsourcing Service Business

Specializing in the materials solution business. This group supplies customers in a broad range of industries, including manufacturing, distribution and financial services, with a wide array of services, such as design consulting, and development and operation 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. The group supplies customers in a broad range of industries, from various fields of research and development to realizing actual applications.

Life Support and Outsourcing Service Business

Provides BPO, a wide range of high-quality services to revitalize the lives of customers, including business management, human resources management, facility management, temporary staffing, and operation of sport facilities, wedding halls, and private nursing homes.

Manufacturing/Engineering Business

Involves sales of products of Osaka Gas Group companies such as LNG terminals, liquefied gas products, electric cars, cryogenic grinding equipment, etc.

Financial Services Business

Engaged in leasing of cars, etc., facility management, temporary staffing, and operation of sport facilities, wedding halls, and private nursing homes.

Sorakaya Business

Engaged in BTO business of Osaka Gas Group companies in various industries.

Business Fields of Affiliated Companies

Industrial Gas/LPG/LNG Business

- Specializing in the materials solution business. This group supplies customers in a broad range of industries, from various fields of research and development to realizing actual applications.
- Specializing in the materials solution business.

Life Support and Outsourcing Service Business

- Provides BPO, a wide range of high-quality services to revitalize the lives of customers, including business management, human resources management, facility management, temporary staffing, and operation of sport facilities, wedding halls, and private nursing homes.

Financial Services Business

- Engaged in leasing of cars, etc., facility management, temporary staffing, and operation of sport facilities, wedding halls, and private nursing homes.

Sorakaya Business

- Engaged in BTO business of Osaka Gas Group companies in various industries.

Chairman / President

Established mainly for developing systems for Osaka Gas’s gas businesses. In recent years, this group has provided IT services to various industries.

Materials Solutions Business

Established mainly for developing systems for Osaka Gas’s gas businesses. In recent years, this group has provided IT services to various industries.

Life Support and Outsourcing Service Business

- Provides BPO, a wide range of high-quality services to revitalize the lives of customers, including business management, human resources management, facility management, temporary staffing, and operation of sport facilities, wedding halls, and private nursing homes.

Financial Services Business

- Engaged in leasing of cars, etc., facility management, temporary staffing, and operation of sport facilities, wedding halls, and private nursing homes.

Sorakaya Business

- Engaged in BTO business of Osaka Gas Group companies in various industries.

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