

# **JX Report**

## **for a Sustainable Future 2015**

Performance Report

**The Future of Energy,  
Resources and Materials**

**JX Holdings, Inc.**



# Contents

Editorial Policy .....	1	Relationship with society .....	7
JX Group Mission Statement .....	1	Trustworthy products/services .....	11
JX Group Values Report .....	2	Harmony with the environment .....	13
Ethics .....	3	JX Group Management .....	17
Advanced ideas .....	5	Independent Practitioner's Assurance Report .....	19

## Editorial Policy

This report was prepared by JX Holdings, Inc. to introduce the JX Group's ideas and initiatives on corporate social responsibility (CSR). From this year onwards, the report will comprise two parts: the booklet named "Highlights" which aims to deepen communications with our stakeholders—including shareholders, investors, customers, employees, business partners and local communities—and deepen their understanding about the JX Group, and the other named "Performance Report" (PDF) which aims to fulfill our accountability to all stakeholders.

### Scope of Report

JX Holdings, Inc. and its 11 main Group companies  
 JX Nippon Oil & Energy Corporation and its 20 main Group companies  
 JX Nippon Oil & Gas Exploration Corporation and its 32 main Group companies  
 JX Nippon Mining & Metals Corporation and its 68 main Group companies  
 The scope of quantitative information is defined in notes on each page.

### Reporting Period

In principle, the report covers the period from April 2014 to March 2015. However, some information from April 2015 onwards is also included, as necessary.

### Publication Date

December 2015 (Previous issue: December 2014; Next issue: December 2016)

### Guidelines Used as Reference

- The Sustainability Reporting Guidelines, Version 3.1, Global Reporting Initiative (GRI)
- The Environmental Reporting Guidelines (2012 Edition), Ministry of the Environment, Japan
- The GRI Mining and Metals Sector Supplement

In the Performance Report, the JX Group Values section reports on several representative activities we are conducting in accordance with the Group's five EARTH values.

The JX Group companies, including JX Holdings and the three core operating subsidiaries, disclose information on various CSR activities on their company websites. Please take time to visit them.

### Enhancing Reporting Reliability

The quantitative environmental information data on pages 13–16 has been assured by an independent body to ensure objective and reliable reporting.

### Inquiries

JX Holdings, Inc.  
 6-3 Otemachi 2-chome, Chiyoda-ku, Tokyo 100-8161, Japan  
 From January 1, 2016, it will shift to this new address.  
 1-2 Otemachi 1-chome, Chiyoda-ku, Tokyo 100-8161, Japan  
<http://www.hd.jx-group.co.jp/english/>  
 General Administration Department (e-mail) [csr@hd.jx-group.co.jp](mailto:csr@hd.jx-group.co.jp)

### Cautionary Statement regarding Forward-Looking Statements

This notice contains certain forward-looking statements, however, actual results may differ materially from those reflected in any forward-looking statement, due to various factors, including but not limited to the following: (1) macroeconomic conditions and changes in the competitive environment in the energy, resources, and materials industries; (2) changes in laws and regulations; and (3) risks related to litigation and other legal proceedings.

## JX Group Mission Statement

### JX Group Slogan

**The Future of Energy,  
 Resources and Materials**

### JX Group Mission Statement

The JX Group will contribute to the development of a sustainable economy and society through innovation in the areas of energy, resources and materials.

### JX Group Values

Our actions will respect the **EARTH**

**Ethics**

**Advanced ideas**

**Relationship with society**

**Trustworthy products/services**

**Harmony with the environment**

### About JX

The name "JX" is the brand that symbolizes the JX Group's existence and presence. The letter "J" represents our position as one of the world's largest integrated energy, resources and materials business groups from Japan, while the letter "X" represents our willingness to pioneer new frontiers, our future growth and development potential, and our pursuit of creativity and innovation.

### About the JX Corporate Brand Mark

The JX corporate brand mark symbolizes the continuity of the

global environment and the JX Group based on the JX Group's mission statement. The design, in which the "JX" logo overlaps with a sphere, represents the JX Group's commitment to a green earth—i.e., our contribution to the development of a sustainable economy and society, through innovation in the areas of energy, resources and materials.

\* The JX corporate brand mark is common to JX Holdings, Inc., JX Nippon Oil & Energy Corporation, JX Nippon Oil & Gas Exploration Corporation and JX Nippon Mining & Metals Corporation



# JX Group Values Report

The JX Group continues to conduct activities based on the JX Group values the **EARTH**.

## What does the **EARTH** mean to me?



### Ethics

For the JX Group to conduct our business globally, compliance is the main premise of our business activities and cannot be lacking. In recent years, the JX Group is actively raising the awareness of compliance such as adopting a set of basic policies across the entire JX Group for legal compliance, focusing on the prevention of bribery and cartel, of which regulations and exposure are strengthened globally. As a member of the legal department, I would like to make contribution to such compliance activities, too.



**Masahide Tamura**

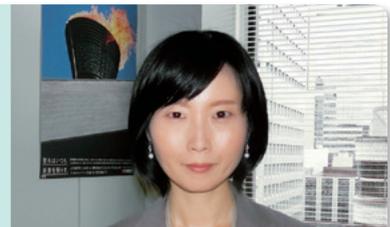
Legal & Corporate Affairs Group  
Legal & Corporate Affairs Dept.  
JX Holdings, Inc.



### Advanced ideas

The Tokyo 2020 Olympic and Paralympic Games is a major event, since it will be the first time in half a century that the Summer Olympics will take place in Japan. I hope everyone can be personally involved in the Tokyo 2020 Games through contributing innovative ideas, interacting with companies from other fields, promoting synergy between departments and launching activities only made possible because of this special event.

\* JX Nippon Oil & Energy is a Tokyo 2020 Olympic and Paralympic Games Gold Partner in the "Oil, Gas & Electricity Supply Services" category



**Noriyo Ishimaru**

Tokyo 2020 Olympic and Paralympic Games Promotion Group  
Corporate Planning & Management Department  
JX Nippon Oil & Energy Corporation



### Relationship with society

We place great importance on our links with local communities through participation in various social activities. When we visited an orphanage as part of these activities, the presentation by the children to show their appreciation for us left a deep impression on me. While these activities are not directly linked to our business, I was very touched and there is nothing that can replace the words of "thank you" from the children. I will continue to actively participate in such activities as a member of the local community.



**DE MESA, Gellen C.**

Sr. HR  
JX Nippon Mining & Metals Philippines, Inc.



### Trustworthy products/ services

I'm in charge of the accounting and taxation for the JX NOEX Group. Our company runs exploration and development of oil and gas projects. To provide information more accurate and faster, I share any small issues with the concerned parties in my daily work. I believe that the accumulation of steady efforts will lead to high quality.



**Sayumi Harada**

General Accounting Group, Contract Department 3  
JX Nippon Business Services Corporation



### Harmony with the environment

Having worked in the oil and gas industry for many years I firmly believe that we must respect the environment in which we operate. We create value for our shareholders whilst contributing to the ever increasing demand for energy, in a safe and environmentally responsible way. We work in a highly regulated industry where we cannot afford to be complacent; we learn lessons and continuously improve through the systematic application of our HSE management systems. Our goal is to act in harmony with the environment whilst creating a sustainable future for our company and the communities in which we operate.



**Arthur Spence**

Head of Production, Operations & HSE  
JX Nippon Exploration and Production (U.K.) Limited



To achieve thoroughness of compliance and strengthening of risk management in all business activities through respecting human rights, founded on decisions and actions based on ethics.

## Compliance

### Basic Approach

The JX Group has declared a policy to establish internal rules to ensure thorough compliance, and laws, the Articles of Incorporation and internal rules shall be observed in every aspect of work performance.

In accordance with this policy, the JX Group established the JX Group Compliance Committee to review the results of compliance measures throughout the Group, set the direction of future measures based on the review, and consider issues that need to be addressed by the Group as a whole.

The Group also has an internal whistle-blowing system in place for identification of a conduct that is or may be in violation of laws or regulations and remediation of such conduct at an early stage.

### Priority Compliance Action Items

In order to reduce the legal risks that may occur with the expansion of overseas business by the JX Group companies, in October 2013, the JX Group adopted the JX Group Compliance Activity Basic Policies, a systematic statement of compliance measures in accordance with global standards, and began implementing those regulations. In April 2014, the Group established internal rules setting forth a group-wide basic policy concerning the prevention of corruption and conduct on restraint of competition, areas in which regulation is becoming stricter around the world, and took measures to further strengthen its compliance systems.

In addition, the Group specified improvement in the quality of compliance status checks as a group-wide priority action item and took further measures for the appropriate identification of problems, early correction, and follow-up.

Individual Group companies also implemented a variety of measures including confirmation of compliance systems and the status of measures at overseas offices and plants.

### Implementation of Compliance Training

To raise awareness of compliance, the JX Group conducted compliance training for all JX Group executives and employees.

JX Nippon Oil & Energy conducts compliance training regularly to enhance employees' legal knowledge. In addition, anti-bribery training was conducted 16 times both within and outside Japan for departments where the risk of corruption is high; approximately 700 employees attended this training.

The JX Nippon Oil & Gas Exploration Group is working to thoroughly ensure compliance by holding training workshops explaining anti-bribery guidelines aimed at head office executives and managers, and by conducting training sessions to explain rules for documents and compliance overall to executives and employees, in addition to conducting seven training workshops to enhance overall knowledge on relevant agreements in upstream oil and gas business.

In fiscal 2014, the JX Nippon Mining & Metals Group conducted a total of 41 legal training sessions, separately done by hierarchy of positions and workplaces, attended by a total of 1,300 employees to enhance compliance knowledge and awareness. In addition, internal rules for anti-corruption were established, and a total of 16 training sessions were conducted domestically and overseas for 350 employees to help them understand these rules.

### Cooperation with and Support for the Extractive Industries Transparency Initiative

The Extractive Industries Transparency Initiative (EITI) is an international framework that seeks to prevent corruption and conflicts, provide the foundations for sustainable economic growth, and encourage resource development that leads to reductions in poverty by increasing the transparency of the flows of funds from extractive industries (industries involved in the development of resources such as oil, natural gas, and minerals) to the governments of resource possessing countries. JX Nippon Mining & Metals is in agreement with the principles of EITI and supports its activities.

## Internal Whistle-Blowing System

Considering that it may be difficult for individual worksites to independently resolve issues regarding conduct that is or may be in violation of laws and regulations, the JX Group established "Compliance Hotline," an internal whistle-blowing system. Use of the system is available to all personnel who work within the JX Group including temporary employees and employees of contractors, who are guaranteed that they will not be subject to any detrimental treatment as a result of making reports.

The JX Group Whistle-Blowing Systems Basic Policies were adopted in January 2013 to make it possible for whistleblowers to remain anonymous and to introduce Group Reporting that allows reports of legal violations by a Group company to be reported to any company, enhancing the system. In addition, we allowed overseas offices and plants to develop and implement internal whistle-blowing systems that take into account local and regional laws, customs and culture. We also established common reporting window that can be used the JX Group's overseas offices and plants.

## Human Rights

### Basic Approach

The JX Group recognizes that achieving corporate behavior firmly rooted in highly ethical values ultimately rests on the actions of its individual executives and employees. Accordingly, the JX Group strives for labor, personnel management, and human resource development underpinned by respect for human rights.

The JX Group strives to cultivate strong ethical values among its executives and employees by respecting international rules such as the Universal Declaration of Human Rights and the ILO Conventions, and providing them with supportive environments for performing meaningful work. The individual policies and specific measures are decided based on Group company business characteristics and scale.

Also, JX Holdings is fostering a management class with highly ethical standards through specific training for executives at each Group company and joint training for managers across the Group.

## Supporting the UN Global Compact

JX Holdings and its three core operating subsidiaries are participants in the United Nations Global Compact, implementing and promoting the Compact's Ten Principles in the four areas of human rights, labor, the environment and anti-corruption.

▶ Please refer to page 26 of the "Highlights" for the UN Global Compact's Ten Principles.

## Effective Abolition of Forced Labor and Child Labor

The JX Group complies with local laws and regulations at all domestic and overseas sites and strives to engage in proper human resource management including the prohibition of all forms of forced labor and the rigorous confirmation of the age of employees at the time of hiring so as to effectively abolish child labor.

## Human Rights Training

The JX Group regularly conducts various types of training in order to raise the awareness of each employee concerning human rights issues.

JX Nippon Oil & Energy conducts regular e-learning sessions on human rights for all employees, including at affiliated companies. In addition, personnel rank-based training aimed at new employees and newly appointed personnel, and training for sites and affiliated companies are conducted about 40 times annually.

JX Nippon Oil & Gas Exploration gave a training workshop on human rights lectured by an outside expert in March 2015. The training workshop was conducted twice under the theme "The Workplace Can Change with Awareness and Behavior of Each and Everyone" and attended by a total of 136 persons.

JX Nippon Mining & Metals held a lecture attended by 29 persons in June 2015 on "Business Activities and Human Rights" targeted at those responsible for promoting CSR. In addition, based on the lecture material, some trainees conducted identical training at their worksites.



Human rights e-learning at JX Nippon Oil & Energy



Human rights workshop at JX Nippon Oil & Gas Exploration



# Advanced ideas

By using advanced ideas and continuing to undertake the challenges of cutting-edge research and development and technologies, we will create technologies, products, and services that support solutions to societal issues and make broad contributions to society.

## Technology and R&D

### Basic Approach

With advanced nations leading the move to structure low-carbon, recycling-oriented societies amid growing awareness of the urgent need to address global environmental problems, the role of the energy, resources and materials industry has become more important than ever before.

Guided by its Group mission statement to “contribute to the development of a sustainable economy and society through innovation in the areas of energy, resources and materials,” the JX Group is aggressively pursuing technology development in each of its business domains. At the same time, we are advancing joint research and demonstration tests in collaboration with public institutions, universities and other entities.

JX Holdings also creates synergies by developing and promoting technologies and development infrastructure across the entire Group and by integrating technologies within the Group.

annual capture capacity of 1.6 million tons of CO<sub>2</sub> emitted into the atmosphere from the power plant.

We will start commercial operation of the CO<sub>2</sub> capture plant and begin the CO<sub>2</sub> injection into the West Ranch oil field. The oil production at the field is expected to boost from around 500 barrels per day to approximately 12 thousand barrels per day (the average output during the project) and the oil field is estimated to hold approximately 60 million barrels of cumulative production increase. Of the CO<sub>2</sub>-EOR (Enhanced Oil Recovery) initiatives that aim to increase oil production by injecting CO<sub>2</sub> into an oil field, the method to be used in this project is innovative because it will utilize CO<sub>2</sub> emitted from a coal-fired power plant. CO<sub>2</sub>-EOR stores CO<sub>2</sub>, a cause of global warming, in underground reservoirs. At the same time, it also facilitates an increase in oil recovery.

JX Nippon Oil & Gas Exploration Corporation has been focusing on enhanced oil recovery as a core technology. One such project was the CO<sub>2</sub>-EOR pilot test at the Rang Dong Oil Field offshore Vietnam in 2011, conducted together with Japan Oil, Gas and Metals National Corporation (JOGMEC) and PETROVIETNAM, the state oil company of Vietnam. We will continue to develop our business in harmony with the environment together with advanced ideas.

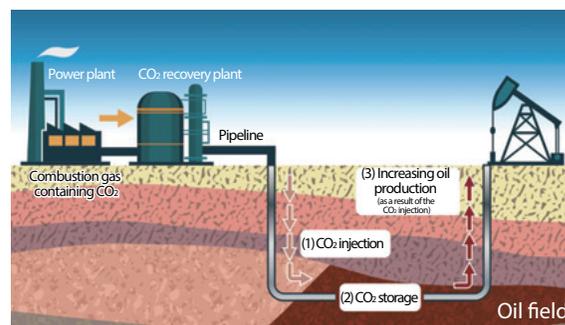
\* JX Nippon Oil & Gas Exploration holds a 25% interest in the West Ranch oil field through a 50:50 joint venture with NRG

## Implementation of Project to Increase Oil Production While Reducing CO<sub>2</sub>

JX Nippon Oil & Gas Exploration announced in July 2014 that it launched in the United States a project in which a plant would be constructed to capture carbon dioxide (CO<sub>2</sub>) in the processed flue gas from a coal-fired power generation plant and the captured CO<sub>2</sub> would be injected into an oil field to increase oil production. It is an epoch-making project that will increase oil production while concurrently reducing CO<sub>2</sub> emitted into the atmosphere from a coal-fired power generation plant.

The project is a joint venture with NRG Energy Inc. (NRG), a major independent power producer of the United States. The world’s largest plant to capture CO<sub>2</sub> from processed flue gas will be built at the W.A. Parish coal-fired power generation plant of NRG in Texas, and in order to increase oil production, captured CO<sub>2</sub> will be injected into the West Ranch oil field,\* also located in Texas, in which JX Nippon Oil & Gas Exploration holds an interest. Meanwhile, this scheme has an

### Project Concept



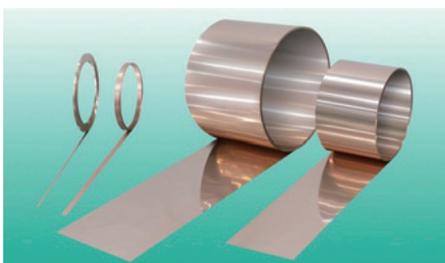
## Manufacturing and Development of Electronic Materials to Meet Market Needs

Electronic materials manufactured and sold by the electronic materials business of JX Nippon Mining & Metals are used in various electronic components for IT equipment and in-vehicle electric devices. As the demand for further miniaturization and better performance of electronic components increases with the advancement of society including popularization of the Internet of Things (IoT), the company is enhancing product development to meet to such requirements. The Functional Materials Division, in charge of the development of products such as copper foil used in circuit boards and copper alloy strips for connectors, established the Market Development Office (present Market Development Department) in 2013 to unify its marketing function which used to be carried out separately for each product. Through this reorganization, the division was able to bring its capabilities in pioneering new markets and new applications to a higher level, accelerating the development of products to meet market needs.

As a group of experts on functional materials, the Market Development Department accepts each and every request from customers so that they can be reflected in the development of products. Such activities produce a positive cycle that further enhances the ability to make proper proposals, expanding the scope of use for the JX Nippon Mining & Metals Group's electronic materials. Recently, there are increasing cases of direct requests for proposals regarding materials from the design departments of customers manufacturing IT equipment and in-vehicle electric devices. Besides utilizing the JX Nippon Mining & Metals Group's knowledge on electronic materials, it also provides precious opportunities for the Group to consider the direction of its future developments. In the future, focus will continue to be placed on developing products that widely leverage input from customers.



Treated rolled copper foil used in electronic devices



Titanium copper foil with high tensile strength

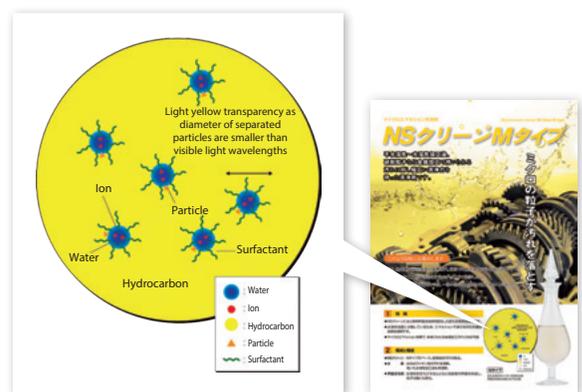
## Balancing Environmental Friendliness and Convenience in Cleaning Solvents

With rising environmental awareness and industries switching to products with less environmental impact, JX Nippon Oil & Energy developed an environmentally and workplace friendly cleaning solvent, NS Clean<sup>®</sup>, which is a highly functional hydrocarbon cleaner that does not contain ozone depleting substances (specific CFCs and trichloroethane). For over 20 years, NS Clean<sup>®</sup> has established a reputation for its high level of environmental friendliness and safety. Also, as part of the move to promote this series overseas, dedicated personnel were dispatched to Mexico in July 2015 so as to strengthen the product and service supply system.

NS Clean<sup>®</sup> M Type won the Machinery Component Award at the "Cho' Monodzukuri Innovative Parts and Components Award 2014" sponsored by the Conference for the Promotion of MONODZUKURI and Nikkan Kogyo Shimibun Ltd. The award aims to recognize the strengths of Japan's manufacturing sector and contribute to the development of the industry and society, focusing the award system on the *en no shita no chikara-mochi* (this is a proverb in Japanese meaning "it is worthy to support others behind the scene") existence of components and materials.

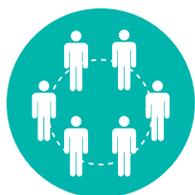
NS Clean<sup>®</sup> M Type is a micro-emulsion cleaner formulated with water and special surfactants in a hydrocarbon base. NS Clean<sup>®</sup> M Type can remove water- and oil-based contaminants, fine particle dirt and a variety of other substances at the same time. When cleaning metal components, it used to be that the user had to choose the right type of cleaner depending on the type of substance involved. Our M Type represents a breakthrough in that it can be used without having to determine the type of contaminant or sort the parts beforehand, which makes the cleaning process a lot easier. Being able to satisfy our customers' needs such as "The working oil used in the previous stage cannot be identified or narrowed down." "It would be good to be able to clean differently processed parts together." with our technological capability led to winning the award.

In fiscal 2014, JX Nippon Oil & Energy adopted the in-house company system for its specialty chemicals and materials business. This change enables us to make even faster decisions so as to respond to changes in the business environment. JX Nippon Oil & Energy continues to develop products sought after by society.



Water droplets containing ions in hydrocarbons

Water droplets and particles separated by surfactants



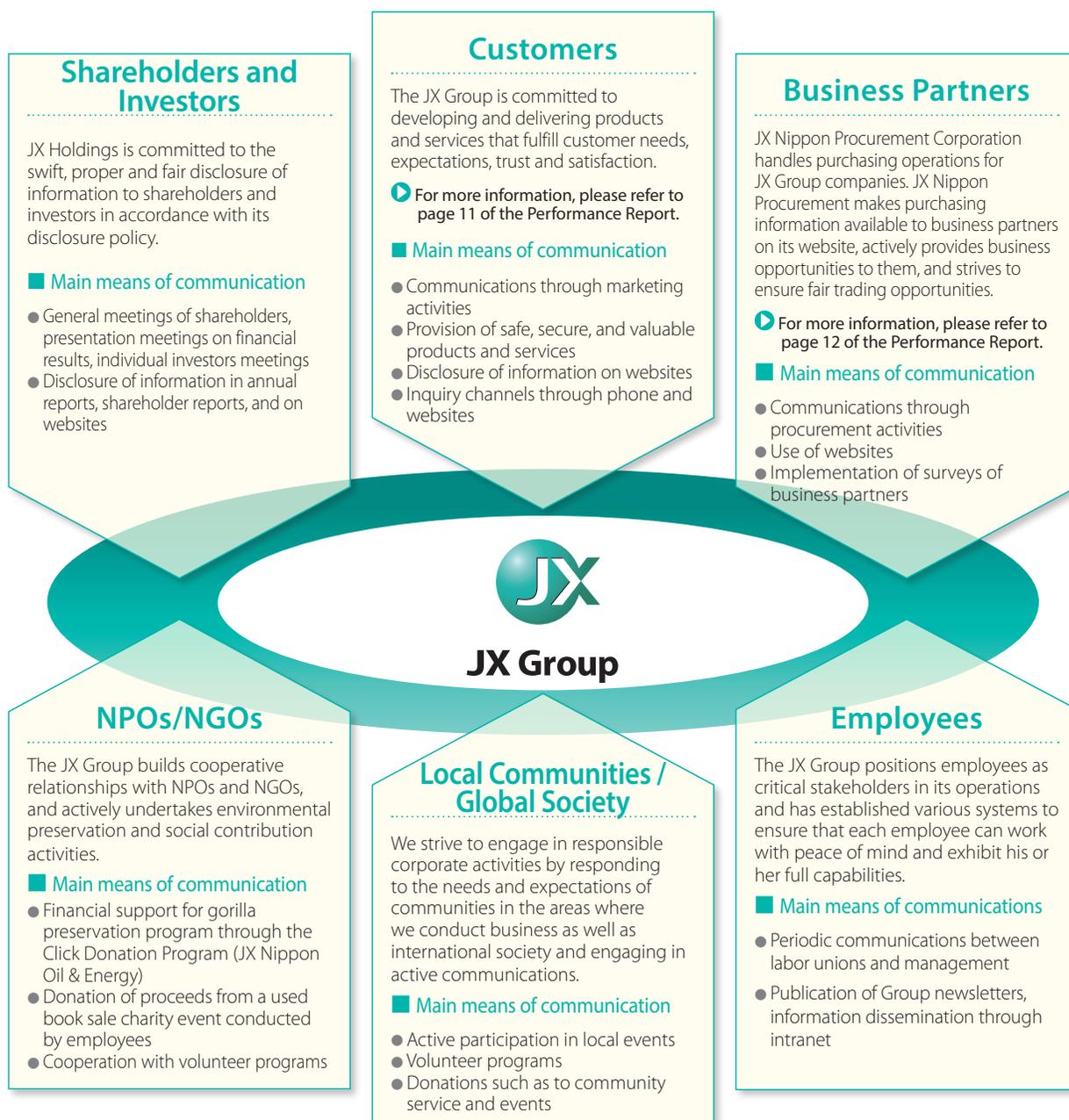
# Relationship with society

By sincerely responding to the demands of a variety of stakeholders, we seek to earn society's trust. In addition, through activities such as advancement of sports and culture, next generation development and support, and environmental protection, we aim to deepen our interaction with the local community and live in unity with society as a corporate citizen.

## Relationship with Stakeholders

### Basic Approach

The JX Group conducts business activities while maintaining relationships with a variety of stakeholders, among them shareholders, investors, customers, business partners and employees. By accurately assessing the demands of these many stakeholders, and sincerely responding to them, we seek to earn society's trust.



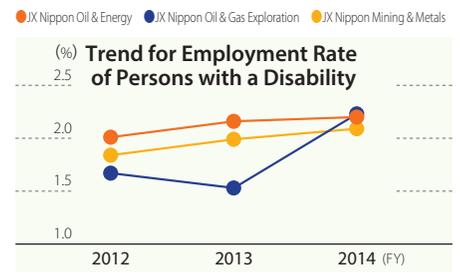
# Relationship with Employees

## Basic Approach

It is crucial for companies to incorporate the opinions of a diverse array of personnel in business activities in order to respond to societal changes and achieve sustainable development. The JX Group actively hires and deploys people in a fair manner regardless of sex, age, nationality, or disabilities in an effort to promote diversity in the workforce. Furthermore, in addition to a good workplace, employees need to lead fulfilling lives outside the workplace, including at home, and in leisure and other activities, if they are to demonstrate their respective abilities to the fullest and work energetically. Accordingly, JX Group companies have developed a range of employee support programs and also conduct awareness-raising activities designed to encourage employees to take advantage of these programs.

## Workforce Composition (non-consolidated) (as of March 31, 2015)

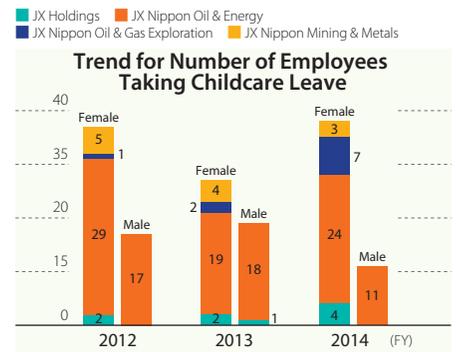
		JX Holdings	JX Nippon Oil & Energy	JX Nippon Oil & Gas Exploration	JX Nippon Mining & Metals
Total headcount		109	5,674	215	1,280
	Domestic	109	5,653	178	1,278
	Overseas	0	21	37	2
Male employees	Headcount	83	5,099	188	1,173
	Average age	45.5	42.1	42.1	41.6
	Average years of service	21.2	20.3	15.4	18.0
	Managerial staff	67	1,522	98	225
Female employees	Headcount	26	575	27	107
	Average age	39.5	41.7	39.8	37.8
	Average years of service	16.3	19.6	8.6	13.0
	Managerial staff	2	15	1	1



## Number of Recent Graduates Recruits (non-consolidated) (FY2014) and Separation Rate

	JX Holdings	JX Nippon Oil & Energy	JX Nippon Oil & Gas Exploration	JX Nippon Mining & Metals
Total headcount	—	178	7	63
Male university graduates	—	73	5	34
Female university graduates	—	19	0	6
Junior college/vocational school graduates	—	21	0	0
Senior high school and other graduates	—	65	2	23
Separation rate*1	—	2.3%	0.0%	5.7%

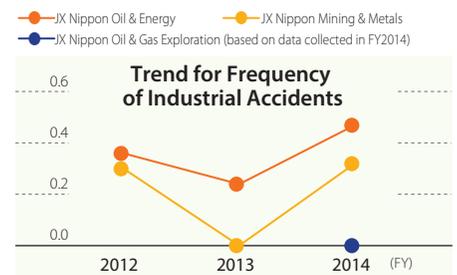
\*1 The separation rate is the percentage of recent graduates hired as new employees in fiscal 2012 who left the company within three years



## Employment Rate of Persons with a Disability, Number of Employees Re-Hired after Retirement, Usage Rate for Annual Paid Leave, and Number of Employees Taking Leave (non-consolidated) (FY2014)

	JX Holdings	JX Nippon Oil & Energy	JX Nippon Oil & Gas Exploration	JX Nippon Mining & Metals
Employment rate of persons with a disability	— *2	2.20%	2.23%	2.09%
Number of employees re-hired after retirement	— *2	320	10	16
Number of annual paid leave days granted	20.0	19.6	19.5	20.8
Number of annual paid leave days taken	12.0	15.0	12.2	14.2
Usage rate for annual paid leave	60.0%	76.7%	62.7%	68.0%
Number of employees taking nursing care leave	0	1	0	0
Number of employees taking childcare leave (incl. male employees)	4	35	7	3

\*2 "Employees" refers to those seconded from operating companies, and is accounted for at their companies of origin



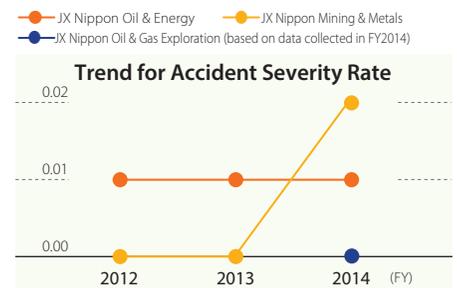
## Frequency of Industrial Accidents and Accident Severity Rate<sup>3</sup> (FY2014)

	JX Holdings	JX Nippon Oil & Energy	JX Nippon Oil & Gas Exploration	JX Nippon Mining & Metals
Frequency of industrial accidents	—	0.47	0.00	0.32
Accident severity rate	—	0.01	0.00	0.02

For JX Nippon Oil & Energy and JX Nippon Mining & Metals, the figures are for employees from offices and plants in Japan (excluding head office)

For JX Nippon Oil & Gas Exploration, the figures are for employees from offices and plants in Japan and overseas (excluding head office)

\*3 "Frequency of industrial accidents" is the number of deaths and injuries due to industrial accidents per 1 million working hours. "Accident severity rate" is the number of lost work days per 1,000 working hours.



## JX Safety Education Center\*4 Lecture Participants

	JX Holdings	JX Nippon Oil & Energy	JX Nippon Oil & Gas Exploration	JX Nippon Mining & Metals	Other*5	Total
From January 23, 2013 to March 31, 2014	4	103	4	1,537	11	1,659
FY2014 (as of March 31, 2015)	0	153	8	1,637	16	1,814
Total	4	256	12	3,174	27	3,473

\*4 Safety education center that simulates potential hazards at the workplace

\*5 Such as Group affiliated companies and cooperating companies



## Corporate Citizenship

### Basic Approach

The JX Group views CSR activities that contribute to society as an important issue and takes proactive steps in this area. The JX Group Corporate Citizenship Committee, with members drawn from across the JX Group, deliberates and reports on the Group's social contribution efforts, while sharing information on such contributions with Group companies. Under the Basic Policy for JX Group Social Contribution Activities, the JX Group collectively implements various types of initiatives, with emphasis on the three priority fields of (1) advancement of sports and culture, (2) next generation development and support, and (3) environmental protection.

## Advancement of Sports

The JX Group hosts a baseball and basketball team and conducts various sporting programs with a focus on these two sports.

The Group supports activities such as the Rakuten Eagles Youth Baseball program and the Japan Rubber Baseball Association Emperor's Cup, and the JX-ENEOS Baseball Team also conducts youth baseball classes.

For basketball, the Group sponsors the JX-ENEOS Winter Cup for high school students, and conducts 60 to 70 basketball training classes nationwide for elementary and junior high school students each year by members and alumni of the JX-ENEOS Sunflowers. The Group also supports the Japan women's national basketball team as its official sponsor.



Members of JX-ENEOS Sunflowers, with 18 wins, who won the W League (Japan) for the 7th consecutive year



Youth baseball classes around Japan



Basketball clinic (training class)

## Advancement of Culture/Next Generation Development and Support

The JX Group holds the JX-ENEOS Children's Story Award ceremony every year. We have been collecting works based on the theme "heart-to-heart contact" from the general public since 1970. JX-ENEOS Children's Story Award is presented to the authors of outstanding works from three categories: elementary school and younger, junior high school, and others. The awarded works are published as the booklet, *The Bouquet of Children's Stories*. We donate this booklet to educational institutions, child welfare and other facilities. In fiscal 2015, the 46th time that the program was conducted, 13,093 heart-warming short stories were received from the public in Japan and overseas.



*The Bouquet of Children's Stories* (volume 45)

*The Bouquet of Children's Stories* is purchased widely by the general public and dealerships that operate ENEOS service stations and LPG dealerships as well as Group company executives and employees. All proceeds go to the JX-ENEOS Children's Story Fund. We donate to the Japan National Council of Social Welfare (JNCSW) every year to aid in children's welfare. The donations are used by the JX-ENEOS Scholarship Program established by the JNCSW as a part of the scholarship support funds when children living in child welfare facilities or foster homes across Japan enter university or other higher education institutions. In fiscal 2014, scholarships were granted to 489 students.

*The Bouquet of Children's Stories* also helps to increase the absorption of carbon dioxide by forests in Japan. The paper of this booklet is made from raw materials derived from wood produced as a by-product of forest thinning in areas where the JX Group is working on reforestation. Through *The Bouquet of Children's Stories* program, the JX Group supports Kizukai Undo (Tree-Use Movement), a domestic forest preservation program promoted by Japan's Forestry Agency.



The 45th JX-ENEOS Children's Story Award ceremony

## Environmental Conservation

JX Nippon Oil & Energy is involved in forest stewardship activities at eight ENEOS Forests across Japan in partnership with local governments and the National Land Afforestation Promotion Organization. Employees and their families volunteer to take part in tree planting, thinning and bush clearing that helps to ensure the forests are maintained. In fiscal 2014, approximately 1,670 persons participated in these programs.

In addition, our personal credit card service, the ENEOS Card, has a donation program. 0.01% of the amounts charged by customers to the card at ENEOS service stations is donated to the National Land Afforestation Promotion Organization. The actual amount donated in fiscal 2014 was 46.5 million yen. This is one of the privileges of the ENEOS Card.

The Click Donation Program donated about 3 million yen in fiscal 2014 to the Japan Wildlife Conservation Society. Through activities associated with ENEGORI-KUN, it also supports the conservation of African forests in which gorillas facing extinction live.

Since 1998, JX Nippon Oil & Gas Exploration has worked to preserve the pine forest located on and around the site of its Nakajo Field Office in Niigata Prefecture. In 2014, a total of 78 executives, employees and their family members, including 12 foreign-national employees from overseas and Tokyo offices, planted approximately two thousand black pine trees in "JX Nakajo Forest" for two days.

JX Nippon Mining & Metals participated in reforestation activities at four sites of closed mines in Japan to promote the conservation of the natural environment in fiscal 2014. The company also joined Mt. Kurakake Cherry Tree Development activities in Hitachi City, Ibaraki Prefecture.



Forest stewardship activities at the ENEOS Forest



Preservation activities for the pine forest in "JX Nakajo Forest"



Mt. Kurakake Cherry Tree Development activities in Hitachi City

### Volunteer Activities for Passing on Hope for the Future

The JX Group widely recruited participants from within the Group to take part in volunteer activities to support recovery efforts in areas affected by the Great East Japan Earthquake. In fiscal 2014, the name was changed to "JX Group Volunteer Activities for Passing on Hope for the Future" and the geographic scope has been broadened beyond the earthquake affected areas to bring hope and energy to more children.

Recent activities include collaborating with NPOs in Fukushima Prefecture in an Art Renovation Project to paint the walls of hospital pediatric wards in bright colors, and the organizing of cultural events for parents and children within Tokyo. From July 2011 to the end of March 2015, a total of 34 rounds of volunteer activities were conducted with the participation of more than 1,200 employees. The Group will continue to organize activities to pass on hope for the future.

Further details concerning volunteer activities can be found on the following website:  
<http://www.hd.jx-group.co.jp/english/csr/volunteer/>



Art renovation of pediatric ward



Cultural event for parents and children



# Trustworthy products/services

In order to achieve customer satisfaction, we work to enhance the quality of products and services from the customer's perspectives, and ensure the safety and environmental friendliness of products, so as to continue to provide more reliable products and services.

## Quality Assurance, Product Safety and Customer Satisfaction

### Basic Approach

Because the JX Group is involved in a broad range of operations, each Group company practices quality control, and each company and business site has obtained ISO 9001 certification, the internationally recognized standard for quality management systems, as part of efforts to ensure quality.

JX Holdings has extensive knowledge of the quality control and product safety policies and annual targets of each company. If a product-related accident does arise, JX Holdings works together with the Group company involved to minimize damages and formulate steps to prevent recurrence, in line with crisis management rules.

**Web** Please visit the following websites for information about the quality initiatives of JX Nippon Oil & Energy and JX Nippon Mining & Metals.

JX Nippon Oil & Energy  
<http://www.noe.jx-group.co.jp/csr/social/customer/quality.html>  
 (Available only in Japanese)

JX Nippon Mining & Metals  
<http://www.nmm.jx-group.co.jp/company/guidelines/quality.html>  
 (Available only in Japanese)

## Trustworthy Products/Services

### Basic Approach

With customer's demands toward products and services growing more diverse, the JX Group is striving to provide new products and services that are trustworthy and that fulfill the needs of customers.

## "Testing and Analysis Group at R&D Solution Center" Responsible for Quality Management

JX Nippon Oil & Energy's "Testing & Analysis Group at R&D Solution Center" belonging to the Central Technical Research Laboratory works on quality enhancement of petroleum products through defining testing methods to enhancing analysis technique for the quality management of fuels,

lubricants, chemical products, etc.

Not only does the group perform the testing and analysis of new products and materials developed in the laboratory, but it also handles a wide range of testing requirements from selling sites to refineries or plants. The measured data is checked carefully by the three persons to ensure the accuracy of tasting results. Furthermore, automation of testing and analysis are being promoted.

In recent years, demands from overseas plants for testing of petroleum products have also been rising, and the Testing & Analysis Group is also responsible for considering the installation of testing equipment meeting local needs, and providing guidance on testing and analysis methods. Using knowledge developed over the years, the group supports reliable product development as the center of JX Nippon Oil & Energy Group's quality management both in Japan and overseas.

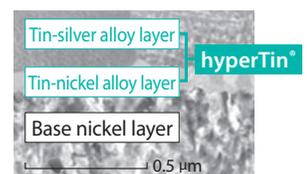


Testing and analysis

## Development of New Plating Technology "hyperTin®"

JX Nippon Mining & Metals has developed hyperTin®, a new post-plating\* technology that achieves lower friction than conventional tin plating, greatly reducing the force needed for connector insertion.

hyperTin® is one of the plating technologies applied to strips or foils after stamping and it eliminates the pure tin layer that was a cause of the increased insertion force found in connectors having growing number of pins, reducing insertion force to around 36% of that required previously. The lack of a pure tin surface layer eliminates the risk of shorting caused by formation of tin "whiskers" (whisker-shaped single crystals) that is an issue with conventional tin plating. Taking advantage of this feature makes it applicable to connectors with narrower pitch than are possible with conventional tin plating. Thanks to the excellent electrical characteristics and solderability of hyperTin®, which maintains its contact resistance in high-temperature environments, it can replace precious metal (gold and silver) plating that has conventionally been used for certain portions of connectors, leading to significant cost savings.



\* Plating applied to strips or foils after stamping

Cross-sectional structure of hyperTin®

## Purchasing

### Basic Approach

Procurement sources are growing increasingly diverse in step with economic globalization. The practice of compliance and consideration for the environment and human rights on the supplier side are required aspects of responsible supply chain management and are important aspects of establishing trust in our products and services.

JX Nippon Procurement Corporation plays a central role in procurement for the JX Group, strives to conduct in transparent and fair transactions, and conducts purchasing with consideration for the environment. We seek to achieve mutually beneficial development by enhancing communications with suppliers and building partnerships based on mutual trust.

### Basic Policy on Procurement

The JX Group implements procurement operations in accordance with the JX Group Values.

### Ethics

- We will abide by relevant laws and social norms as well as respect and operate in accordance to the spirit of both.
- The selection of suppliers will be performed based on a fair assessment of their compliance with laws and social norms, consideration for the environment, quality, price, delivery and performance.
- We will maintain an appropriate and highly ethical relationship with suppliers.

### Advanced ideas

- We will always create and innovate using new ideas and strive to employ new products and services

### Relationship with society

- We will pursue stronger communication with suppliers and strive to make contributions to society based on relationships of mutual trust.

### Trustworthy products/services

- Each JX Group company will provide trust and satisfaction based on activities that are highly accurate, prompt and transparent.

### Harmony with the environment

- We will strive to create a sustainable society by encouraging the procurement of materials, equipment and services that have lower environmental impacts

## Supplier Survey

JX Nippon Oil & Energy and JX Nippon Mining & Metals also conduct a supplier survey to complement their procurement of environmentally friendly products, materials and services in accordance with the Basic Policy on Procurement.

JX Nippon Oil & Energy conduct supplier surveys that include questions on green purchasing. As a result of vigorous efforts targeting suppliers since fiscal 2011, the percentage of suppliers adopting green practices (percentage of suppliers meeting the company's green standards) improved in fiscal 2014 to 32%, reaching 84% in four years.

JX Nippon Mining & Metals has drawn up the Green Purchasing Policy together with the Green Purchasing Guideline based on this policy. It also conducts green purchasing surveys targeted at its main suppliers. In fiscal 2014, 542 suppliers that accounted for 95% of the value of items purchased were targeted and responses were received from 490 suppliers for a response rate of 90.4%. The results may be reflected in the reconsideration of suppliers as necessary.

### ■ Third-Party Guarantee for Non-Conflict Minerals

JX Nippon Mining & Metals has defined in its Basic Purchasing Policy that it will not engage in raw materials procurement that contributes to illegal activities in conflict-affected regions or to human rights. The company and Group company Pan Pacific Copper Co., Ltd. (PPC) are establishing a management system for their raw material supply chain.

The implementation status is reported to the London Bullion Market Association (LBMA)\* after undergoing an external audit by a third party agency designated by the LBMA. Through this process, the gold bullion produced at PPC's Saganoseki Smelter & Refinery is maintained in the LBMA's Good Delivery List, guaranteeing its high quality and reliability.

\* An association composed of financial institutions that deal in gold bullion and other organizations



Accreditation certificate from the LBMA



JX Nippon Procurement Corporation is in charge of procurement operations for materials.  
<http://www.pr.jx-group.co.jp/> (Available only in Japanese)

# Harmony with the environment

As a group that is deeply involved in global resources, we work together to create technologies and services that will be useful for the development of a better global environment, and at the same time actively and continuously taking measures to effectively use energy, resources, and materials and to preserve the environment.

## Environment

### Basic Approach

“Harmony with the environment” is one component of the JX Group Values. Accordingly, environmental preservation is a vital theme in the Group’s CSR activities.

Through environmental preservation actions enabled by operation of an Environmental Management System (EMS), coupled with deliberation and reporting on the Group environmental safety by the JX Group Environment & Safety Committee, the JX Group manages progress on the Medium-Term Environmental Management Plan by the Group.

### JX Group Environmental Policy

The JX Group will

1. Develop the technologies, products and services that help to create a better global environment.
2. Work diligently to prevent global warming and be mindful of preserving biodiversity.
3. Constantly strive to reduce environmental impact in all business activities.
4. Strive for strict compliance with environmental laws and ordinances, based on the highest ethical values.

## Compliance with Environmental Laws and Regulations

For the JX Group, compliance with environmental laws and regulations, being a major premise for our business activities, is taken as a very important issue, and we also strive for thoroughness in compliance checks and environmental education.

In fiscal 2014, JX Holdings and core subsidiary groups conducted compliance checks, and in cases where non-compliance was found, appropriate actions for reporting, responding and preventing of future occurrence were taken.

### Environmental Conservation Activities at Mines and Closed Mines

The JX Nippon Mining & Metals Group actively promotes conservation activities for forests and wildlife at sites of mines and closed mines in Japan and overseas.

At Caserones Copper Mine in Chile, 0.87 km<sup>2</sup> affected by the development work has been designated as a protected area, to protect the animals and plants inhabiting the area. “If trees are cut in a certain area, planting must be done for an area 1.6 times larger than the reduced forest area,” and “If any protected plant is cut out of necessity, 10 times the number of the same type of plant must be planted” were also set as regulations within the protected area. Under expert guidance, plants in a wetland plant zone spanning 9,400 m<sup>2</sup> of the Caserones Valley were wholly transplanted to the La Ollita valley, the nearest place with an appropriate

habitat. A subsequent survey confirmed that the vega plant, a protected plant, has rooted safely at the transplanted site.

In Japan, reforestation activities are regularly conducted centered on the sites of closed mines, striving to maintain biodiversity and enhance the natural environment. In fiscal 2014, following fiscal 2013, conservation activities such as planting and weeding were carried out at four closed mine sites, namely Takatama, Oe, Toyoha, and Kameda.



## JX Group Medium-Term Environmental Management Plan

The JX Group has set three Group targets based on its environmental policy, and continues to work together as a Group to achieve them.

### Group Targets in the JX Group Medium-Term Environmental Management Plan (FY2013–2015)

1  
Global warming prevention  
and biodiversity  
preservation measures

2  
Environmental load  
mitigation

3  
Enhancement of environment  
management system

Note: The exact content and targets differ according to each company's characteristics

### Results and Evaluation of the JX Group Medium-Term Environmental Management Plan (FY2013–2015)

#### Energy Business (JX Nippon Oil & Energy Group)

Activities	Reduction of CO <sub>2</sub> emissions	Soil contamination countermeasures	Waste reduction
Targets	Reduce by 1.1 million tons in FY2013 compared with FY2009 Reduce by 1.25 million tons in FY2014 compared with FY2009 Reduce by 2.1 million tons in FY2015 compared with FY2009	Operating properties: Prevent external leakage Decommissioned properties: Conduct deliberate surveys and treatment measures	Waste-to-landfill ratio: Less than 0.5%
FY2013 results and evaluation	Reduced by 0.78 million tons compared with FY2009 (Target not achieved)	Soil surveys implemented: 145 sites Treatment measures: 85 sites (Target achieved)	0.29% (Target achieved)
FY2014 results and evaluation	Reduced by 0.80 million tons compared with FY2009 (Target not achieved)*	Soil surveys implemented: 153 sites Treatment measures: 80 sites (Target achieved)	0.21% (Target achieved)
Planned measures for FY2015	Reduce by 2.1 million tons compared with FY2009	Implementation of continuous improvements	Waste-to-landfill ratio: Maintain at less than 0.5%

\* Due to lower efficiency from reduced production, etc.

#### Oil and Gas Exploration and Production Business (JX Nippon Oil & Gas Exploration Group)

Activities	Reduction of energy consumption	Management of final waste disposal volume and oil content in produced water disposed to the sea	Maintenance and management of environmental management systems
Targets	Reduce by 1% in FY2013 compared with FY2012 Reduce by 2% in FY2014 compared with FY2012 Reduce by 3% in FY2015 compared with FY2012	Monitor volumes, including at overseas sites (Vietnam, Malaysia)	Appropriately manage the HSE Committee, and maintain the environmental management system throughout the JX Nippon Oil & Gas Exploration Group
FY2013 results and evaluation	Reduced by 1.4% compared with FY2012 (Target achieved)	Implemented (Target achieved)	Held 3 HSE Committee meetings, etc. (Target achieved)
FY2014 results and evaluation	Reduced by 3.9% compared with FY2012 (Target achieved)	Implemented (Target achieved)	Held 3 HSE Committee meetings, etc. (Target achieved)
Planned measures for FY2015	Reduce by 3% compared with FY2012	Continuous implementation	Continuous implementation

#### Metals Business (JX Nippon Mining & Metals Group)

Activities	Specific energy consumption reduction	Reduction of CO <sub>2</sub> emissions	Waste reduction
Targets	Reduce by 1% in FY2013 compared with FY2012 Reduce by 1% in FY2014 compared with FY2013 Reduce by 1% in FY2015 compared with FY2014 More than half the evaluated sites must achieve the target	FY2013: 1.08 million tons FY2013–2014: 2.14 million tons cumulative FY2013–2015: 3.17 million tons cumulative	Non-application waste ratio: Less than 0.7%
FY2013 results and evaluation	Of all subject sites, 43% achieved targets (Target not achieved)	0.84 million tons (Target achieved)	Non-application waste ratio: 0.6% (Target achieved)
FY2014 results and evaluation	Of all subject sites, 61% achieved targets (Target achieved)	1.67 million tons (Target achieved)	Non-application waste ratio: 0.6% (Target achieved)
Planned measures for FY2015	More than half the evaluated sites achieve the target	Continuous implementation	Continuous implementation



## Environmental Performance

### Basic Approaches

The environmental performance data on pages 15 to 16 covers a total of 55 business sites at 30 companies engaged in the Energy Business, the Oil and Gas Exploration and Production Business, the Metals Business, and Other Businesses.

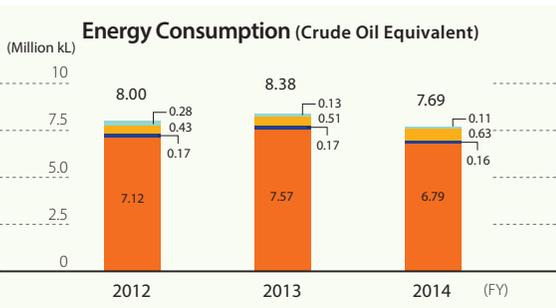
- Energy Business: 20 sites at 11 companies
- Oil and Gas Exploration and Production Business: 3 sites at 1 company
- Metals Business: 28 sites at 16 companies
- Other Businesses: 4 sites at 2 companies

For the energy business, we recorded data only for business sites involved in petroleum product refining and production (data from fiscal 2013 onwards, including depots). Some sites included in the other business segment in fiscal 2012 were included in the metal business segment from fiscal 2013 onwards. Some figures from past fiscal years were revised.

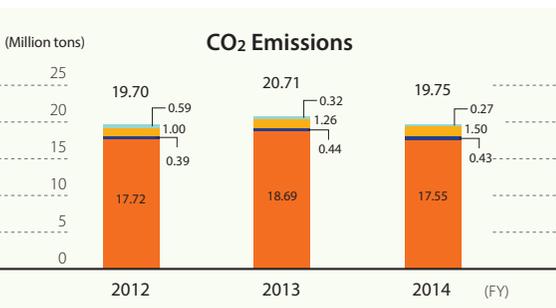
### Initiatives to Prevent Global Warming

Energy consumption in fiscal 2014 (crude oil equivalent) for the entire JX Group was 7.69 million kL, marking a 0.69 million kL decrease. CO<sub>2</sub> emissions for the JX Group in fiscal 2014 totaled 19.75 million tons, a year-on-year decrease of 0.96 million tons.

■ Energy Business ■ Oil and Gas Exploration and Production Business ■ Metals Business ■ Other Businesses



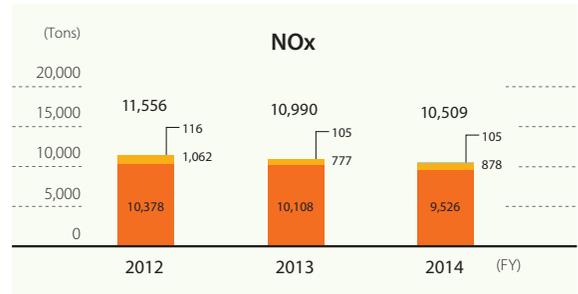
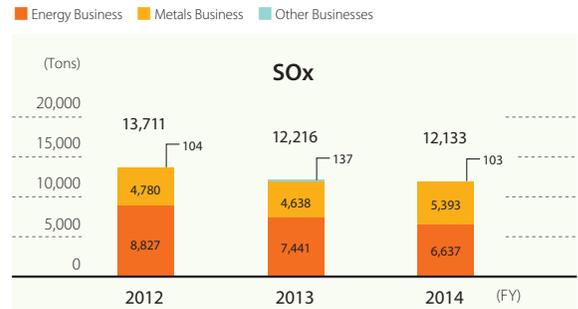
■ Energy Business ■ Oil and Gas Exploration and Production Business ■ Metals Business ■ Other Businesses



Note: CO<sub>2</sub> emissions include emissions from energy consumption (electricity, fuel, etc.) as well as greenhouse gases emitted mainly in oil and gas production converted to CO<sub>2</sub>

### Initiatives to Prevent Air Pollution

In line with laws, ordinances, accords and voluntary standards to prevent air pollution, the JX Group closely monitors gases emitted into the atmosphere by its facilities. In fiscal 2014, the JX Group reduced emissions of sulfur oxides (SO<sub>x</sub>) by 83 tons and of nitrogen oxides (NO<sub>x</sub>) by 481 tons.



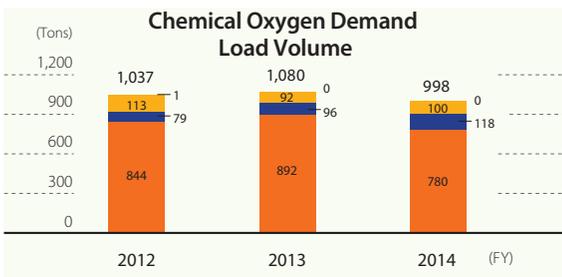
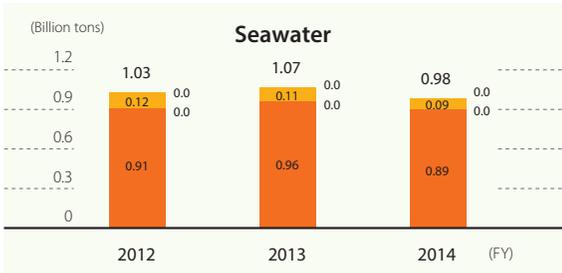
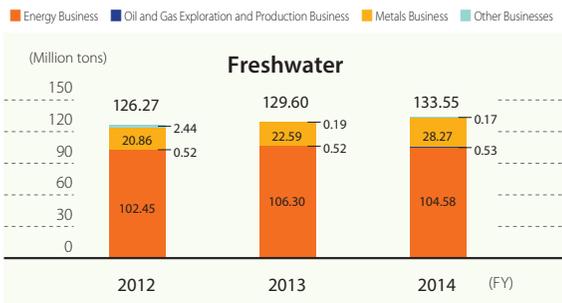
Note: Not applicable for the Oil and Gas Exploration and Production Business. Figures for NIPPO CORPORATION in Other Businesses were estimated by its 50 main plants.

### Initiatives for Protecting Water Resources

As one of its resource conservation measures, the JX Group firmly manages its use of water resources and monitors wastewater produced by its facilities in line with laws, ordinances, accords and voluntary standards, in an effort to reduce its environmental impact.

In fiscal 2014, the JX Group used a total of 133.55 million tons of water (freshwater resources), an increase of 3.95 million tons. The JX Group also used 980 million tons of seawater, a decrease of 90 million tons.

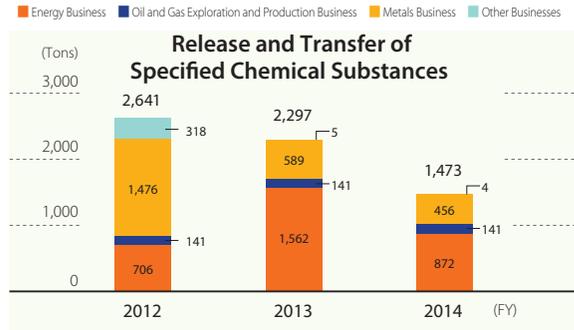
The JX Group's chemical oxygen demand (COD) load volume in fiscal 2014, an indicator of water pollution levels, decreased 82 tons year-on-year to 998 tons.



Note: Figures for overseas offices and plants (Malaysia and Vietnam) are not applicable in the figure for the Oil and Gas Exploration and Production Business

## Initiatives for Management of Chemical Substances

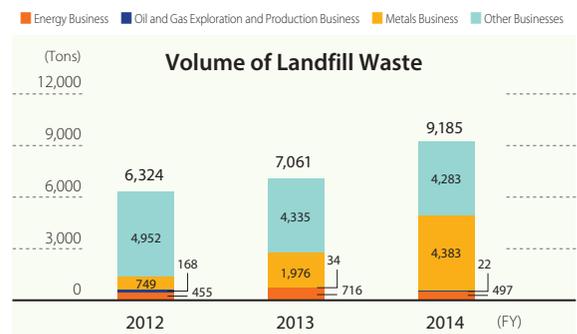
The JX Group conducts proper management of specified chemical substances stipulated under the Pollutant Release and Transfer Register (PRTR) Law and also strives to reduce chemical emission levels. In fiscal 2014, the JX Group's release and transfer of specified chemical substances totaled 1,473 tons, a decrease of 824 tons.



Note: Figures for overseas offices and plants (Malaysia and Vietnam) are not applicable in the figure for the Oil and Gas Exploration and Production Business

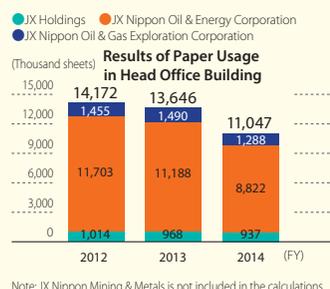
## Initiatives to Reduce Waste

In fiscal 2014, the JX Group's final waste disposal volume totaled 9,185 tons, an increase of 2,124 tons. The main reason for the increase was the inclusion of figures from Caserones Copper Mine for JX Nippon Mining & Metals from July onwards in fiscal 2014. (Caserones Copper Mine commenced production in fiscal 2014.)



## Reducing Environmental Impact in the Office

Beginning with switching off lights during lunchtime and in unoccupied areas, the JX Group actively strives towards energy saving in the immediate surroundings, such as switching off unused appliances, revision of air conditioning temperature settings, waste sorting, and the reduction of paper waste. Especially in head office building, as part of going paperless, efforts are made to contribute to reducing environmental impact such as raising awareness for paper usage reduction and promoting paperless meetings.



Paperless meeting using personal computers and tablets

# JX Group Management

## Corporate Governance

The basic approach to corporate governance within the JX Group is to make decisions and execute operational activities quickly and flexibly to implement growth strategies for the JX Group as a whole and make appropriate responses to changes in the business environment. In addition, the JX Group endeavors to secure the soundness and transparency of its management to respond to the trust of all its stakeholders.

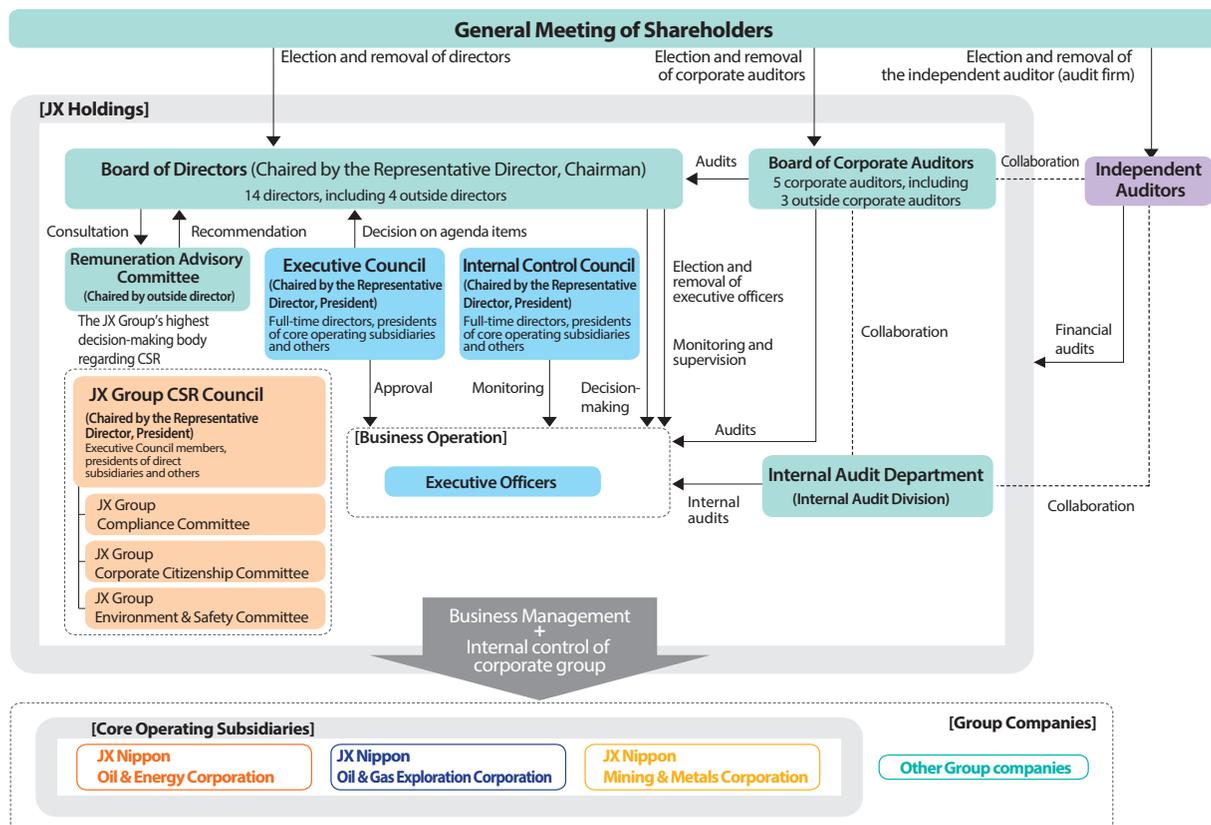
Guided by this basic policy, JX Holdings, as the ultimate holding company of the JX Group, focuses especially on formulating medium- to long-term strategies for the JX Group and strategically allocating management resources and conducting risk management to implement these strategies. Under JX Holdings, its three core operating subsidiaries wholly owned by it have been positioned to be responsible for each of the Group's three core businesses, namely the Energy Business, the Oil and Natural Gas Exploration and Production Business, and the Metals Business.

In addition, JX Holdings' corporate governance structure is characterized by the following features:

1. Directors are elected for a term of one year and must stand for election each year at the General Meeting of Shareholders.
2. Outside directors with management insight and extensive experience, are appointed to strengthen the supervisory function over the management from an objective perspective.
3. In addition to full-time directors and outside directors, the presidents and certain other senior management

4. The majority of corporate auditors consist of outside corporate auditors appointed on the basis of management insight and extensive experience. This structure ensures the effectiveness of audits of directors' performance of management duties by the Board of Corporate Auditors.
5. The Remuneration Advisory Committee comprising two outside directors and two representative directors has been formed as an advisory body to the Board of Directors, in order to ensure the transparency and objectivity of the decision-making processes related to remuneration of directors and executive officers.
6. The Executive Council has been formed as a body to discuss matters that require the approval of the president and other important issues with respect to the execution of the president's duties based on authority handed down from the Board of Directors. This council is composed of full-time directors, the presidents and certain senior management member(s) of the core operating subsidiaries. The Executive Council helps to ensure appropriate and efficient decision making by the president.
7. The Internal Control Council has been established as an advisory body to the president to ensure appropriate execution of operation. This council, which consists of the same members as the Executive Council, monitors, confirms and reviews the appropriateness of business operation status as an autonomous self-control system.

## JX Group Corporate Governance Framework



## Development of Internal Control System

Based on the JX Group Mission Statement and the JX Group Values, JX Holdings has established and implements its internal control system to ensure appropriate execution of operation in line with the following Basic Policy.

### Basic Policy for the Establishment and Operation of Internal Control System

<b>1. System to ensure that execution of the duties by the directors and the employees complies with laws and regulations, and the Articles of Incorporation</b>
<ul style="list-style-type: none"> <li>(1) Develop and implement various rules and ensure compliance with laws and regulations, the Articles of Incorporation, and various other rules.</li> <li>(2) Establish and operate the JX Group Compliance Committee, implement the compliance status checks, and address the results.</li> <li>(3) Develop and implement an internal whistle-blowing system.</li> <li>(4) Hold the Board of Directors' meetings on a monthly basis and conduct adequate discussion and reporting, based on Rules for the Board of Directors.</li> <li>(5) Ensure objectivity and improve appropriateness through the appointment of outside directors and outside corporate auditors.</li> <li>(6) Establish the Internal Audit Department independent of other divisions and conduct internal audits.</li> <li>(7) Develop and implement an internal control system for the Financial Instruments and Exchange Act.</li> <li>(8) Develop and implement rules to prevent relationships with anti-social forces and ensure thorough compliance with such rules.</li> </ul>
<b>2. System for the storage and management of information related to execution of duties by the directors and the employees</b>
<ul style="list-style-type: none"> <li>(1) Develop and implement rules concerning documents.</li> <li>(2) Prepare minutes of the Board of Directors' meetings, and develop rules for preparing other documents related to decision-making, and ensure their appropriate implementation.</li> <li>(3) Develop and implement rules regarding information security, and ensure thorough compliance with such rules through training and other programs.</li> <li>(4) Provide proper external disclosure of information, including timely disclosure.</li> </ul>
<b>3. Rules and other systems for management of risk of loss</b>
<ul style="list-style-type: none"> <li>(1) Analyze risks and clarify policy for handling them in the Board of Directors' meetings and the Executive Council.</li> <li>(2) Develop and implement a system and rules for handling large fluctuations in economic conditions, resource prices and foreign currency exchange rates, along with natural disasters and other risks.</li> <li>(3) Develop and implement a system and rules for handling crises and emergency situations.</li> </ul>
<b>4. System to ensure efficient execution of duties by directors and the employees</b>
<ul style="list-style-type: none"> <li>(1) Establish and implement Rules on Organization and Authority, and efficiently execute duties.</li> <li>(2) Ensure appropriate and efficient approval by the president through discussions in the Executive Council before making decisions in the Board of Directors' meetings.</li> <li>(3) Formulate the Medium-Term Management Plan, and develop and implement a management system.</li> </ul>
<b>5. System to ensure appropriate business operation within the corporate group</b>
<ul style="list-style-type: none"> <li>(1) Ensure penetration and thoroughness of the JX Group Mission Statement and the JX Group Values.</li> <li>(2) Ensure presidents of core operating subsidiaries and others attend meetings of the Board of Directors and the Executive Council.</li> <li>(3) Discuss important Group companies' business execution projects in the Board of Directors' meetings and the Executive Council of JX Holdings for decision-making, approval and reporting.</li> <li>(4) Formulate and implement JX Group Operation Regulation and ensure thorough compliance with the rules.</li> <li>(5) Establish and implement compliance systems and extend to Group companies.</li> <li>(6) Establish and implement an appropriate internal control system for Group companies.</li> </ul>
<b>6. System to ensure effective auditing by the corporate auditors</b>
<ul style="list-style-type: none"> <li>(1) Ensure respect for audit standards and audit plans, along with cooperation on the efficient execution of audits and the development of an audit environment.</li> <li>(2) Ensure the corporate auditors attend meetings of the Executive Council and other meetings, and establish and implement an appropriate system for the Company and Group companies to report to the corporate auditors.</li> <li>(3) Establish and implement a system for promptly reporting to corporate auditors regarding the discovery of material breaches of laws and regulations and the Articles of Incorporation, and any discovery of misconduct, within the Company or Group companies.</li> <li>(4) Establish and implement a system to prevent the detrimental treatment of whistleblowers.</li> <li>(5) Ensure the corporate auditors and management personnel exchange opinions regarding the Group's management issues and other matters.</li> <li>(6) Ensure close collaboration between the corporate auditors and the Internal Audit Department.</li> <li>(7) Establish the Auditors Affairs Office independent of divisions responsible for business execution, and ensure the effectiveness of corporate auditors' findings on employees.</li> <li>(8) Bearing of cost and liabilities incurred in the course of execution of duties by corporate auditors.</li> </ul>

## Risk Management

In the JX Group, each company has prepared risk management systems appropriate for its respective lines of business and implements measures in accordance with such individual risk related to compliance and occupational safety, environment, and other.

### ● Crisis Management

When crises or emergency situations arise that may significantly affect the management of the JX Group, JX Holdings exercises overall control and has prepared its Rules for Responding to Crises and Emergency Situations, which specifies measures to be taken to minimize the damage that may occur.

The General Administration Department of JX Holdings functions as the standing organizational unit in charge of crisis and emergency response and management, and the general manager of this department acts as head of this crisis response unit, and, when such situations arise, operating procedures require that the situation and measures taken be reported immediately to the head of the crisis response unit.

Also, depending on the magnitude of the crisis or emergency, at its discretion, JX Holdings may form a crisis response headquarters or a joint crisis response headquarters with JX Group companies to respond quickly and appropriately to the crisis.

### ● Information Security Management

Based on its Basic Rules for Information Security, the JX Group works to prevent the improper usage or disclosure, and leakage, of company information, which is a corporate asset. The JX Group also makes it possible for authorized users of corporate information to have constant access to such information as necessary by making efforts to maintain the accuracy and reliability of its corporate information and to prevent falsification or erroneous handling.

## Information Disclosure

### ● Disclosure Policy

JX Holdings is fully aware that the timely and proper disclosure of corporate information is a core issue of healthy capital markets and, to promote transparency in management, works to provide prompt, appropriate, and fair disclosure of information to shareholders and investors.

Systems have been prepared to obtain, manage, and disclose information on JX Holdings as well as information on JX Group companies quickly and accurately. Information that is subject to Timely Disclosure Rules is made public through the timely disclosure information browsing service (TDnet) provided by the Tokyo Stock Exchange and others, and the same information is made available on JX Holdings' website.

# Independent Practitioner's Assurance Report



デロイト トーマツ

(TRANSLATION)



## Independent Practitioner's Assurance Report

September 25, 2015

Mr. Yukio Uchida,  
Representative Director, President,  
JX Holdings, Inc.

Hiroshi Inanaga  
Chief Executive Officer  
Deloitte Tohatsu Evaluation and Certification Organization Co., Ltd.  
3-3-1, Marunouchi, Chiyoda-ku, Tokyo

We have undertaken a limited assurance engagement of the quantitative environmental information (the "quantitative environmental information") for the year ended March 31, 2015 included in P.13-16 of the "JX Report for a Sustainable Future 2015 Performance Report" (the "Report") of JX Holdings, Inc. (the "Company").

### The Company's Responsibility

The Company is responsible for the preparation of the quantitative environmental information in accordance with the calculation and reporting standard adopted by the Company (the Report P.1 and P.13-16). Greenhouse gas quantification is subject to inherent uncertainty for reasons such as incomplete scientific knowledge used to determine emissions factors and numerical data needed to combine emissions of different gases.

### Our Independence and Quality Control

We have complied with the independence and other ethical requirements of the Code of Ethics for Professional Accountants issued by the International Ethics Standards Board for Accountants, which is founded on fundamental principles of integrity, objectivity, professional competence and due care, confidentiality and professional behavior. We apply International Standard on Quality Control 1, *Quality Control for Firms that Perform Audits and Reviews of Financial Statements, and Other Assurance and Related Services Engagements*, and accordingly maintain a comprehensive system of quality control including documented policies and procedures regarding compliance with ethical requirements, professional standards and applicable legal and regulatory requirements.

### Our Responsibility

Our responsibility is to express a limited assurance conclusion on the quantitative environmental information based on the procedures we have performed and the evidence we have obtained. We conducted our limited assurance engagement in accordance with the International Standard on Assurance Engagements ("ISAE") 3000, *Assurance Engagements Other than Audits or Reviews of Historical Financial Information*, issued by the International Auditing and Assurance Standards Board ("IAASB"), ISAE 3410, *Assurance Engagements on Greenhouse Gas Statements*, issued by the IAASB and *the Proposed Environmental Report Review Standard*, issued by the Japanese Ministry of Environment.

The procedures we performed were based on our professional judgment and included inquiries, observation of processes performed, inspection of documents, analytical procedures, evaluating the appropriateness of quantification methods and reporting policies, and agreeing or reconciling with underlying records. These procedures also included the following:

- Evaluating whether the Company's methods for estimates are appropriate and had been consistently applied. However, our procedures did not include testing the data on which the estimates are based or reperforming the estimates.
- Undertaking site visits to assess the completeness of the data, data collection methods, source data and relevant assumptions applicable to the sites.

The procedures performed in a limited assurance engagement vary in nature and timing from, and are less in extent than for, a reasonable assurance engagement. Consequently, the level of assurance obtained in a limited assurance engagement is substantially lower than the assurance that would have been obtained had we performed a reasonable assurance engagement.

### Limited Assurance Conclusion

Based on the procedures we have performed and the evidence we have obtained, nothing has come to our attention that causes us to believe that the Company's quantitative environmental information is not prepared, in all material respects, in accordance with the calculation and reporting standard adopted by the Company.

The above represents a translation, for convenience only, of the original Independent Practitioner's Assurance report issued in the Japanese language.

Member of  
Deloitte Touche Tohmatsu Limited



This report was printed using an environmentally friendly waterless printing process and vegetable oil ink. In support of the Kizukai Undo (Tree-Use Movement) promoted by Japan's Forestry Agency, JX Holdings has printed this report on "3.9 paper," made from wood produced through forest thinning in areas where the JX Group is engaged in forest maintenance. This contributes to increased absorption of CO<sub>2</sub> by Japanese forests.