JX Report for a Sustainable Future 2011







































The Future of Energy, Resources and Materials















JX Holdings, Inc.



The JX Group is now in its second year, after being formed in April 2010.

Under our mission statement, the JX Group aims to develop in the fields of energy, resources and materials. Guided by the slogan of "The Future of Energy, Resources and Materials," the JX Group is determined to open up the future.

JX Group Mission Statement

JX Group Slogan

The Future of Energy, Resources and Materials

JX Group Mission Statement

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 a 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.



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Editorial Policy

The JX Group has prepared this report to communicate the results of its first year in existence in order to be accountable with respect to CSR to shareholders and other investors, customers, employees and local communities while deepening communication and fulfilling stakeholders' expectations in this regard.

The report is structured in a similar way to the previous fiscal year's report; it is based around the JX Group's Mission Statement and Group values. The feature section, "JX Snapshot 2011," reports on the impact of the Great East Japan Earthquake on the JX Group and the Group's response. At the same time, the feature is structured and designed to facilitate understanding of how the JX Group is working to realize the JX Group Mission Statement and to help solve social issues. The "JX Group Values" section reports on results in fiscal 2010 in accordance with the five values (EARTH) of the Group, providing more information than the previous year.

Furthermore, various JX Group companies, including JX Holdings, Inc. and the three core operating companies, disclose a variety of CSR-related information on their websites. Information on these websites is summarized on page 52 for easier access.

Forward-looking Statements

This report contains forward-looking statements that are not historical facts, and that reflect management's judgment as of the time of preparation. Please note that actual results may vary significantly from such projections and forecasts due to various known and unforeseeable risks and uncertainties. JX Holdings cannot guarantee the accuracy of the targets, assumptions, expectations, projections, plans and evaluations and other similar information contained in forward-looking statements, or that they will be realized without qualification in the future.

Scope of Report

JX Holdings, Inc. and its 10 main Group companies.

JX Nippon Oil & Energy Corporation and

its 24 main Group companies.

JX Nippon Oil & Gas Exploration Corporation and

its 25 main Group companies.

JX Nippon Mining & Metals Corporation and

its 51 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 2010 to March 2011. However, some information from April 2011 onwards is also included, as necessary.

Guidelines Used as Reference

- Sustainability Reporting Guidelines, Version 3.0, GRI (Global Reporting Initiative)
- Environmental Reporting Guidelines (2007 Edition), Ministry of the Environment, Japan.
- The GRI Mining and Metals Sector Supplement

Enhancing Reporting Reliability

Environmental performance information on pages 45–51 has been reviewed by an independent body to ensure objective and reliable reporting.

Management Message



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

Effects and aftermath of the Great East Japan Earthquake

On behalf of the JX Group, we would like to offer our sympathies to those whose lives have been forever changed by the Great East Japan Earthquake, as well as our hopes for a swift recovery in the affected region.

As many of you are aware, the JX Group sustained heavy damage to a refinery and other production and sales facilities in the disaster. Despite these challenges, in the wake of the March 2011 catastrophe, we made every possible effort to supply petroleum products to the hardest-hit region, instituting emergency measures in every business field to immediately fulfill our responsibilities around the stable supply of energy and materials.

The recent disaster has underscored yet again the importance of energy, and triggered stronger calls for more assertive steps than ever before to diversify energy sources. In addition to the continued and stable supply of petroleum products, the JX Group will do its very best to build a much more robust presence in new energy businesses as well.

Determined to become one of the largest integrated energy, resources and materials business groups in the world.

We are already entering the second year since the creation of the JX Group from the merger of Nippon Oil Corporation and Nippon Mining Holdings, Inc. During that time, our three core operating companies JX Nippon Oil & Energy Corporation, JX Nippon Oil & Gas Exploration Corporation, and JX Nippon Mining & Metals Corporation, as well as other Group companies and businesses, have gotten off to a smooth start post-integration. Not only has the Group coalesced internally faster than initially expected, but there is a clear sense that synergies from the integration itself have begun to emerge.

These positives notwithstanding, the JX Group is confronting structural changes in its business environment today, creating a situation that still requires vigilance on our part. The spread of fuel-efficient vehicles, an ongoing switch to the low carbon types of energy consumed and other changes are eroding demand for petroleum products in Japan. At the same time, growing awareness of the urgent need to address global environmental

problems, as well as progress in the movement to develop lowcarbon, recycling-oriented societies in advanced nations, have emerged as critically important considerations in shaping the trajectory of JX Group businesses.

Given this business environment, in May 2010, we announced our Long-Term Vision for fiscal 2020. In it, in addition to taking steps to transform existing operations into world-class businesses, we are seeking to establish profitability in new energy businesses to groom them into new JX Group operations.

At the JX Group, all Group employees are united in a singular determination to become one of the largest integrated energy, resources and materials business groups in the world, with operations in Petroleum Refining and Marketing, Oil and Gas Exploration and Production, Metals, and of course, New Energy.

Share your thoughts on CSR activities from the newly formed JX Group.

Looking back over more than a year since the launch of the JX Group from a CSR perspective, what stands out first is our effort to develop a structure for promoting Group CSR by establishing the JX Group CSR Council, responsible for managing and coordinating Group CSR activities. Chaired by the president of JX Holdings, council membership is drawn from across the Group. Under the council we established three Group CSR committees—the JX Group Compliance Committee, the JX Group Corporate Citizenship Committee, and the JX Group Environmental Committee. After discussing the trajectory activities should take, each committee has taken concrete action in their respective areas. Furthermore, CSR promotion managers responsible for staying abreast of our Group CSR promotion structure have been assigned to Group company worksites, and we have instituted Group education and training to enable their work.

We also moved quickly and assertively to embed and instill the JX Group Mission Statement among all Group employees. Specifically, along with posting panels with our Mission Statement at business sites worldwide, we ran feature articles providing a detailed breakdown of the Mission Statement for six months in the Group's monthly newsletter. Presentations on it were also given at most business sites.

Furthermore, from the standpoint of promoting responsible management as a global corporation, in July 2010 JX Holdings announced its participation in the United Nations Global Compact. A month later, JX Holdings was joined by its three core operating companies, which announced their own participation

in the compact. We also remain committed to many of the social contribution activities once separately pursued by the Nippon Oil Group and Nippon Mining Holdings Group, among them forest conservation activities, management of the JX Children's Story Award and donor activities through the JX Children's Story Fund, and the sponsorship of youth baseball classes and basketball clinics.

After the recent earthquake and tsunami, JX Holdings and its 3 core operating companies gave ¥300 million in monetary donations through the Japanese Red Cross Society. We also moved to support farmers and growers in Japan's Tohoku and Kanto regions damaged by rumors surrounding the quality of their crops after the disaster by using their produce as ingredients in our employee cafeterias, and holding events to sell the produce to JX Group employees. To help children in the affected region heal emotionally from this recent tragedy, we donated 10,000 copies of The Bouquet of Children's Stories published by JX Holdings to evacuation centers. We also recruited many people from within the Group to take part in volunteer activities in the hardest-hit areas. These and other efforts were part of support activities we promoted based on needs present in the affected region, to help life return to normal as soon as possible for those victimized by the Great East Japan Earthquake.

The JX Group Mission Statement reads, "The JX Group will contribute to the development of a sustainable economy and society through innovation in the areas of energy, resources and materials." For this reason, we view the business activities that we pursue each day to fulfill our Group Mission Statement as synonymous with the kind of CSR activities that the JX Group should strive for. With the Group now making a new start, we hope that stakeholders will share with us their opinions of our CSR activities, and that, through mutual dialogue, we can spur further progress in CSR at the JX Group.

In closing, we ask for your understanding and support of the JX Group as we move forward.

Shinji Nishio

Representative Director, Chairman

Mitsunori Takahagi

Representative Director, President (JX Group CSR Council Chairman)

M. Jakahagi

At a Glance—JX Group Overview

Holding Company Overview

JX Holdings, Inc.

Representatives: Shinji Nishio,

Representative Director, Chairman

Mitsunori Takahagi,

Representative Director, President

Head Office Location: 6-3 Otemachi 2-chome, Chiyoda-ku, Tokyo

100-8161, Japan

Established: April 1, 2010
Capital: ¥100 billion

Principal Group Businesses:

Petroleum Refining and Marketing Business, Oil and Gas Exploration and Production Business, and

Metals Business

Group Companies:

164 (130 consolidated subsidiaries and 34

equity-method affiliates)

Number of Employees: 24,691 (Consolidated)



Overview of Core Operating Companies



JX Nippon Oil & Energy Corporation

Representatives: Yasushi Kimura, Representative Director, President

Head Office Location: 6-3 Otemachi 2-chome, Chiyoda-ku, Tokyo 100-8162, Japan

Capital: ¥139.4 billion (100% investment of JX Holdings, Inc.)

Principal Business: Manufacturing and marketing of petroleum and petrochemical products



JX Nippon Oil & Gas Exploration Corporation

Representatives: Makoto Koseki, Representative Director, President

Head Office Location: 6-3 Otemachi 2-chome, Chiyoda-ku, Tokyo 100-8163, Japan

Capital: ¥9.8 billion (100% investment of JX Holdings, Inc.)

Principal Business: Exploration, development and production of petroleum and natural gas



JX Nippon Mining & Metals Corporation

Representatives: Masanori Okada, Representative Director, President

Head Office Location: 6-3 Otemachi 2-chome, Chiyoda-ku, Tokyo 100-8164, Japan

Capital: ¥40.0 billion (100% investment of JX Holdings, Inc.)

Principal Business: Manufacturing and marketing of nonferrous metal products and electronic materials products, and

recycling and environmental services



Overview of Listed Subsidiaries

Consolidated Subsidiaries: 2

NIPPO CORPORATION

Principal Business: Planning, design, and construction of roads, pavement, civil engineering works, and petroleum-related facilities

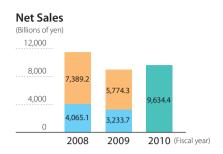
• Toho Titanium Co., Ltd.

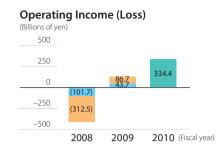
Principal Business: Manufacturing and marketing of titanium

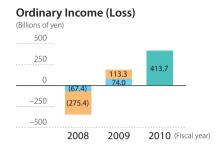
Equity-method Affiliates: 4

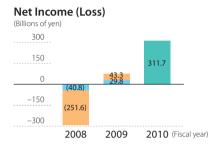
Financial Highlights

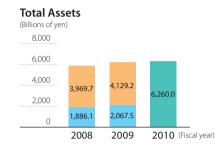
Nippon Oil Corporation (Consolidated) Nippon Mining Holdings, Inc. (Consolidated) JX Holdings, Inc. (Consolidated)













Medium-Term Management Plan for FY2010-2012

[Basic policy]

With emphasis on the concept of "Best Practices," dramatically transform the Petroleum Refining & Marketing Business by realizing integration synergies and rigorously reducing costs, and maximize corporate value by allocating management resources to highly profitable operations on a priority basis.

[Targets (Fiscal 2012)]

Ordinary income: ¥300 billion or more

ROE: 10% or more Net Debt/Equity ratio: 1.0 time

Capital expenditure and

financial investments: ¥960 billion (FY2010–2012 total)

Dividend policy: Redistribute profits by reflecting

consolidated business results while striving to maintain stable dividends

Key Assumptions (Fiscal 2012)

- Exchange rate ¥90/US\$
- Crude oil FOB (Dubai spot)
 U\$\$80/bbl
- Copper price (LME) 280 ¢/lb

Long-Term Vision for FY2020

Become one of the world's leading integrated energy, resources and materials business groups with new energy-related businesses

JX Holdings, Inc.

----- Transform existing operations into world-class businesses

Petroleum Refining and Marketing Business
 Slim, robust production operations aligned with demand
 Goal: Refining capacity of 1,000 thousand barrels/day

Oil and Gas Exploration and Production Business
Become an oil and gas E&P company that achieves
sustained growth on the basis of operatorship
Goal: Produce 200 thousand barrels/day of crude oil and
natural gas (equity basis)

Metals Business

¹ Secure resources and develop businesses to meet societies' eco needs

Goal: Equity-entitled copper mine production ratio of 80%

---- Establish profitability

New Energy Business
Establish profitability

Goal: Fuel cell sales of 300 thousand units/year (including exports)

Construction, Titanium Business, etc.

By broadly supplying society with "Energy, Resources and Materials," JX Group businesses are inextricably linked to people's lives in many different fields.



1 ENEOS Service Stations

The ENEOS service station network is the largest of its kind in Japan, with approximately 12,000 locations, supplying customers with gasoline, kerosene, diesel, lubricants, and other petroleum products. By consistently taking the customer's perspective, this network delivers products, services and technologies to match the needs of the times.

- ENEOS EV (Electric Vehicle) Charge Stations Demonstration projects for delivering rapid recharging services for electric vehicles (EVs) are under way at 34 ENEOS service stations in Japan, located mainly in Tokyo and Kanagawa Prefecture. An increase in the number of electrical and electronic systems in conventional automobiles is also spurring greater use of electronic components made from high-performance materials produced by JX Nippon Mining & Metals.
- Targeting a 50% reduction in CO₂ emissions in the entire home versus 1990, JX Holdings is advancing the development of a "comprehensive energy system for residential use" that exhibits outstanding environmental and economic performance as well as comfort. "ENEOS SOENE House," the site for demonstration trials in this area, is equipped with a range of distributed energy systems, as well as monitors that give visible data on electricity production and energy usage in the home.
- 4 Wastewater Treatment Facilities (Basic Material)

RECOSUL is a product that effectively uses the sulfur generated as a byproduct at refineries. As a recycled basic material, RECOSUL offers outstanding tensile strength, water impermeability and acid resistance, resulting in longer useful life for wastewater treatment facilities and other structures operating under harsh conditions.

- 5 Building Air Conditioning (Basic Material) Ecojoule® is a latent heat storage material that contributes to greater energy efficiency, and is finding
 - application in the air conditioning units of the latest high-efficiency buildings, as well as in automotive components, thermally adjustable apparel, building materials, and other fields.





Feature: JX Snapshot 2011

The Great East Japan Earthquake

—Impact and Response

In this section, we report on the impact of the Great East Japan Earthquake and our response to this tragic disaster. In light of the massive scale of destruction caused by the earthquake that struck on March 11, 2011, JX Holdings and its core operating companies immediately set up headquarters led by the respective president of each company to devise countermeasures and gather information on the extent of damage. In parallel, we took emergency response measures in every field to fulfill our responsibility to ensure the stable supply of energy and materials.

Main Damage to the JX Group



Status of Restoration and Recovery at JX Nippon Oil & Energy

JX Nippon Oil & Energy sustained damage to both its Sendai and Kashima refineries in the wake of Japan's most powerful earthquake in recorded history, with a magnitude of 9.0, and the subsequent massive tsunami it triggered. The event also temporarily halted production at the Negishi Refinery, and caused damage to oil depots, tank trucks and service stations all along the Pacific coast, but most notably in Japan's Tohoku region. The distribution network, including railways and roads, was also damaged, which temporarily interrupted the supply of petroleum products to the disaster zone in the wake of the disaster.

Under these conditions, JX Nippon Oil & Energy has made every effort to supply petroleum products to the hardest-hit region. Production- and procurement-side measures to this end have included the rapid restart of production at the Negishi Refinery, efforts to augment crude oil processing capacity at the Mizushima Refinery, and the redirecting of product exports to supplement domestic supply. In parallel on the distribution side, in addition to sending petroleum products from the Muroran and Negishi refineries to the Tohoku region, tank trucks from western Japan were transferred there as an emergency measure. Work was also undertaken to restore oil depots. As a result, the ability to stably supply products to the disaster zone had been reestablished by mid-April 2011.

On June 4, 2011, production resumed at the Kashima Refinery. Restoration efforts are also under way at the Sendai Refinery to resume production in the fastest possible timeframe.

Emergency Supply Response Targeting Eastern Japan

Production Structure

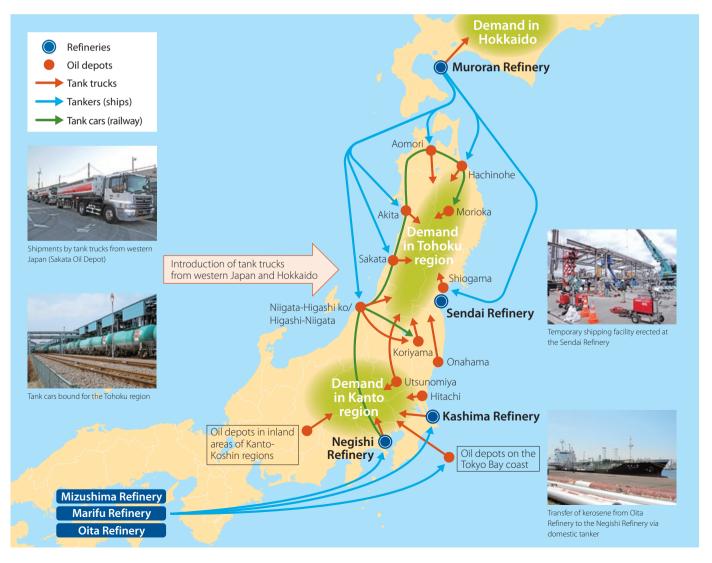
- Full production at the Muroran, Mizushima, Marifu, and Oita refineries
- Augment Mizushima Refinery production capacity by 20 thousand barrels/day
- Resume operation of the atmospheric distillation unit at the Negishi Refinery

Supply Structure

- Move tank trucks from Mizushima, Marifu and Oita refineries to the Kanto region
- Partial restoration and partial resumption of shipments from 12 of 14 damaged oil depots and gas terminals
- Send railway tank cars from Negishi Refinery to the Tohoku region
- Redirect inventory for export from the Osaka Refinery to domestic supply
- Import products
- Introduce tank trucks from western Japan and Hokkaido

Marketing Structure

- Survey all service stations in the Tohoku region and along the Pacific coast of Ibaraki and Chiba prefectures to determine necessary restoration work and initiate repairs
- Post locations of service stations in operation in the Tohoku region on the corporate website from April 1, 2011



Feature: JX Snapshot 2011

Restoration and Recovery at JX Nippon Mining & Metals

Immediately after the earthquake, a Disaster Countermeasures Headquarters headed by the president of JX Nippon Mining & Metals was established. The JX Nippon Mining & Metals Group sustained damage to all of its sites, specifically the Hitachi Works, Isohara Works/Isohara Fabricating Works, Ichinoseki Foil Manufacturing Co., Ltd., the Esashi Works of Sanyu Electronic Industrial Co., Ltd., Shin-Takatama Mining Co., Ltd., and Oya Mines Co., Ltd. The Disaster Countermeasures Headquarters took immediate action, confirming damage status, the safety and whereabouts of employees at each business site and their families, and assessing the damage to infrastructure surrounding business sites and the status of restoration efforts.

Smelting and Refining

PAN PACIFIC COPPER CO., LTD. carries out copper electrowinning at its Hitachi Works to produce refined copper. Although production was halted temporarily due to damage to production facilities caused by the March 2011 disaster, an all-out commitment to restoration work resulted in the resumption of production on April 19, 2011.

Electronic Materials Business

Operations at the following sites were halted due to damage to structures and facilities, as well as later disruptions in power, water and other services stemming from the earthquake. Along with securing the safety of employees and their families, efforts to confirm the safety of buildings and other assets on site, coupled with progress on subsequent restoration work, resulted in the steady resumption of operations.

Resumption of Operations in Late March 2011

- · Ichinoseki Foil Manufacturing Co., Ltd.
- Esashi Works, Sanyu Electronic Industrial Co., Ltd.

Recovery of Operations by Mid-April 2011 (Excluding Certain Products)

- Shirogane Works of the Hitachi Works, Hitachi Fabricating Works
- Isohara Works/Isohara Fabricating Works

Disaster Damage and Response at the Oya Mines

Generally at mines, slag (residual dirt and sand from metal recovery) results from the excavation of various metals. At abandoned mines owned by the JX Nippon Mining & Metals Group, slag from earlier extraction work remains accumulated in piles near the mine. The Oya Mines (Kesennuma, Miyagi Prefecture) was damaged by the disaster. Power outages caused the pit wastewater treatment facilities to stop operating, and slag also ran off after liquefying. While fortunately this incident resulted in no injuries, the run-off damaged some private homes, fields and roads in the area below the site of the slag piles.

In the aftermath of the earthquake, JX Nippon Mining & Metals moved quickly to use onsite power generation to restore pit wastewater treatment facilities and return the treatment of water from the abandoned mine to normal operating conditions. In tandem, the company assessed the damage situation stemming from the slag flow, and provided appropriate explanations of its intended response going forward to those impacted and government agencies. A briefing on the situation for local residents was held in mid-April, where an explanation was given that included an analysis of the slag flow, coupled with a work plan for restoration and recovery. Work to





Slag landslide after the disaster (March 2011)

The same location after recovery of slag (June 2011)

remove the slag behind the landslide was completed by the end of June 2011. The company is now carrying out soil inspections and restoration measures in the presence of residents, while meeting individually with residents to explain the situation regarding damage associated with the slag flow in an effort to gain their understanding. Plans also call for work to start on restoring the slag pile site from October 2011.

At the Oya Mines, although the design of the pile site itself meets national standards, material nonetheless ended up escaping from the site due to the unprecedented magnitude of the earthquake. In light of this, while discussing options with relevant government agencies, we are pressing ahead with putting the necessary countermeasures in place to prevent recurrence at this and other sites.

Group Support for the Disaster Zone

Monetary Donations

On March 18, 2011, JX Holdings and its three core operating companies donated ¥300 million to the Japanese Red Cross Society on behalf of the JX Group. Individual JX Group companies have also made donations to local governments within the affected region.

Support for Damaged Business Sites<JX Nippon Oil & Energy>

The head office and business sites in the Keihin area sent food, drinking water, winter clothing and other supplies to business sites in the disaster area (Tohoku Branch Office, Sendai Refinery, Kashima Refinery). Players from the JX-ENEOS Baseball Club also took part in preparing supplies sent from the head office.



Relief supplies being sent from the Negishi Refinery

<JX Nippon Mining & Metals>

The head office, Kurami Works and affiliated companies sent nonperishable foods, bedding, daily essentials and other items to business sites in the disaster area (Hitachi Works, Isohara Works/Isohara Fabricating Works, Ichinoseki Foil Manufacturing Co., Ltd., Esashi Works of Sanyu Electronic Industrial Co., Ltd., and Oya Mines Co., Ltd.).

Fundraising by the JX Sunflowers in Kashiwa City (Chiba Prefecture)

On March 27, 2011, the JX Sunflowers women's basketball team joined with five other sports teams for a fundraising activity in the city of Kashiwa (Chiba Prefecture), home to the Kashiwa Reysol soccer team. The event was chiefly

sponsored by the Kashiwa Branch of the Chiba Prefecture Community Chest Association, and raised roughly ¥2.6 million in donations for the disasterstricken Tohoku region.



Players from the JX Sunflowers doing fundraising

Support for Farmers in Areas Damaged by Concerns of Radiation

In partnership with restoration and recovery support efforts by the Keidanren economic federation following the disaster, the employee cafeteria at the JX Building offered a menu serving produce (excluding crops restricted from shipment) from areas that have suffered reputation damage due to concerns over radioactive contamination. Through this move, as well as special shopping opportunities (called "Corporate Marche") held to sell the same produce, the Group has supported farmers from the prefectures of Fukushima, Ibaraki, Gunma, Tochiqi, Saitama and Chiba that have suffered reputation damage regarding the quality of their crops due to the nuclear accident triggered by the Great East Japan Earthquake.



Sale at the JX Building of produce from areas impacted by concerns of radiation contamination



Employees at the JX Building cafeteria eating from a special menu supporting restoration and recovery efforts

JX Group Volunteer Activities Supporting Restoration and Recovery

The JX Group, in cooperation with volunteer centers in Tohoku region, is recruiting far and wide within its ranks for participants to join in volunteer activities to support restoration and recovery in the disaster zone.

One employee who volunteered in activities such as removing rubble from homes, shoveling away mud from street gutters, and clearing weeds around temporary housing offered the following assessment: "In witnessing conditions in the disaster zone with my own eyes, it is clear that the road to recovery will be a long one. Recovery is going to require long-running programs and activities. I don't know if ultimately I can really make a difference, but as an individual I want to continue doing whatever I can to help." In the words of another employee, "I feel as though the opportunity to interact with volunteers from all over Japan, both from in and outside of the JX Group, has deepened the common bonds that we all share."

Guided by a commitment to a "Relationship with society," one of the five JX Group Values (EARTH), we will continue to conduct volunteer activities based on needs present in the disaster zone, with the aim of helping life for people there return to normal as quickly as possible.







lunteer activities in Shichigahama (Miyagi Prefecture)

JX Group employees taking part in voluntee

Donation of *The Bouquet of* Children's Stories to Children in the Affected Region

To play a role in helping children in the impacted region heal emotionally, the JX Group teamed up with Culture Convenience Club Co., Ltd., operator of the TSUTAYA music and video entertainment and T-POINT franchises, to donate 10,000 copies of the book, The Bouquet of Children's Stories (Volume 41), to some 200 evacuation centers.



Children's Stories (Volume 41)

Similarly, in conjunction with NGO Japan Platform and other entities, another roughly 2,000 copies of the book were presented to elementary schools, preschools, daycare centers and children's centers in Fukushima and Miyagi prefectures.

Comments from Employees/



Kavo Koide Dealers Sales Branch Office JX Nippon Oil & Energy Corporation

Participation in JX Group Volunteer Activities Supporting Restoration and Recovery

On March 11, 2011, the Great East Japan Earthquake struck. I happened to be in the city of Sendai on a trip at the time and I personally became a victim of the disaster. I am thankful to the many people who I relied on for help during my several-day stay at an evacuation center set up in a local junior high school. Words simply cannot express my gratitude.

In hoping to repay that kindness in some small way, I immediately applied to take part in the "JX Group Restoration and Recovery Support Volunteer Activities."

I joined the third round of activities that took place in the city of Rikuzentakata in Iwate Prefecture. The city was largely destroyed, with the tsunami affecting places up to around 5 km inland from the coast. There were mountains of rubble piled everywhere, some the size of 4- to 5-floor buildings, which represented the extent of the damage the area suffered.

On the first day, we cut grass around temporary housing before evacuees moved in, and on the second day we removed rubble from people's houses. We only helped out for two days, but victims of the disaster told us what it meant to them with statements such as "Knowing that people haven't forgotten about us, gives us encouragement," and "We hope you'll tell many people about the disaster zone." This made me realize the importance of actually seeing the devastation for myself, being touched by it, and sharing my experience with those around me.

The road to full recovery is a long and difficult one. I hope to see the circle of those willing to help grow even wider.

Feature: JX Snapshot 2011

1

Stably Supplying Energy, Resources and Materials

What commitment to society does the JX Group value?



The JX Group is an integrated energy, resources and materials business group with operations anchored by Petroleum Refining and Marketing, Oil and Gas Exploration and Production, and Metals. The unique feature of the JX Group's business can be summed up as "spanning upstream to downstream sectors." In other words, the Group has an expansive supply chain covering everything from the development to the marketing and recycling of oil and copper resources.

As a business group that supports people's lives and functions as a pillar of Japan's economy, we bear a significant responsibility with respect to the stable supply of energy, resources and materials. We are constantly aware of this duty as we strive to contribute to society through our operations.



We would say ensuring the stable supply of energy, resources and materials.

See the next page for specific initiatives





Stably Supplying Energy, Resources and Materials

The JX Group strives to ensure the continued supply of products and the fulfillment of its corporate social responsibility even during large-scale disasters. The following is an introduction to the role we play in stably securing and supplying the Group's representative products—oil and copper—by taking responsibility for every aspect of these respective supply chains.

Case

Through advantages that include a leading share of fuel oil sales in Japan, JX Nippon Oil & Energy is responsible for stably and efficiently delivering the energy that people need.

As a corporation that has a large impact on local communities and the global environment, we strive to contribute to the safety and security of society through a deep-seated commitment to dependable plant operations.

Resource Development

- JX Nippon Oil & Gas Exploration is doing E&P business in 14 countries worldwide, producing oil and gas equivalent to 140 thousand barrels each day. We have been working on acquiring interests in promising blocks, mainly focused on exploration, to maintain and expand production volume from a medium- to long-term perspective.

We contribute to the stable supply of oil and gas, while working to minimize our environmental impact and maintaining safe operations, by effectively applying knowledge and experience accumulated as an operator.

Transport and Storage

- JX Nippon Oil & Energy Group owns 25 Very Large Crude Carriers (VLCCs). Operating day and night, each VLCC is capable of transporting in a single trip roughly half of the crude oil Japan consumes in a day. As a safety precaution, all VLCCs are double-hulled vessels.
- The Kiire Terminal of JX Nippon Oil & Energy Staging Terminal Corporation is capable of storing enough crude oil to sustain consumption in Japan for two weeks.



Case

2 Copper

JX Nippon Mining & Metals supports society via resources and materials, backed by world-class production and technological capabilities that culminate in cutting-edge, high-quality products.

From resource development to sales and recycling, we promote cyclical operations that make a sustainable relationship between business and society possible.

Resource Development

With global demand for copper ore on the rise, JX Nippon Mining & Metals is seeking to raise its ratio of equity entitlement copper mine production (currently 17%) and secure stable long-term access to quality ore by developing new mines and aggressively acquiring promising deposits.



In resource development, our emphasis is on sustainable development that clears global standards, and that demonstrates ample consideration of coexistence with local communities and biodiversity.

Transport and Storage

JX Nippon Mining & Metals Group has some of its own vessels on hand to transport copper concentrate. The Mar Camino, operated by JX Nippon Mining & Metals Group company Nippon Marine Co., Ltd., is one of the most uniquely structured vessels of its type in the world, capable of importing copper concentrate and exporting sulfuric acid.



Beyond transport and storage alone, we deploy extensive safety management at all worksites to prevent accidents and environmental pollution.

Stable energy supplies hinge on the discovery of promising oil and gas fields.

In Malaysia, we have active projects ranging from exploration to development and production. As a geologist, I'm primarily involved in exploration. As the oil and gas reserves in the existing fields decline since the start of production, continuous discovery that "replace and add" reserves is vital to our company's growth and meeting our social responsibility for stable energy supply. Out of asset acquisitions and discovery through exploration are both viable options for increasing reserves, as a company with "exploration" in its name, and as an exploration specialist myself, I believe that the discovery of new oil and gas fields is the best course for doing so, and am always doing my job with this in mind.



Keisuke Nakamura Exploration Department, Miri Office JX Nippon Oil & Gas Exploration (Malaysia) Limited

Refining and Production

We aim to maximize merger synergies by implementing several measures made possible by the integration including "Reduce refining capacity," "Integrate operation of the Mizushima Refinery," and "Unify production plans."



Guided by the "Group Philosophy on Safety" and "Group Policy on Safety," JX Nippon Oil & Energy endeavors to ensure safe operations by working to prevent accidents and catastrophes, and having comprehensive countermeasures in place should any problems materialize.

Distribution and Marketing

Unifying brands under ENEOS is allowing the pursuit of greater efficiency by integrating oil depots and branches and reducing selling, general and administrative expenses.



■ ENEOS service stations can be found in ENEOS service statio approximately 12,000 locations across Japan, and JX Nippon Oil & Energy has an unrivaled 35% share of domestic fuel oil sales.

Smelting and Refining

PAN PACIFIC COPPER CO., LTD. (PPC), responsible for the JX Group's copper business, has 3 production bases in Japan where it produces roughly 40% of the country's copper.



Through an alliance with South Koreabased LS-Nikko Copper Inc., we are building a federation of copper producers that is among the best in the world in terms of quality and production volume.

Marketing and Recycling

PPC markets a wide range of products such as refined copper and ingot copper, mainly to cable, wrought copper and copper alloy manufacturers in Japan and East Asia.

We also proactively contribute to a resource recycling-oriented society. JX Nippon Mining & Metals' HMC Works specializes in smelting, refining and extraction processes for recycled resources, for a unique type of facility rarely found elsewhere.



Hitachi Metal Recycling Complex (HMC) Works

2

Contributing to a Recycling-Oriented Society



What are some activities distinctive to the JX Group for realizing a recycling-oriented society?





Contributing to a Recycling-Oriented Society

As a corporate group whose businesses draw on the Earth's resources, the JX Group considers the effective utilization of resources and materials through the recycling and environmental services business an important responsibility.

Case

Mining of an "Urban Mine"

Japan, a country poor in mineral resources, depends on imports for nearly all its metal resource needs. However, soaring prices and heightened resource nationalism stemming from growing demand worldwide have led to uncertainty about the stable supply of these resources. Consequently, the concept of "urban mines" has become increasingly important. Urban mines are discarded electronic devices, home appliances, and other products that contain useful resources. These discarded products are a source of gold, silver, and other precious metals and of rare metals such as indium and nickel. Japan is said to have among the world's highest quantities of precious metal resources in urban mines. Recycling and utilizing these metals as a new resource is an important activity for the development of a recycling-oriented society in which JX Group networks and technologies cultivated in mine development and smelting play a key role.

Discarded mobile phone Separation and collection through a nationwide recyclina network The JX Group's recycling plants Recycling of Precious Metals (oil conversion) and Rare Metals The JX Group's Electronic device smelters, etc. manufacturers (post-processing)

Metal materials and IT materials

Resource Recycling That Begins with Mobile Phones

The recycling of electronic devices is one activity in which the JX Group's technologies play a key role. Here we examine urban mine resource recycling, taking the familiar mobile phone as an example.

Unwanted mobile phones that have been separated into handsets, batteries, rechargers and other components are sent from all over Japan to JX Nippon Tsuruga Recycle Co., Ltd., where they are further separated manually to facilitate recycling. Precious metal scrap is extracted from mobile phone handsets by means of oil conversion. At this stage, the precious metals are in the form of a residue. The residue is sent to the Saganoseki Smelter & Refinery of JX Group company PAN PACIFIC COPPER CO., LTD. where it is reborn as copper, gold, silver, palladium, and other metal resources through post-processing to extract the metals. Not only that, the oil recovered through oil conversion does not go to



The company became one of Japan's first mobile phone recyclers in 1998. During 13 years of continuous recycling activities since that time, we have earned the unshakeable trust of our customers by appropriately responding to needs for increased processing capacity and a higher material recycling rate.

For the future economic development of Japan, a country poor in resources, the need to not only secure new resources, but also to recycle existing ones, is expected to increase. By meticulously identifying and responding to these needs through means including capital investment, we aim to contribute to the realization of a recycling-oriented society.



Mitsugu Sakaguchi Director, Head of E&R Works JX Nippon Tsuruga Recycle Co., Ltd.

waste; it is utilized as supplemental fuel for the industrial waste incinerators at the Saganoseki Smelter & Refinery.

It is possible to extract approximately 9 kilograms of gold from the roughly 30 tons of mobile phones processed monthly at JX Kinzoku Tsuruga Recycle Co., Ltd. Extracting that much gold from natural resources would require 4,500 tons of mineral ore. It is a matter of fact that urban mine recycling is a highly efficient form of "mining."

In activities at other JX Group business sites, HMC* Department, Hitachi Works in Ibaraki Prefecture efficiently and economically recover a variety of metals, including rare metals, from wide-ranging post-consumer material by means of a unique combined smelting and refining process with zero emissions. We will continue to contribute to the development of a recycling-oriented society by engaging in the recycling and environmental services business.

* Hitachi Metal Recycling Complex

Case 2

Resource Recycling Centered on Asphalt

The service life of asphalt pavement is about 10 years, after which repair of the paved surface with new paving is required. Each year 26 million tons of old asphalt pavement is collected in repair work nationwide, enough to fill Tokyo Dome about 10 times, and nearly all of this pavement is used in new paving material. The asphalt pavement recycling rate exceeds 99%, excellent recycling performance.

JX Group member NIPPO CORPORATION is the biggest road pavement enterprise in Japan. In the early 1950s, the company began research into asphalt pavement recycling technologies, an activity unusual at the time, nearly perfected the technologies and systems used today, and began recycling nationwide. Today, the company owns 157 asphalt mixture plants nationwide. Nearly all of these plants accept asphalt and concrete rubble, reuse it as aggregate, and manufacture and sell recycled asphalt mixture and recycled base course material. The manufacturing ratio of recycled asphalt mixture has exceeded 70% since 2005.

In addition, research begun in 1981 has resulted in technology for the effective use as a component of asphalt paving material of molten slag generated in the processing of incinerated ash from





household waste. In the recycling of other industrial byproducts, we have succeeded in making effective use of sewage sludge molten slag (generated in the melting treatment of sewage sludge incinerated ash), iron and steel slag (generated in the steelmaking process), and other byproducts. This is yet another field in which the JX Group has achieved cyclical recycling.



The Ashinoko Skyline toll road, operated by Ashinoko Skyline Corporation, which is 100% owned by NIPPO CORPORATION.

Feature: JX Snapshot 2011

3

Rising to the Challenge of Creating a Low-Carbon Society



Prevention of global warming, the effective use of resources, and other measures required to protect the global environment are now widely recognized as global challenges.

As an integrated energy company, the JX Group will apply proven technologies amassed over the years and flexible thinking to step up involvement with new energy sources that help reduce environmental impact and contribute to the realization of a low-carbon society.

As an integrated energy company, the JX Group will actively pursue the development of new ecofriendly energy sources.



Rising to the Challenge of Creating a Low-Carbon Society

To take responsibility for energy, we will boldly pursue next-generation energy sources such as renewable sunlight and fuel cells, along with oil. We aim to shape the future of energy by offering an optimal mix of energy sources.

Case 1

The Rapidly Spreading Use of Solar Power

Carbon dioxide (CO₂) is said to be a cause of global warming. Environmental measures in households are essential for reducing CO₂ emissions. The JX Group engages in activities to promote the uptake of solar power generation, which enables households to generate the electricity they use while emitting absolutely no CO₂. In October 2010, we commenced sales of solar power generation systems for condominiums and other multi-unit dwellings. Electricity generated on the rooftop is supplied to each unit, and unused energy can be sold.

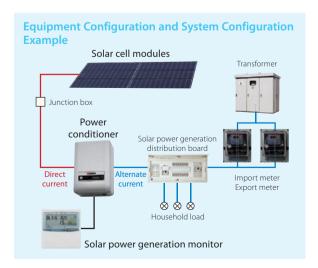
This active involvement with solar power draws fully on the technologies of the JX Group, which has sophisticated expertise in the development of key materials. Examples include carbon electrode materials for capacitors and positive- and negative-electrode materials used in lithium-ion batteries for the purpose of storing electricity generated in the daytime from sunlight.



See page 36 for details.



Solar power generation system for condominiums



Case

Hydrogen Energy, the Focus of Increasing Expectations

Hydrogen, the focus of high expectations as a key energy source for the future, generates energy when combined with oxygen in the air. Since only water is emitted at that time, hydrogen is a clean energy source that emits no CO_2 or atmospheric pollutants. We have long engaged in research and development to take advantage of our energy expertise to realize a hydrogen-based society and have steadily achieved results.

Utilizing Expertise in the Oil Refining Process

Residential-use fuel cell systems produce electricity and hot water using hydrogen extracted from oil-based fuels and other sources. They are clean energy production systems that entail little energy loss and also curb CO₂ emissions. They are therefore expected to reduce CO₂ emitted from households. The JX Group commercialized the world's first residential-use system powered by LPG (liquefied petroleum gas) in 2005 and the first powered by kerosene in 2006.

Technologies accumulated in oil refining contributed greatly to the development of these systems. Since nearly no hydrogen exists as a natural resource, it is extracted from oil-based fuels and other sources. At the time of hydrogen extraction, expertise in oil refining processes is utilized in the technologies for desulfurization, reforming, and carbon monoxide removal.

The sale of residential-use fuel cell systems in Japan began in 2009 with the introduction of the ENE-FARM system. Today, we are



ENE-FARM

engaged in product development of next-generation fuel cell systems in pursuit of cost and size reduction, as well as high efficiency to encourage full-scale uptake. Furthermore, we are considering sales in overseas markets in the coming years.

The Tokyo Suginami Hydrogen Station, which satisfies all the safety standards that apply to ordinary service stations, supplies hydrogen to customers. The hydrogen station demonstration is different from previous experiments limited to test vehicles in that it is for use by public transportation vehicles such as buses and limousines for hire. Activities to realize a hydrogen society have shifted from feasibility consideration to the stage of considering implementation methods. By operating the hydrogen station, we will significantly contribute to the spread of fuel cell vehicles scheduled for introduction in 2015.



Atsushi Kawakami
Research & Development
Planning Department
JX Nippon Oil & Energy Corporation

Utilizing Expertise in the Construction and Operation of Petroleum Products Supply Infrastructure

To promote the spread of fuel cell vehicles, scheduled for introduction in 2015, supply infrastructure for hydrogen fuel is essential. In this field, a large-scale demonstration experiment conducted through cooperation with the national government and private companies is underway. The JX Group is participating in numerous projects, applying knowledge developed in the supply of petroleum products.

One such project in which we participate is the "Local hydrogen supply infrastructure technical & social demonstration" of The Research Association of Hydrogen Supply/Utilization Technology (HySUT), Fukuoka Prefecture, and other sponsors. We are in charge of operating the Yokohama-Asahi Hydrogen Station, the Tokyo-Suginami Hydrogen Station, and the Kitakyushu Hydrogen Station. In this demonstration experiment, we supply hydrogen for fuel cell passenger cars as well as for fuel cell buses and limousines for hire that shuttle passengers from downtown Tokyo to and from Narita and Haneda airports on the expressway.

We also participate in the demonstration study utilizing Kita-Kyushu Hydrogen Town, involving the laying of a pipeline from a hydrogen station to nearby homes and public facilities and the supply of hydrogen for residential-use fuel cells.



Tokyo Suginami Hydrogen Station

Case 3

Further Technological Innovation

One JX Group research project conducted as a further innovation is separation membrane technology for the extraction of hydrogen and CO₂. Through this development project, we seek to realize an extremely efficient carbon-reduction mechanism. This involves the supply of highly pure hydrogen in large volumes, reduction of CO_2 emitted from automobiles and other end-user emission sources, and collection of CO_2 at refineries and other upstream locations.

In addition, we promote creative, pioneering basic research through the ENEOS Hydrogen Trust Fund, established in 2006. We also participate in Japan CCS Co., Ltd., which engages in the development of carbon dioxide capture and storage (CCS) technology to separate and capture the large amounts of CO₂ emitted from factories and power plants and store it deep underground.

JX Group Management

Corporate Governance

JX Holdings, Inc. recognizes that the JX Group's mission is to contribute to sustainable economic and social development through creation and innovation in the fields of energy, resources and materials. In addition, the Company is cognizant of the importance of ensuring fair and responsible conduct in all of its business activities while striving to maximize its corporate value.

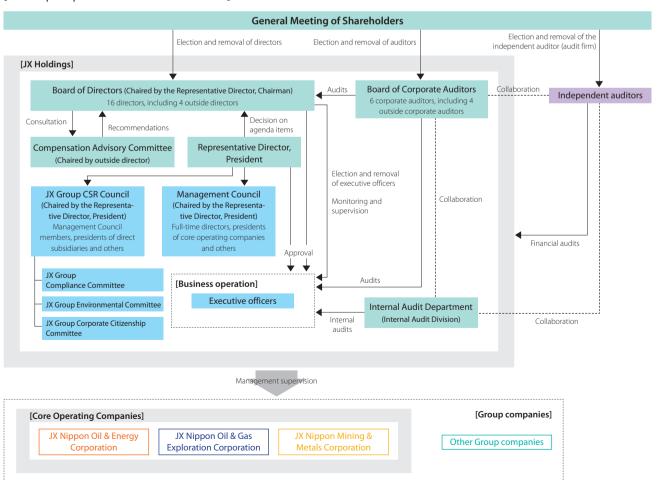
The basic approach to corporate governance of JX Holdings is to make decisions and execute operational activities quickly and flexibly to implement cohesive growth strategies for the JX Group as a whole and to respond promptly to changes in the business environment. In addition, JX Holdings endeavors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

Guided by this basic policy, JX Holdings, as a holding company, focuses especially on formulating medium- to long-term strategies for the JX Group and strategically allocating management resources to implement these strategies. Under JX Holdings, core operating companies have been positioned to promote each of the Group's three core businesses, namely the Petroleum Refining and Marketing business, the Oil and 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 re-election each year at the General Meeting of Shareholders.
- (2) Four outside directors with management insight and extensive experience are appointed to strengthen the supervision of management from an objective perspective.
- (3) In addition to full-time directors and outside directors, the presidents of the core operating companies and certain other key personnel are elected as directors of JX Holdings to deliberate and decide on cohesive Group-wide business strategies at meetings of the Board of Directors of JX Holdings.
- (4) Among the six corporate auditors, a majority, or four outside corporate auditors, are appointed on the basis of their management insight and extensive experience. This structure ensures the effectiveness of audits of directors' performance of management duties by the Board of Corporate Auditors, whose authority has been strengthened and expanded under Japan's Companies Act.
- (5) A Compensation 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 compensation of directors and executive officers as well as related matters.

[JX Group Corporate Governance Framework]



Development of Internal Control System

Based on the JX Group Mission Statement, "JX Group will contribute to the development of a sustainable economy and society through innovation in the areas of energy, resources and materials" and the JX Group Values "Ethics, Advanced ideas, Relationship with society, Trustworthy products/services, and Harmony with the environment," JX Holdings has developed an internal control system to ensure appropriate business activities in line with the following basic policies:

[Basic Policies Regarding the Development of an Internal Control System]

System to ensure that the execution of directors' and employees' duties conforms to laws and regulations and the Articles of Incorporation

- (1) Develop various rules and ensure compliance with laws and regulations, the Articles of Incorporation, and various other rules.
- (2) Establish a Compliance Committee and check the status of compliance with laws and regulations.
- (3) Develop an internal reporting system.
- (4) Hold Board of Directors' meetings on a monthly basis and conduct adequate discussion and reporting, based on the rules of the Board of Directors.
- (5) Ensure objectivity and appropriateness through the appointment of outside directors and outside corporate auditors.
- (6) Establish an Internal Audit Department independent of other divisions and conduct internal audits.
- (7) Develop an internal control system for the Financial Instruments and Exchange Act.
- (8) Develop a system for preventing damage due to anti-social forces.

System concerning the storage and management of information related to the execution of directors' and employees' duties

- (1) Develop rules concerning documents
- (2) Develop rules for preparing minutes of Board of Directors' meetings and other documents related to decision-making, and ensure their appropriate implementation.
- (3) Develop rules and conduct rigorous training regarding information security.
- (4) Provide proper external disclosure of information, including timely disclosure.

3. Regulations and other systems for managing risk of loss

- (1) Analyze risks and clarify policy for responding to them in the Board of Directors and Management Council.
- (2) Develop a system for responding to economic changes, fluctuations in crude oil and other resource prices and foreign currency exchange rates, natural disasters, and other risks.
- (3) Develop a system for responding to crises and emergency situations.

4. System for ensuring the efficient performance of directors' and employees' duties

- (1) Establish an organization and delegations, and efficiently execute duties.
- (2) Conduct in the Management Council before official decision-making in the Board of Directors' meetings.
- (3) Formulate a medium-term management plan and develop a management system.

5. System for ensuring appropriate business activities in the corporate group

- (1) Decide on a common Group philosophy and values and rigorously enforce.
- (2) Ensure presidents of core operating companies attend meetings of the Board of Directors and Management Council.
- (3) Discuss business execution projects at Group companies in the Board of Directors and Management Council at JX Holdings.
- (4) Formulate Group management regulations.
- (5) Establish a compliance system and extend to Group companies.

6. System for ensuring the efficient conduct of audits by corporate auditors

- (1) Ensure corporate auditors attend meetings of the Board of Directors, Management Council and other meetings, appoint corporate auditors also as full-time auditors of core operating companies.
- (2) Ensure corporate auditors have regular discussions with the senior management team and work closely with the independent auditors and Internal Audit Department.
- (3) Establish an Auditors' Affairs Office independent of divisions responsible for business execution.

Risk Management

The JX Group has risk management structures that are tailored to the business lines of each Group company, with countermeasures in place to manage individual risks related to compliance, occupational safety, and the environment, among others.

Crisis Management

Crisis management is the responsibility of JX Holdings, which is to take care of overall coordination in the event of crisis situations that could potentially impact Group management. Accordingly, JX Holdings has formulated a set of crisis management rules detailing actions for minimizing damage should such situations arise.

The General Administration Dept. of JX Holdings is the standing administration office for responding to crisis situations which is headed by the General Manager of General Administration Dept. Should such situations arise at JX Holdings or a company within the JX Group, the general manager of this department, or alternatively, the general manager responsible for general affairs at the applicable Group company, is responsible for immediately reporting the incident and any response measures taken to the general manager of the administration office.

Depending on the severity of the crisis, the President of JX Holdings may opt to establish an in-house response headquarters for specific countermeasures, or a united headquarters with Group companies to devise and coordinate measures across the Group. The purpose of these measures is to mount a swift and accurate response to the crisis situation in service of the JX Group's social mission.

Information Security Management

The JX Group works to prevent the improper use, disclosure and leakage of company information, an asset of the company, in accordance with information security regulations. At the same time, it works to prevent tampering with and erroneous handling of company information to maintain its correctness and reliability. The JX Group also ensures that this company information can be used when it is needed by authorized personnel.

[JX Group Information Security Basic Regulations]

- 1. Ensure information security regarding company information by adhering to rules and regulations.
- 2. Do not use (receive, view, disclose, print, copy, etc.) company information other than within the necessary scope of business activities.
- 3. Do not engage in activities that could harm information security.
- 4. Establish the necessary systems and structures for ensuring information security when performing duties.
- 5. Take contractual steps as a matter of practice to ensure information security when company information is provided to third parties.

CSR Promotion Structure

Basic Approach

The Board of Directors formulated the JX Group Mission Statement when JX Holdings was formed in April 2010. The Management Council meeting held on the same day determined the JX Group's basic policy for CSR, priority fields, and the structure for promoting CSR across the JX Group. The Management Council is a body that assists decision-making by the President.

As a company involved in the energy, resources and materials fields, which are vital for people's lives and economic activity, we believe that the embodiment of CSR is to ensure a stable and efficient supply of energy, resources and materials, and the implementation of the Mission Statement by every employee in the course of executing business operations. This is the JX Group's social responsibility. Based on this belief, we aim to establish a corporate group worthy of the trust of stakeholders, including shareholders and other investors, customers and employees.

JX Group's Basic Approach to CSR

We will steadily fulfill our responsibility to society through faithful implementation of the JX Group Mission Statement by every officer and employee in order to establish a corporate group worthy of the trust of our stakeholders.

JX Group Mission Statement JX Group Mission Statement JX Group Slogan (The essence of the JX Group mission) JX Group mission statement (JX Group's raison d'être) JX Group values (Values that are grounds for corporate officers and employees) JX Group Long-Term Vision and Medium-Term Management Plan Putting the mission statement into practice in business operations = CSR

Priority Fields and Promotion Structure

We established the JX Group CSR Council, which is chaired by the President of JX Holdings, to formulate and promote the JX Group's basic policy on CSR and to manage and coordinate CSR activities across the JX Group. We have specified three priority areas for CSR:

1) compliance (including information security and human rights),
2) social contribution, and 3) the environment. A JX Group CSR committee has been established for each field as advisory bodies to the chairman of the JX Group CSR Council. Each committee deliberates and reports on actual business operations and shares information. This promotional structure leverages the different business characteristics of each company in the JX Group while ensuring the CSR activity PDCA cycle functions in the whole Group.

The office responsible for the council and these committees in JX Holdings serves as the Administration Office.

Group CSR Promotion Managers

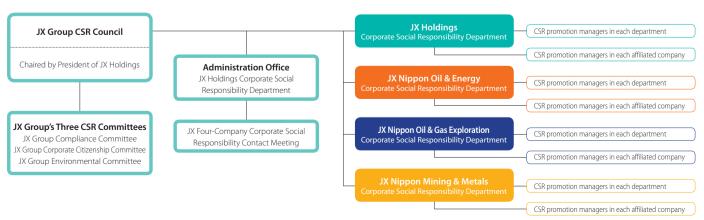
Each workplace leads the way in putting the JX Group Mission Statement into practice. Given that the main players are the individuals who work there, Group CSR promotion managers have been assigned to each workplace in the JX Group.

The Group CSR promotion managers cooperate with the department responsible for CSR in each company, working at the frontline of CSR promotion to manage CSR in the workplace. Group CSR promotion managers gather once a year for a conference at which they learn about the direction and vision of the Group's CSR activities and share opinions.

Training Event for JX Group CSR Promotion Managers

In November 2010, we held a training seminar that was attended by approximately 140 Group CSR promotion managers. The seminar was designed to instill and entrench the Mission Statement as well as provide an opportunity to share information on CSR activities in the JX Group.

[JX Group CSR Promotion Structure]





A scene from the training event for JX Group CSR promotion managers

The director in charge of the JX Holdings Corporate Social Responsibility Department explained the JX Group Mission Statement at this training seminar and discussed the JX Report for a Sustainable Future 2010. Later, attendees heard a lecture from Joji Nakaya, an assistant

professor at Kinki University, based on the theme of thinking about CSR from the starting point of issues surrounding globalization.

Attending CSR promotion managers were then split into small groups, which actively discussed CSR.

Fiscal 2010 Achievements and Fiscal 2011 Activity Policy

JX Group CSR Council and the Three CSR Committees

In fiscal 2010, the JX Group CSR Council convened twice.

At the meeting in July 2010, when the core operating companies were established, the chairman of the council spoke about the JX Group's commitment to CSR activities, explained how the JX Group CSR



A JX Group CSR Council meeting in session

Council and the three CSR committees would operate, and ordered the establishment of CSR frameworks at each company. The three CSR committees that were subsequently convened discussed key themes for fiscal 2010 in each field, with the recommendations adopted at the second meeting held in October 2010.

The first council meeting for fiscal 2011, which was held in April 2011, reported on the implementation status of the key themes for fiscal 2010, and adopted the recommendations of each committee concerning key themes for fiscal 2011.

Activities to Foster Awareness of the JX Group Mission Statement

In March 2010, we distributed Mission Statement cards to corporate officers and employees of the JX Group with the hope that they will make it a habit to act with the JX Group Mission Statement in mind. Corporate officers and employees are asked to carry these cards with them so that they can refer to them at all times. For one week at the beginning of every month an animation of the JX Group Mission Statement was played when corporate officers



JX Group Mission Statement card

and employees started up their computers. This initiative using the in-house intranet is continuing in fiscal 2011 as a way of building awareness about and entrenching the JX Group Mission Statement.

JX Group Compliance Committee

- Key Themes for Fiscal 2010
 - Conduct compliance status checks.
 - Conduct inspections to ascertain the status of regulation.
 - * See pages 33 and 34 for an overview of compliance status checks.

• Implementation Status of Key Themes for Fiscal 2010

- JX Holdings and each of the core operating companies carried out compliance status checks. These checks found 1,022 problems areas across the Group. Quick actions are being taken to address areas that need to be corrected.
- Each committee member company carried out voluntary inspections of internal rules that need review and whether rules are required in other areas. Member companies quickly revised and established regulations where deemed necessary as a result of these inspections.

• Key Themes for Fiscal 2011

- Conduct compliance status checks and follow-up inspections.
- Study system for sharing information that addresses legal issues overseas.

JX Group Corporate Citizenship Committee

- Key Themes for Fiscal 2010
 - Extend the JX Children's Story Award *The Bouquet of Children's Stories* to Group companies.
- * See page 42 for an overview of The Bouquet of Children's Stories.

• Implementation Status of Key Themes for Fiscal 2010

- The Bouquet of Children's Stories was sold to corporate officers and employees of JX Group companies to raise money for charity. A total of 60 companies participated, generating proceeds of approximately ¥8.66 million, 2.2 times more than in fiscal 2009.
- Key Themes for Fiscal 2011
- Further develop social contribution activities with *The Bouquet of Children's Stories*, including support for children affected by the Great East Japan Earthquake.

JX Group Environmental Committee

- Key Themes for Fiscal 2010
- Establish a JX Group environmental management system (EMS) and share information on the status of implementation.
- Formulate the JX Group Medium-Term Environmental Management Plan.
- * See page 46 for an overview of the JX Group Medium-Term Environmental Management Plan.

• Implementation Status of Key Themes for Fiscal 2010

 A JX Group EMS was established and the JX Group Medium-Term Environmental Management Plan was formulated. Furthermore, the head offices and branches of JX Nippon Oil & Energy, JX Nippon Oil & Energy Trading Corporation, JX Nippon Real Estate Corporation and JX Nippon Business Services Corporation obtained JX integrated ISO 14001 certification.

• Key Themes for Fiscal 2011

- · Operate JX Group EMS.
- Manage progress with the JX Group Medium-Term Environmental Management Plan.
- Manage key points for environment-related compliance.

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Human Resource Development Basic Approach

In the JX Group, to nurture human resources to pioneer the future of energy, resources, and materials, each of the three core operating companies has a training system suited to its own business characteristics, and JX Holdings sponsors groupwide education and training programs.

In addition to this education and training, we have a practice of periodically rotating personnel among JX Holdings and the core operating companies. With this personnel development structure, we seek to deepen awareness of the JX Group's businesses and create cohesion as a business group by enabling employees to accumulate a wealth of experience as they communicate with various stakeholders.





Nozomu Kubo Manager, Personnel Group, General Administration Department JX Holdings, Inc.

In training sponsored by JX Holdings, I feel that employees from different industries, oil and metals, and in different positions, administration, marketing, and technology, can gather together and engage in a frank and constructive exchange of opinions from various perspectives that crosses over organizational barriers, something possible only among members of the JX Group, to increase the JX Group's competitive strength. By continuing to enhance the Group's overall training, I want to develop human resources who can flexibly cope with changes in the business environment from a global perspective and assist in the development of a new culture and values for the JX Group.

Overview of the JX Group's Education and Training Programs

Category	Goals	Coverage	Program Details
2) Shared understanding of the Long-Te Medium-Term Management Plan, etc. 3) The medium- to long-term issues of the final fina	1) Fostering and deepening of cohesion 2) Shared understanding of the Long-Term Vision, Medium-Term Management Plan, etc. 3) The medium- to long-term issues of the JX Group (including the management structure), Consideration and reconciliation of solutions	companies up er- at n in	First Session (September 2010) 1) Briefing on the Long-Term Vision by JX Holdings and the three core operating companies 2) Group discussions and presentations concerning themes common to all Group companies
	4) Deepening of understanding of the management environment (the political and economic situation in Japan and abroad, environmental problems, etc.)		Second Session (February 2011) 1) Lecture by an outside instructor 2) Group discussions and presentations
Executive Leader Training	Based on the human resource development plans of each operating company, develop the managers who will be the next generation of leaders in the JX Group from a more multidimensional perspective. 1) Acquisition of Group management awareness (best practices, pursuit of synergy, etc.) 2) Realization of positive results of interchanges between different industries (oil and metals, etc.) 3) Provision of opportunities to acquire knowledge and skills required for management	Approximately 20 department manager- level employees of JX Holdings and the three core operating companies	Proposals for management in preparation for the JX Group's future Lectures from current managers centered on past success stories In-depth discussion of the pursuit of Group best practices and synergies Organization and development of knowledge (including third-party corporate value assessment) and skills required of the next generation of top managers Reinforcement of collaboration and mutual development of Group executives
Middle Manager Training		Approximately 40 section manager-level employees of JX Holdings and the three core operating companies	1) Proposals to management for synergy realization in the JX Group 2) Deepening of awareness of the JX Group's overall medium- to long-term management plans and current situation (including comparison with other companies) 3) In-depth discussion of problems and challenges in the Group 4) Reorganization of knowledge about management, etc. 5) Mutual interaction and mutual development
Training for New Hires	Jointly engage in training themes common to all companies (business manners, financial analysis, etc.) and foster Group consciousness through an explanation of the Group's history and a tour of business sites of the core operating companies.	University and graduate school graduates newly employed by the three core operating companies	Explanation of the JX Group's businesses and history, tour of business sites of the core operating companies On-site training utilizing activities at outdoor facilities (to facilitate communication and increase motivation through sharing of goals) Cultivation of awareness and formation of manners required of working adults
Distance Learning	In addition to opportunities to acquire knowledge and skills necessary for the performance of work, provide opportunities for self-development and instill the habit of continual learning.	Employees of JX Group companies for which the HR personnel consider it necessary	Selection of desired courses from among approximately 250 courses, including management, financial accounting, technical development, information systems, and foreign languages

Education and Training at the Core Operating Companies

The companies of the JX Group have prepared a variety of human resource development plans adapted to their individual business characteristics. In this section, we introduce examples of distinctive training programs at the three core operating companies.

JX Nippon Oil & Energy Corporation

Three basic concepts underpin personnel systems at JX Nippon Oil & Energy: "Remuneration according to the most recent results," "Management that motivates," and "The provision of opportunities and support for skills development." From the perspective of human resource development, by combining the provision of opportunities through personnel systems and skills development support through the enhancement of training systems with appropriate evaluation systems, we enable employees to show and develop their skills, which links to groupwide enhancement of motivation and vitality.

As development of the Group's businesses overseas accelerates, notably in developing countries, the training program to increase communication skills in English (the International Communication School) has achieved tremendous results

JX Nippon Oil & Gas Exploration Corporation

JX Nippon Oil & Gas Exploration holds HR meetings chaired by the president to develop personnel who can contribute to the sustained growth of the company. At the meetings, corporate officers and general managers of each department discuss all aspects of personnel systems, including recruiting, transfer, training, evaluation, and remuneration, and make reforms and improvements to develop human resources from a comprehensive perspective.

The development of oil and gas field increases its degree in difficulty and exploration and development technologies are becoming more advanced. To develop technical employees in these circumstances, the company dispatches young employees to overseas business sites that do business as project operators early in their careers to quickly master basic technologies and acquire specialized expertise.

JX Nippon Mining & Metals Corporation

JX Nippon Mining & Metals, whose business originates in mining operations, engages in people-oriented management illustrated by the company's motto "One mine, one family." Harmony with society and environmental activities are essential for mine operation and have been universal themes at the company in Japan and abroad through the years.

As the company pursues mine development activities such as the Caserones Project in Chile, it fosters among personnel in charge of resource development sensitivity to the need for coexistence with society and harmony with the global environment, the foundation for business activities at project sites, by providing on-the-job training at mines in Japan in their first and second years of employment. The company has a human resource development program that enables employees to build on this foundation, accumulate technological and professional competencies, and move on to the front lines of overseas mine development.



Mariko Horiguchi Petroleum Trading & Shipping Department JX Nippon Oil & Energy Corporation

During the five-month training period, employees perform their normal duties in the afternoon but immerse themselves in English for three hours every morning. In addition, there are three training camps where a practical curriculum featuring speeches and presentations and the acquisition of local business practices and cultures envisioning future overseas assignments. My current work is import and export of gasoline, heavy oil, and other petroleum products. Since the value of each transaction is high and delivery plans are formulated in line with demand trends, there is constant tension. I want to continue to improve my communication skills so that I can make correct decisions while observing the market overall.



Fumitoshi Sato Exploration Department JX Nippon Oil & Gas Exploration Corporation

For four years beginning with my second year of employment, I had worked at well sites in the Rang Dong Oil Field and Phuong Dong Oil Field and the local office in Vietnam. My main assignment was to optimize the operations "geologically" through the data acquisition, analysis and its interpretation. On site, people work as a team to achieve a single goal, without regard to nationality or other matters of personal background. The more involved one becomes in oil development, the more there is to learn. I became aware not only of technical matters, but also about relationships with people. With the experience I gained in training, I would like to start up new excellent projects in the future.



Ryohei Nakai Resources Development Department JX Nippon Mining & Metals Corporation

My on-the-job training at mines lasted a total of four months at three locations. At Toyoha Mine in Sapporo, my training coincided with the boring of a tunnel for water treatment, and I was able to experience actual tunneling work and various environmental protection activities. I currently work at headquarters in operations management of a copper mine in Chile. Having acquired the ability to sense what is happening at the site through the numbers for control indices and performance is tremendously beneficial. I want to take advantage of this experience in the future and be involved from the start of development of a new copper mine.

EARTH Highlights

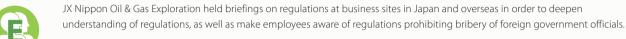
The JX Group continues to conduct activities based on five EARTH values.

Activity Topics

Compliance

Human Rights

Regulations Briefings at Business Sites in Japan and Overseas



Participation in the United Nations Global Compact

JX Holdings and its three core operating companies are participants in the United Nations Global Compact, and implement and promote the compact's 10 principles.

Technology and R&D **Promoting Development of Solvent EOR Technology**

JX Nippon Oil & Gas Exploration is conducting pilot tests for the practical application of Solvent (CO₂/Hydrocarbon gas) EOR technology, which promises to reduce CO2 as well as increase crude oil production volume.

Relationship with Stakeholders

Recognition for IR Activities

JX Holdings won an award for excellence in corporate disclosure from The Securities Analysts Association of Japan for its highly transparent investor relations (IR) activities. The Company's website has also earned recognition for the fullness of information disclosed

Corporate Citizenship

Key Theme for Fiscal 2010: JX Children's Story Award and JX Children's Story Fund The three priority fields in the JX Group's social contribution activities are advancement of culture, youth development and support, and environmental protection. In fiscal 2010, we extended the JX Children's Story Award The Bouquet of Children's Stories to JX

Quality Assurance, Product Safety and Customer Satisfaction

Group companies as an important theme of our social contribution activities.

Council Meetings of Officers Responsible for Quality in May and November 2010 These meetings at JX Nippon Mining & Metals shared information on the status of ISO 9001 audits, quality losses and other mat-

ters, and also rebuilt training systems.

Purchasing Basic Purchasing Policy Established, Green Purchasing System Developed

JX Nippon Procurement, which is responsible for JX Group purchasing operations, formulated a new basic purchasing policy and established a system for promoting green purchasing.

Environment

JX Group Medium-Term Environmental Management Plan Starts

We formulated a Medium-Term Environmental Management Plan covering the period from fiscal 2010 to fiscal 2012 and began working toward achieving targets under some common categories: global warming prevention and biodiversity preservation measures, environmental load mitigation, and enhancement of environmental management systems.

Environmentally Friendly Products

Launch of Geothermal Power Generation Development Feasibility Study in the **Toyoha Mine Zone** JX Nippon Mining & Metals began a geothermal power generation development feasibility study at the closed Toyoha Mine,

following implementation of geothermal development promotion surveys by New Energy and Industrial Technology Development Organization (NEDO).

for a Sustainable Future 2011

Performance



Compliance

JX Nippon Oil & Gas Exploration

Number of regulation briefings





Technology and R&D

JX Nippon Mining & Metals

Ramping up production capacity of cathode materials for use in lithium-ion batteries

By early 2012

5,000 tons/year



Relationship with Employees

JX Nippon Oil & Energy

Proportion of male employees taking childcare leave

(15 out of 47 employees)

3 Core Operating Companies

Average usage rate for annual paid leave

Approx. 60%



Corporate Citizenship

The Bouquet of Children's Stories donated to children in regions hardest hit by the Great East Japan Earthquake

12,000 copies



Quality Assurance, Product Safety and Customer Satisfaction **JX Nippon Oil & Energy**

Number of calls to customer centers

Approx. 9,300 customers opinions/month



Environment

Petroleum Refining and Marketing Business (Refining Division)

Specific energy consumption

Oil and Gas Exploration and **Production Business**

CO₂ emission volume

Reduced 1.6% 294 thousand tons

Metals Business

Waste-to-landfill ratio

Reduced 78%

for a Sustainable Future 201

JX Group Values



Ethics

Alongside compliance with laws and rules, the JX Group believes that the basis of trust is formed by fair and honest business transactions, protection of intellectual property and human rights, and other behaviors that underlie ethical decision-making and actions in all of its business activities.

Together with the promotion of thorough compliance and stronger risk management, the JX Group has formed a highly ethical stance based on management that respects human rights, and has set its sights on becoming a truly leading company in this field.

Compliance

To promote fair and honest corporate activities and earn greater trust from society, the JX Group has established regulations and other rules to ensure thorough compliance among all Group companies, and has declared a policy of full compliance with laws, the Articles of Incorporation and regulations in every aspect of work performance.

We established the JX Group Compliance Committee as a sub-unit under the JX Group CSR Council to examine the direction of our compliance activities and identify key issues that need to be addressed by the Group as a whole. In addition to determining group-wide policy on future compliance initiatives, this committee also reports back with results of ongoing activities.

Under the action plan for fiscal 2010, regulations were established that took into account changes in management structure, and legal compliance status checks at JX Group companies were declared a priority and implemented. Corrective measures will be swiftly drawn up and implemented for problem areas uncovered in these checks, with all follow-up actions taken as necessary.

In addition, a compliance hotline has been set up at key Group companies to swiftly correct actions that violate laws or might violate laws as well as to properly protect those who come forward to report such behavior. These reports can be made to an outside legal firm, an external point of contact, in addition to internal departments.

JX Nippon Oil & Energy

Compliance status checks were held at all domestic and overseas locations of JX Nippon Oil & Energy as well as 24 designated affiliated companies from early October through late December 2010.

Compliance status checks are conducted by group managers at each workplace through individual or collective interviews with group members, exchanging opinions freely as to doubts about the legality of elements of each employee's daily operations. Problem areas cited as a result of checks will be followed up swiftly, in order to bring about a prompt solution.

Since this was the first year following the merger, in addition to compliance status checks, we also carried out checks to ascertain the status of regulations. The majority of regulations are already in place, and work is under way on regulations requiring establishment or revision/abolishment.

In addition, surveys were conducted at 19 key overseas units to confirm issues faced in bolstering local legal support structures at overseas units. In fiscal 2011, we will work to identify problem areas at overseas units through overseas unit managers, and enhance the ability of overseas unit managers to deal with problems through training by and information provided from legal staff at JX Nippon Oil & Energy's headquarters.



JX Nippon Oil & Gas Exploration

Compliance status checks covering all employees were held at the headquarters and domestic and overseas business sites of JX Nippon Oil & Gas Exploration, in a similar manner to JX Nippon Oil & Energy, from late September through early December 2010. Most of the problem areas cited in these checks were concerns or doubts, and all problem have since been solved or addressed.

Along with the abovementioned checks, we conducted a self-monitoring program to gauge the level of understanding of laws related to operations among all employees at the headquarters and the domestic business sites, and Japanese staff of overseas business sites. This self-monitoring involved subjects listing laws they were aware of that related to their jobs, self-evaluation by grading understanding using a point system, and meetings with group managers based on this self-analysis. We will continue to work on

strengthening communication about and enforcing strict compliance with laws, as well as raising employees' degree of recognition and understanding of laws.

We also held briefings on regulations at the headquarters and domestic and overseas business sites between October 2010 and February 2011. We deepened employees' understanding of regulations, including compliance-related regulations, and made them aware of regulations prohibiting the bribing to foreign public officials. Details are as follows.

[JX Nippon Oil & Gas Exploration Overview of Regulations Briefings]

	Theme/Frequency			
Location/Period	Resolutions and regulations regarding internal control	2. Regulations related to compliance	Prohibition of bribery to foreign public officials	
Headquarters	9	9	4	
November 2010	Coverage: all executives	Coverage: all executives	Coverage: all regular	
to January 2011	and regular employees	and regular employees	employees yet to attend	
Nakajo Oil and Gas Field October 2010	2 Coverage: all regular employees	2 Coverage: all regular employees	_	
Overseas business sites* February 2011	1 per business site Coverage: all Japanese staff	1 per business site Coverage: all Japanese staff	1 per business site Coverage: all Japanese staff	

^{*}Overseas business sites: London, Houston, Ho Chi Minh City, Vietnam, Miri, Abu Dhabi Oil Co., Ltd.
Abu Dhabi, Bunduq Co., Ltd.

JX Nippon Mining & Metals

We checked the status of legal compliance at various divisions and affiliates from September through October 2010. Problem areas cited were promptly resolved, and measures put in place to prevent their recurrence.

The results of legal compliance status checks and measures to prevent recurrence were reported to the Compliance Subcommittee (organization positioned under JX Nippon Mining & Metals' CSR Committee), with information shared within the JX Nippon Mining & Metals group.

Individual interviews were also held with JX Nippon Mining & Metals employees, including seconded employees, between November and December in 2010, encouraging them to speak freely about problems or concerns regarding legal compliance and strongly requesting even more thorough legal compliance. Problem areas cited were followed up quickly.

Furthermore, fiscal 2010 saw the second consecutive year of compliance training by job class (training for new hires, third-year employees, new supervisors, and new managers), in addition to training on anti-trust laws and export control also performed last year.

Human Rights

Basic Approach

The JX Group recognizes that achieving corporate behavior firmly rooted in high 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. Beyond respecting international rules such as the United Nations Declaration of Human Rights and the ILO Conventions, the JX Group strives to cultivate strong ethical values among its executives and employees by providing them with supportive environments for performing meaningful work. While individual policies and specific measures are decided based on Group company business characteristics and scale, we endeavor to improve working environments across the entire Group, including through the expansion of improved measures, while promoting information exchanges between staff responsible for human resource management.

JX Holdings has also placed special emphasis on the development of human resources responsible for Group management, and is fostering a management class of high ethical standards through specific training for executives and joint training for administrative staff at all Group companies.



Please refer to pages 29 and 30 for information about human resource development.

United Nations Global Compact

JX Holdings and its three core operating companies are also participants in the United Nations Global Compact, implementing and promoting the compact's 10 principles in the 4 areas of human rights, labor, the environment and anti-corruption.





Please refer to page 51 for the UN Global Compact's Ten Principles.



Dedicated to meeting the challenges of cutting-edge research and technology development with advanced ideas, the JX Group will contribute to society as a whole by creating technologies, products and services that help to answer social concerns.

Technology and R&D

M

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. In parallel, JX Holdings will seek to comprehensively manage and coordinate a host of technology development themes being advanced by the Group. Efforts here include encouraging the establishment of a technology and development platform across the entire Group.

Here we report on some technological development themes that contribute to sustainable economic/social development, and their contents.

Moves to reduce emissions by injecting/solidifying CO_2 into depleted reservoir and/or aquifers underground are ramping up as part of such efforts. These moves are called Carbon Capture and Storage (CCS).

At JX Nippon Oil & Gas Exploration, we are working together with Japan Oil, Gas and Metals National Corporation (JOGMEC) in R&D for CO₂-EOR technology to boost oil recovery by injecting CO₂ into the reservoir. We have been conducting research into the application of CO₂-EOR technology together with JOGMEC and Petrovietnam, Vietnam National Oil and Gas Group, since May 2008 at the Rang Dong oil field owned by operating subsidiary Japan Vietnam Petroleum Company, Limited.

Specifically, we have conducted the feasibility study for the field application of CO_2 -EOR including laboratory experiments, reservoir simulation study and CO_2 supply study. The study result indicated the substantial potential to increase oil production as well as to reduce CO_2 emission. Potential supply source of CO_2 for CO_2 -EOR, if applied on a field level, is industrial exhaust gases, in which case, global CO_2 emission reduction through the underground storage can be expected. In order to confirm the field applicability, we have decided to conduct a small scale CO_2 injection test (Pilot Test) in June, 2011.

In the Pilot Test, we inject CO₂ into the reservoir and produce the reservoir fluid together with CO₂. We intend to acquire the production data in order to identify any uncertainties that should be taken into account before the consideration of field application.

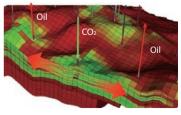
Once the Pilot Test is achieved, this will be the first application case of CO₂-EOR in Vietnam as well as south-east Asia region.

JX Nippon Oil & Gas Exploration

Oil is generally accumulated in the porous media of the underground reservoir. The proportion of crude oil accumulated underground that can be recovered is limited, and the recovery factor is generally considered to be 5–25% for primary recovery using natural energy and about 30% for secondary recovery using water injection and other techniques. Attention is now focused on tertiary recovery technology (Enhanced Oil Recovery: EOR) through injection of gas or chemicals etc. to further improve the crude oil recovery.

Meanwhile, the importance of reducing emissions of carbon dioxide (CO_2), a greenhouse gas, is rising as part of efforts to prevent global warming.

[CO₂-EOR Technology]



Source: JOGMEC

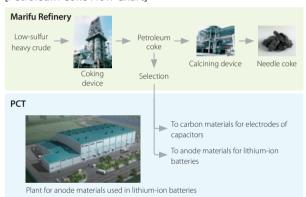
JX Nippon Oil & Energy Corporation

The Marifu Refinery has facilities for manufacturing high-value-added petroleum coke that normal refineries do not have. High-grade petroleum coke, along with light oil, is produced by applying heat decomposition to low-sulfur heavy crude using a coking device. Petroleum coke becomes the raw material for needle coke, and petroleum coke containing large amounts of sulfur with little value is supplied to electric power wholesalers to be used as boiler fuel for power generation.

Petroleum coke is also selected within the refinery and shipped to Power Carbon Technology Co., Ltd. (PCT), a joint venture between JX Nippon Oil & Energy and GS Caltex Corporation of South Korea, which has been producing and selling carbon materials for electrodes of capacitors, a type of electricity storage device, since April 2010.

PCT is also working on production of anode materials for automotive lithium-ion batteries with superior electricity recharge/discharge characteristics using petroleum coke as a raw material. Construction of facilities for producing 2,000 tons per year will be completed in March 2012, and trial runs will begin from April 2012, with commercial production scheduled to start in July to build up a stable supply system.

[Petroleum Coke Flow Chart]



Comments from Employees voice



Takashi Ovama Executive Researche Marifu Refinery JX Nippon Oil & Energy Corporation

What is needle coke?

Petroleum coke produced by a coking device is treated at high temperatures of 1,000-1,500°C in a calcining device, removing oil and water particles becoming needle coke with a highly crystalline structure. Needle coke is used worldwide to produce graphite electrodes used in electric arc furnaces that recycle steel from scrap metal.

JX Nippon Mining & Metals Corporation

Lithium-ion batteries for next-generation environmentally friendly vehicles are required to balance high capacity, safety, and long useful life at a high level. In particular, cathode materials used in the batteries can repeat dissolution and separation during recharge/discharge if foreign materials are mixed in, causing short circuits within the battery.

JX Nippon Mining & Metals uses a proprietary integrated process to control the entry of foreign materials from the outside, and by boosting production capacity, is building a structure to enable stable supply of high-purity, evenquality cathode materials that fully meet the abovementioned quality demands. Specifically, the Isohara Works has production capacity of 300 tons per year to date, but this will be boosted dramatically to 5,000 tons per year by the beginning of 2012.

In addition, we are conducting R&D for efficiently recovering metals that are raw materials for cathode materials from used lithium-ion batteries, aiming to create a resource-recycling system as well as ensure stable procure-

ment of raw materials for cathode material production. We will also build up a massproduction structure for electrolytic copper foil and rolled copper foil used in lithiumion battery cathode current collectors.



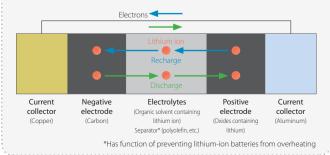
Cathode material developed for automotive lithium-ion hatteries

Column

Lithium-Ion Batteries

Demand for lithium-ion batteries is rapidly rising as an automotive power source indispensable for next-generation environmentally friendly vehicles such as electric cars, and these batteries can be used repeatedly by recharging them as shown in the diagram below. When recharged, lithium ion is stored in the anode after passing from the cathode through electrolytes, producing electromotive force of approximately 4 volts. When discharged, or in other words, when generating power, lithium ion returns to the cathode and electrons flow from the anode to the cathode, generating electric power.

The JX Group will utilize technologies accumulated in both the petroleum and metals fields to comprehensively supply lithium-ion battery materials to the market.



JX Group Values

Relationship

We strive to earn society's trust by faithfully meeting the needs of our

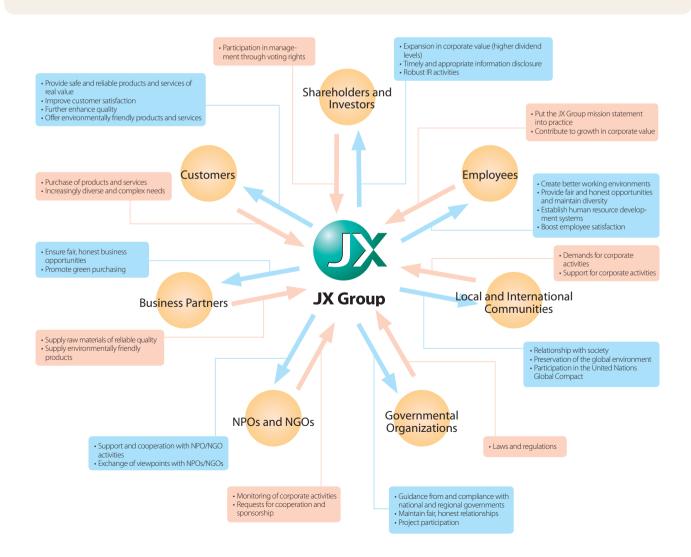
We strive to earn society's trust by faithfully meeting the needs of our diverse stakeholders.

Through sports, culture, programs for positive youth development and support, and environmental protection activities, we hope to deepen our relationships with communities and the public, and to coexist 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.



Shareholders and Investors

JX Holdings is committed to the swift, proper and fair disclosure of information to shareholders and investors in accordance with its disclosure policy. Furthermore, it conducts highly transparent investor relations (IR) activities in line with regulations to prevent insider



Award ceremony for Award for Excellence in Corporate Disclosure

trading and crisis management rules. In fiscal 2010, JX Holdings won external recognition from several organizations for its IR activities.

- The Securities Analysts Association of Japan Award for Excellence in Corporate Disclosure
- Nikko Investor Relations Co., Ltd.
 Best Company Surveyed Award
 (in Nikko Investor Relations' ranking of the websites of listed companies in fiscal 2010)



• Daiwa Investor Relations Co., Ltd. Internet IR Best Company Award

Customers

The JX Group provides and develops trusted and satisfying products and services that meet customers' demands and expectations. These products and services also take into consideration the environment and safety.



See pages 43, 44 and 47 for more information.

Business Partners

JX Nippon Procurement Corporation oversees purchasing operations for JX Group companies. Besides making purchasing information available to business partners in accordance with related laws and regulations and actively providing opportunities to business partners, JX Nippon Procurement is seeking to develop bonds of mutual trust with partners by ensuring fair and honest trading opportunities. The JX Group also purchases equipment and services with low environmental impact.



See page 44 for more information.

NPOs and NGOs

The JX Group has built cooperative relationships with distinctive NPOs and NGOs and supports their activities. For example, JX Nippon Oil & Energy

sponsors the activities of ChildFund Japan through a sponsorship program. This certified NPO assists children living in poverty in Southeast Asia. In fiscal 2010, employees collected unwanted books and sold them at a charity book market. The proceeds were used to help children in the Philippines to attend school.



A letter from a supported child

Governmental Organizations

The JX Group operates in regions across Japan and in countries worldwide. Wherever it operates, the Group maintains fair and honest relationships with national and regional governments and complies strictly with applicable laws and regulations. Along with active participation in government-backed projects, the Group provides policy recommendations, primarily through industry bodies.

Local and International Communities

The JX Group consistently aims to conduct responsible corporate activities to meet the expectations of local and international communities.

As part of efforts to build relationships with local communities, JX Nippon Mining & Metals opens the Nippon Mining Museum to the public (entry is free). This industrial museum is located in Hitachi City, the birthplace of modern mining in Ibaraki Prefecture and the founding site of the company. Since opening in 1985, the museum has been visited by many people, and is used as a site for elementary school children to learn about local history.





Nippon Mining Museum (Exterior)

Nippon Mining Museum (Interior)



Please visit the following website to read more about Nippon Mining Museum. http://www.nmm.ix-group.co.ip/english/museum/index.html

To build relationships with the international community, JX Nippon Oil & Gas Exploration makes donations to events conducted by the local government and disaster recovery in Malaysia where it is developing a key project as the project operator. These activities have helped build a good relationship with the local community over many years.





A regatta in Kuching, Sarawak, Malaysia

A donation is handed to a local government official

Employees

The JX Group believes that employees are one of the most important elements of a company. We therefore put in place various systems so that employees can work with peace of mind and reach their full potential.



See pages 29, 30, 39 and 40 for more information.



Relationship with Employees

Basic Approach

The JX Group sees human resources as one of the most important factors underlying business continuity. 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 works to recruit senior citizens and people with 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, along with conducting awareness-raising activities designed to encourage employees to actually utilize these programs.

Furthermore, the JX Group strongly recognizes the need to give top priority to the safety and health of employees as it conducts business activities.

JX Holdings, Inc.

For JX Holdings, Inc. (non-consolidated), the workforce composition in fiscal 2010 was as follows:

[Workforce composition]

Total headcount		112
Male employees	Headcount	92
	Average age	44.4
	Average years of service	20.6
Female employees	Headcount	20
	Average age	39.1
	Average years of service	16.4

For JX Holdings, Inc. (non-consolidated), the disabled persons' employment ratio, the number of employees re-hired after retirement, the usage rate for annual paid leave and the number of employees taking annual paid leave were as follows:

[Disabled persons' employment ratio etc.]

Disabled persons' employment ratio*	_
Number of employees re-hired after retirement*	_
Number of annual paid leave days granted	20.0
Number of annual paid leave days taken	11.0
Usage rate for annual paid leave	55.0%
Number of employees taking nursing care leave	0
Number of employees taking childcare leave	2
(Incl. male employees)	2

^{*&}quot;Employees" refer to those seconded from operating companies, and are accounted for at their companies of origin.

For JX Holdings, Inc. (non-consolidated), the frequency of industrial accidents (number of deaths or injuries resulting from work-related accidents per 1 million man-hours) in fiscal 2010 and the overall accident severity rate (number of lost workdays per 1,000 man-hours) were both 0.00.

JX Nippon Oil & Energy Corporation

For JX Nippon Oil & Energy Corporation (non-consolidated), the workforce composition and the number of recent graduate recruits in fiscal 2010 were as follows:

[Workforce composition]

<u> </u>		
Total headcount		6,592
Male employees	Headcount	5,977
	Average age	43.6
	Average years of service	22.3
Female employees	Headcount	615
	Average age	40.3
	Average years of service	18.6

[Number of recent graduate recruits]

Total headcount	133
Male university graduates	51
Female university graduates	9
Junior college/vocational school graduates	9
Senior high school and other graduates	64

In fiscal 2010, JX Nippon Oil & Energy implemented a special early retirement benefit program after determining that it must quickly establish an appropriate workforce from the standpoint of driving structural reforms in anticipation of the changing business environment. Eligible personnel were employees aged 35 or above as of March 31, 2010, with up to 1,000 applicants sought. In response, the company received applications from 1,327 employees.

For JX Nippon Oil & Energy Corporation (non-consolidated), the disabled persons' employment ratio, the number of employees re-hired after retirement, the usage rate for annual paid leave and the number of employees taking annual paid leave in fiscal 2010 were as follows:

[Disabled persons' employment ratio etc.]

Disabled persons' employment ratio	2.11%
Number of employees re-hired after retirement	199
Number of annual paid leave days granted	19.5
Number of annual paid leave days taken	11.5
Usage rate for annual paid leave	59.0%
Number of employees taking nursing care leave	4
Number of employees taking childcare leave	47
(Incl. male employees)	15

The frequency of industrial accidents and the accident severity rate for all refineries and manufacturing sites of the JX Nippon Oil & Energy Group from fiscal 2008 to fiscal 2010 were as follows:

[Frequency of industrial accidents and accident severity rate]

	Fiscal 2008	Fiscal 2009	Fiscal 2010
Frequency of industrial accidents	0.35	0.12	0.11
Accident severity rate	0.00	0.00	0.00

JX Nippon Oil & Gas Exploration Corporation

For JX Nippon Oil & Gas Exploration Corporation (non-consolidated), the workforce composition and number of recent graduate recruits in fiscal 2010 were as follows:

[Workforce composition]

Total headcount		222
Male employees	Headcount	199
	Average age	43.1
	Average years of service	18.7
Female employees	Headcount	23
	Average age	32.6
	Average years of service	8.7

[Number of recent graduate recruits]

<u>- </u>	
Total headcount	8
Male university graduates	5
Female university graduates	3
Junior college/vocational school graduates	0
Senior high school and other graduates	0

For JX Nippon Oil & Gas Exploration Corporation (non-consolidated), the disabled persons' employment ratio, the number of employees re-hired after retirement, the usage rate for annual paid leave and the number of employees taking annual paid leave in fiscal 2010 were as follows. The frequency of industrial accidents, including at the company's business sites in Vietnam, Malaysia and Nakajo, Japan, for fiscal 2008 to fiscal 2010 was 0.00.

[Disabled persons' employment ratio etc.]

Disabled persons' employment ratio	3.57%
Number of employees re-hired after retirement	2
Number of annual paid leave days granted	17.8
Number of annual paid leave days taken	9.4
Usage rate for annual paid leave	52.7%
Number of employees taking nursing care leave	0
Number of employees taking childcare leave	3
(Incl. male employees)	0



JX Nippon Mining & Metals Corporation

For JX Nippon Mining & Metals Corporation (non-consolidated), the workforce composition and number of recent graduate recruits in fiscal 2010 were as follows:

[Workforce composition]

[Workloree composition]		
Total headcount		1,396
Male employees	Headcount	1,294
	Average age	40.1
	Average years of service	15.7
Female employees	Headcount	102
	Average age	36.5
	Average years of service	9.5

[Number of recent graduate recruits]

.	
Total headcount	40
Male university graduates	20
Female university graduates	2
Junior college/vocational school graduates	0
Senior high school and other graduates	18

For JX Nippon Mining & Metals Corporation (non-consolidated), the disabled persons' employment ratio, the number of employees re-hired after

Shuichi Tanaka General Administration Department JX Holdings, Inc.



Taking Childcare Leave

I took childcare leave for one week when my eldest daughter was one month old. I was relaxed before taking leave, but once I went on leave I realized that looking after small children is much harder than I expected. It was quite difficult to get my baby daughter to stop crying, for example. I found myself exhausted from day one.

By looking after my daughter for a whole week, I developed an awareness of and new appreciation for the huge role shouldered by my wife, who takes care of household chores and child-raising every day. I feel that the time I spent on childcare leave was very meaningful, as it gave me the chance to interact with my growing daughter and do my very best to look after her on a daily basis.

retirement, the usage rate for annual paid leave and the number of employees taking annual paid leave in fiscal 2010 were as follows.

[Disabled persons' employment ratio etc.]

Disabled persons' employment ratio	1.61%
Number of employees re-hired after retirement	38
Number of annual paid leave days granted	19.3
Number of annual paid leave days taken	13.2
Usage rate for annual paid leave	68.5%
Number of employees taking nursing care leave	0
Number of employees taking childcare leave	7
(Incl. male employees)	0

The frequency of industrial accidents and accident severity rate at the domestic business sites of JX Nippon Mining & Metals Corporation as well as the Saganoseki Smelter & Refinery of PAN PACIFIC COPPER CO., LTD. from fiscal 2008 to fiscal 2010 were as follows:

[Frequency of industrial accidents and accident severity rate]

	Fiscal 2008	Fiscal 2009	Fiscal 2010
Frequency of industrial accidents	0.61	0.61	1.36
Accident severity rate	0.09	0.01	0.02

The JX Nippon Mining & Metals Group recognizes that business activities are premised on giving top priority to the protection of worker safety. Nonetheless, significant accidents occurred at Nikko Environmental Services Co., Ltd. (now JX Nippon Environmental Services Co., Ltd.) and the Kurami Works of JX Nippon Mining & Metals Corporation in September 2010 and February 2011, respectively, resulting in the death of 1 employee of a partner company at both accidents.

Following a fatal accident in June 2009, the JX Nippon Mining & Metals Group has worked to promote a campaign to eradicate significant accidents. The Group takes the repeated incidence of fatal accidents very seriously. While reviewing the campaign, the Group will redouble its efforts to prevent a recurrence of accidents of this kind.



Corporate Citizenship

Basic Approach

The JX Group is actively engaged in activities that give back to society, as it views this as an important theme of CSR activities.

Basic Policy for JX Group Social Contribution Activities

Recognizing its role as a good corporate citizen, the JX Group will advance together with society and will contribute to the development of a sustainable society through the vigorous promotion of social contribution activities, as well as support for the citizenship activities of its employees.

- We will actively work on advancement of sports and culture, as well as youth development and support, to realize a "Relationship with society," one of the JX Group values.
- 2. We will actively work on environmental protection to realize "Harmony with the environment," one of the JX Group values.

The JX Group discusses matters pertaining to JX Group social contributions in the JX Group Corporate Citizenship Committee, which is comprised of members drawn from across the JX Group, and shares related information among JX Group companies. Social contribution themes that the JX Group will work on are discussed and selected, and an ideal vision and direction are determined. These are then reported to the JX Group CSR Council.

Examples of JX Group Social Contribution Activities

Advancement of Sports and Culture

JX-ENEOS Baseball Club and JX Sunflowers

JX Nippon Oil & Energy operates the JX-ENEOS Baseball Club and the JX Sunflowers women's basketball team.

Founded as the ENEOS Baseball Club in 1950, the JX-ENEOS Baseball Club has won 9 Intercity Baseball Tournament titles, the most of any team in the tournament's history. In addition to baseball classes for schoolchildren given by past and current club members, the club provides support for a variety of baseball-related events and groups, including the All Japan Junior Softball Tournament, and the ENEOS CUP Junior Tournament for NPB12 baseball teams.







JX Basketball Clinic

The JX Sunflowers is a women's basketball team originally founded by Kyodo Oil in 1969. It remains the benchmark for women's basketball teams in Japan. The team has won the Women's Japan Basketball League (WJBL) a total of 14 times, and boasts 16 championship wins in the All Japan Basketball tournament, a record for the most wins in the tournament's history. In the JX Basketball Clinic, a special team made up of current and former players with Olympic and other experience travels across Japan to teach children basic basketball skills. In fiscal 2010, a total of 1,480 children attended 43 clinics.



Visit the following websites for details regarding activities.

JX-ENEOS Baseball Club http://www.jx-group.co.jp/baseball/ (Japanese only)

JX Sunflowers http://www.jx-group.jp/sunflowers/ (Japanese only)

Youth Development and Support

School Visits-ENEOS Environmental Classes

JX Nippon Oil & Energy employees visit elementary schools and other sites to offer ENEOS Environmental Classes, which teach children about the environment and energy. Classes were held at 41 schools in fiscal 2010, and attended by approximately 2,400 students.



ENEOS Environmental Classes (School visits)

Environmental Protection

Forest Conservation Activities

JX Group companies are actively involved in forest conservation activities around their operating facilities. JX Nippon Oil & Gas Exploration has been involved in forest conservation activities in and around its Nakajo Oil and Gas Field in Tainai City, Niigata Prefecture, since 1998, with employees and their families participating as volunteers.



A forest conservation activity at the Nakajo Oil and Gas Field

Comments from Employees

Key Theme for Fiscal 2010: JX Children's Story Award and JX Children's Story Fund

Priority fields in the JX Group's social contribution activities are: (1) advancement of sports and culture, (2) youth development and support, and (3) environmental protection. A social contribution activity undertaken by the entire Group that satisfies all three of these areas is the JX Children's Story Award/JX Children's Story Fund.

Cultural Event

The JX Group calls for submissions from the general public every year of original children's literature on the theme of "heart-to-heart contact." The best works are published in a collection called *The Bouquet of Children's Stories*. The JX Group donates copies of the book to social welfare facilities, mothers and children's homes, and foster families through Tokyo Zen-i Bank and other social welfare groups.



41st JX Children's Story Award award ceremony



41st JX Children's Story Award recipients

Hitoshi Tamaki
Executive Officer, Manager, General Affairs
JX Nippon Oil & Energy Staging Terminal Corporation

Initiatives by JX Nippon Oil & Energy Staging Terminal Corporation

JX Nippon Oil & Energy Staging Terminal Corporation presented all 612 students at 6 elementary schools surrounding its Kiire Terminal with copies of *The Bouquet of Children's Stories* in February 2011. When we attended the presentation ceremony at the local Nakamyo Elementary School, we were struck by the sight of children saying with eyes sparkling, "We love books so we are very happy." We hope that the



The Bouquet of Children's Stories (Volume 41)

children of the Kiire district will read these stories, whose theme is "heart-to-heart contact," with their friends and family, and develop sensitivity.

In the future, we will continue to build our relationships with local communities through initiatives such as gifts of *The Bouquet of Children's Stories* and actively work on social contribution activities.

Youth Development and Support

The Bouquet of Children's Stories is purchased by JX Group companies, dealerships of JX Nippon Oil & Energy, which operates service stations, and LPG dealerships, among others, with all proceeds going to the JX Children's Story Fund. This fund makes donations to the Japan National Council of Social



Welfare. The donations are used by the JX Scholarship Program established by the Council as a part of support funds (100,000 yen per person) when children from foster-care facilities, single-mother support facilities and foster homes enter university and undertake other education. Support funds were received by 320 children in fiscal 2010. The support funds do not have to be repaid, and many letters of gratitude have been received from scholarship students.



Ceremony to mark donation of the books to Japan National Council of Social Welfare



Letters of appreciation from scholarship recipients

Environmental Protection

The Bouquet of Children's Stories uses "3.9 paper," produced from forest thinning in Haramura Village, Suwa County, Nagano Prefecture, where JX Nippon Oil & Energy is working on forestation. Some 126 tons of such paper and a similar amount of wood produced from forest thinning



were used as raw materials for *The Bouquet of Children's Stories (Volume 41)* published in fiscal 2010, contributing to reductions in carbon dioxide emissions and supporting Kizukai Undo (Tree-Use Movement), a domestic forest preservation program promoted by Japan's Forestry Agency.



Volunteers pictured at the Haramura ENEOS Ayumi Forest, an initiative run by JX Nippon Oil & Energy.



For information on JX Children's Story Award, visit the following website. http://www.jx-group.co.jp/hanataba/ (Japanese only)

The Bouquet of Children's Stories for children in areas affected by the Great East Japan Earthquake

Working with Culture Convenience Club Co., Ltd., which operates TSUTAYA and other businesses, and others we donated some 12,000 copies of *The Bouquet of Children's Stories (Volume 41)* to evacuation centers in affected areas (about 200 locations), elementary schools, kindergartens, and day care facilities, hoping to help in the psychological care of children in the affected region.



Please see page 12 for details



To satisfy customers, the JX Group works diligently to improve product and service quality from the customer's perspective, and to ensure product safety. As the aspects that make up product quality diversify, we aim to provide even more trustworthy products and services.

Quality Assurance, Product Safety and Customer Satisfaction

Basic Approach

Through its core operating companies alone, the JX Group is involved in a broad range of operations—from oil and gas exploration, refining and marketing, and copper mine development, smelting and processing, to electronic materials. 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. The JX Group is committed to improving customer satisfaction. Group companies work to assess customer needs through everyday business transactions, customer centers, and customer satisfaction surveys, then reflect customer input in products and services.

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.

JX Nippon Oil & Energy Corporation

1 Quality Policy

JX Nippon Oil & Energy has instituted a "quality policy" based on the values of "Trustworthy products/services" included in the JX Group's Values, and is working to enhance quality and ensure product safety.

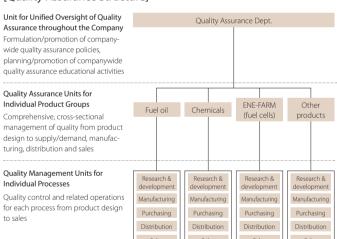


Please refer to the following website for JX Nippon Oil & Energy's quality policy (Japanese only). http://www.noe.jx-group.co.jp/csr/about/trustworthy/quality/index.html

2 Quality Assurance Structure

JX Nippon Oil & Energy is involved in many different energy-related businesses as an integrated energy company, and "quality sought by customers" differs by business. Therefore, the basic policy is for each business to execute quality assurance on its own in line with its own situation. However, the company is also creating a three-tiered quality assurance structure, as shown below, so that businesses can feed off each other and raise quality assurance levels for the entire company.

[Quality Assurance Structure]



Creation of Quality Management System Utilizing ISO 9001, etc.

The company is striving to maintain and enhance the quality of products by utilizing ISO 9001, the international standard for quality management systems, at all refineries and plants.

In manufacturing and sales of PREPREG carbon fiber, the company has acquired the quality management standard JISQ9100, which certifies that "quality and reliability" demanded of aerospace products and services has been met (January 2011).



Please refer to the following website for ISO 9001 certification status (Japanese only). $\label{eq:local_planese} http://www.noe.jx-group.co.jp/csr/about/trustworthy/quality/iso9001/index.html$

Promotion of "Improved Customer Satisfaction"

JX Nippon Oil & Energy sees not only customers in the market but also internal customers and all customers leading to customers in the market as "customers." The company believes that by having each and every employee emphasize "improved customer satisfaction," it can have its products and services ultimately chosen by customers in the market.

Therefore, the company does not treat improved customer satisfaction as something unusual in all of its divisions, but as a basic part of daily operations. This includes responding speedily and sincerely to customers' opinions directed to customer centers*, fully grasping the needs of customers and society, and providing products and services that meet expectations.

With regards to improving customer satisfaction in retail activities, in particular, which have direct customer contact, the company is working with dealerships and sales offices to promote various educational programs and regular monitoring of service from the customer's viewpoint.

*Customer centers are open from 9am–5pm (excluding Saturdays, Sundays, holidays, and New Year's), and receive approximately 9,300 customer opinions per month.

JX Nippon Mining & Metals Corporation

JX Nippon Mining & Metals is promoting group-wide quality management based on its basic quality policy and regulations governing quality management in order to respond quickly and efficiently to customers' increasingly sophisticated and diverse needs regarding quality. We are also operating quality management systems such as ISO 9001 and various improvement activities such as Total Productive Maintenance (TPM) at all of our business sites and affiliates, creating quality control and assurance systems suited to the characteristics of each business.

In fiscal 2010, council meetings of officers responsible for quality were held in May and November 2010, where information was shared and discussions held on the status of ISO 9001 audits, quality losses, and the status of quality-related complaints. The company is also rebuilding its training systems, dividing quality education previously conducted on an individual

business site basis into business site-specific and companywide categories, as it strives for systematic personnel development.

Going forward, the company will further bolster its quality management systems, including human resource development, and build up relationships based on trust by incorporating the opinions of customers and business partners to improve the quality of products and services.

Purchasing

Basic Approach

Procurement sources for raw materials are growing increasingly diverse in step with economic globalization. Numerous examples exist of cases in which supplier-side problems concerning compliance practices, the environment and human rights have ultimately impacted consumable goods. For this reason, responsible supply chain management has become an important element in garnering trust in products and services.

The JX Group established JX Nippon Procurement Corporation to integrate its procurement functions, putting in place a Group-wide procurement structure.

Going forward, JX Nippon Procurement will spearhead the Group's efforts to promote transparent, fair and honest transactions. Along with environmentally friendly purchasing activities, the Group will pursue stronger communication with business partners, aiming for mutually beneficial outcomes by building partnerships grounded on mutual trust.

JX Nippon Procurement's Activities in Fiscal 2010

JX Nippon Procurement drafted a new basic purchasing policy, which is available on its website. The company also established a system for promoting green purchasing in order to procure supplies, materials and services from those business partners that strive to reduce their environmental impact. Plans call for surveys regarding green purchasing and other initiatives.



Please refer to the following website for JX Nippon Procurement's basic purchasing policy (Japanese only).

http://www.pr.jx-group.co.jp/policy/

Column

JX Nippon Oil & Gas Exploration's Iodine Business

lodine is an element used in a wide range of areas, including pharmaceuticals such as iodine tincture and gargles, X-ray contrast mediums, sterilizers and fungicides, and photosensitizers. It is contained in seaweed and fish as well as brine water produced with gas.

At the Nakajo Oil and Gas Field, the company is recovering iodine contained in brine water produced with gas. The Nakajo Oil and Gas Field acquired ISO 9001 certification in September



This iodine product was produced at the Nakajo Oil and Gas Field.

1998, and the company is supplying products to customers worldwide as an iodine supplier.

Very few regions in the world are iodine producers. Japan is the second-ranked producer in the world after Chile, and iodine is a valuable resource that can be exported. Iodine is also an element

world after Chile, and iodine is a valuable resource that can be exported. Iodine is also an element critical to human survival, so potassium iodate (chemical substance to be added to table salt) is being voluntarily provided to countries that cannot acquire seaweed, etc. containing iodine.

JX Group Values



armony nment

We develop technologies and services for creating a better global environment. As a corporate group closely connected to the Earth's resources, the JX Group is involved in ongoing and vigorous efforts to use resources and energy effectively, and to preserve the environment.

Environment

Basic Approach

Harmony with the environment is one component of the JX Group Values. Accordingly, the environment is a vital theme in the Group's CSR activities.

JX Group Environmental Policy

The JX Group will

- Develop the technologies, products and services that help to create a better global environment.
- 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.

The JX Group Environmental Committee deliberates and reports on environmental matters and manages progress against the Medium-Term Environmental Management Plan at Group companies. In October 2010, the committee established the JX Group's Environmental Management System (EMS), putting in place a system for engaging in environmental activities.

Strict Compliance with Environmental Laws

The JX Group considers strict compliance with environmental laws and regulations a precondition for business activities and thus a matter of the utmost importance.

Nevertheless, in February 2011 it came to light that, as far as can be confirmed, that recorded measurements of dust concentration in exhaust from February 1980 to February 2011 prescribed under the Air Pollution Control Act and a pollution agreement with Okayama Prefecture and Kurashiki City had not in fact been performed at 49 smoke-emitting facilities at the A site of JX Nippon

Oil & Energy Corporation's Mizushima Refinery. Following the discovery, dust concentration at the facilities was promptly measured and inspected, and it was confirmed that the dust concentration at 42 facilities, excluding 7 facilities not in operation, was within the control standard.

It was also established that measurement of dust concentration in exhaust prescribed under the Air Pollution Control Act was not performed at 4 smoke-emitting facilities at the Kainan Plant of JX Nippon Oil & Energy Group company Wakayama Petroleum Refining Co., Ltd. As a result of dust concentration measurement performed following the discovery, it was confirmed that the dust concentration at all 4 facilities was within the control standard.

We have determined that the causes that led to these circumstances were insufficient compliance awareness, including understanding of the relevant laws and ordinances and pollution prevention agreements, and inadequate functioning of control mechanisms and systems pertaining to dust concentration measurement and have engaged in deep reflection on the matter.

We fully recognize the gravity of the situation and will promptly review control and work procedures pertaining to environment measurement. We will also engage in employee education and conduct rigorous audits on an ongoing basis. We will once again publicize the importance of compliance and environmental protection and make every effort to prevent a reoccurrence of the incidents.

The JX Group conducted compliance audits of JX Holdings and the core operating companies and found no major violations other than the two abovementioned incidents.

JX Group Medium-Term Environmental Management Plan (Fiscal 2010 to Fiscal 2012)

The core operating companies and other principal companies of the JX Group have established the medium-term environmental management plans. Although the specific environmental targets differ from company to company according to the characteristics of their businesses, the Group has classified the following three items as common targets. The Group companies are working in unison to achieve these environmental targets, sharing information through the JX Group Environmental Committee and other forums.

- Global warming prevention and biodiversity preservation measures
- Environmental load mitigation
- Enhancement of environmental management systems

Targets, fiscal (FY) 2010 results and evaluation, and planned measures for FY2011 for each business are as follows.

Petroleum Refining and Marketing Business (JX Nippon Oil & Energy Group)

Principal activities in the Medium-Term Environmental Management Plan (FY2010–2012) and progress against the plan

Activities	Specific energy consumption reduction	Soil contamination countermeasures	Waste reduction
Targets	Reduce 3% over 3 years compared with FY2009 Reduce 1% in FY2010 (compared with FY2009)	Operating properties: Prevent external leakage Decommissioned properties: Conduct deliberate surveys and treatment measures	Maintain the waste-to-landfill ratio and "Zero Emission Plus" goals Maintain at 0.5%
FY2010 results and evaluation	Reduced 1.6% compared with FY2009 Target achieved (refining division)	Soil surveys implemented: 352 sites Treatment measures: 103 sites Target achieved	0.33% Target achieved
Planned measures for FY2011	Continuous implementation of measures including operation improvement Further accumulation of improvements to achieve targets	Implementation of continuous improvement	Continuous implementation of measures including operation improvement Further accumulation of improvements to achieve targets

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

Principal activities in the Medium-Term Environmental Management Plan (FY2010–2012) and progress against the plan

			*CO ₂ emissions are converted from energy consumption.
Activities	CO ₂ emissions reduction*	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 3% over 3 years compared with FY2009 FY2010 target of no more than 323 thousand tons	Control volumes, including at overseas sites (Vietnam, Malaysia)	Appropriately operate the HSE Committee, maintain and manage the environmental management system throughout the JX Nippon Oil & Gas Exploration Group
FY2010 results and evaluation	294 thousand tons Target achieved	Implemented Target achieved	Held 3 HSE Committee meetings, etc. Target achieved
Planned measures for FY2011	Supply vessel and helicopter operation control Reduction of unplanned shutdowns due to facilities problems, etc.	Continuous implementation	Continuous implementation

Metals Business (JX Nippon Mining & Metals Group)

 $Principal\ activities\ in\ the\ Autonomous\ Action\ Plan\ on\ Environmental\ Protection\ (FY2006-2010\ and\ FY2011-2012)\ and\ progress\ against\ the\ plan\ Plan\ on\ Plan\ o$

Activities	Reduction of CO ₂ emission intensity	Specific energy consumption improvement	Waste reduction
Targets	FY2010: 7.5% reduction (Compared with FY2003–2005 average)	FY2010.5% reduction (Compared with FY2003–2005 average)	FY2010: 70% reduction in waste-to-landfill ratio
	FY2011: 1.0% reduction (Compared with FY2008–2010 average)	FY2011:1% reduction (Compared with FY2008–2010 average)	(Compared with FY2003–2005 average)
	FY2012: 2.0% reduction (Compared with FY2008–2010 average)	FY2012:2% reduction (Compared with FY2008–2010 average)	FY2011 and FY2012: Under 1% (non-application waste ratio)
FY2010 results and evaluation	Reduced 8.1%	Reduced 5.4%	Reduced 78% in waste-to-landfill ratio
	compared with FY2003–2005 average	compared with FY2003–2005 average	compared with FY2003–2005 average
	Target achieved	Target achieved	Target achieved
Planned measures for FY2011	Updating to high-efficiency equipment and reduction of power consumption Reduction of power consumption through greater	\bullet Engagement in activities similar to CO_2 emission intensity improvement activities	• Further accumulation of improvements to achieve targets

Other Businesses (Listed Subsidiaries and Other Companies)

Principal activities in the Medium-Term Environmental Management Plan at Group companies and progress against the plan

Activities	NIPPO CORPORATION	Toho Titanium Co., Ltd.	Other Group Companies
Targets	CO ₂ emissions intensity (sales amount) reduction targets FY2010: 3% (Compared with FY2007) FY2011: 2% (Compared with FY2009) FY2012: 3% (Compared with FY2009)	CO2 emissions intensity (Titanium volume) For FY2008–2012, a reduction of at least 5% compared with FY2005–2007 average by FY2012	Implement the JX Group EMS at each company, establish environmental targets according to business characteristics, and implement PDCA cycle
FY2010 results and evaluation	Reduced 6.3% compared with FY2007 Target achieved	Reduced 5.1% compared with average for FY2005–2007 Target achieved	Reviewed target achievement at each company by the JX Group Environmental Committee
Planned measures for FY2011	• Further accumulation of improvements to achieve targets	Continuation of emissions intensity improvement activities through process yield improvements and prevention of nonconformance	Appropriate operation of the JX Group EMS



Environmentally Friendly Products

Basic Approach

With public interest in environmental problems growing every year, product environmental performance is becoming indispensable to efforts to improve the reliability of products and services. All companies in the JX Group are developing and offering environmentally friendly products, technologies and services.

- Environmentally Friendly Products that Protect the Environment throughout the Entire Automobile Life Cycle
- Contributing to the realization of a low-carbon society through sustained high fuel economy

At a time when efforts to reduce carbon dioxide emissions have become a global imperative, improvement in fuel economy is required from automotive lubricants (engine oil).

To meet this challenge, JX Nippon Oil & Energy developed and launched in November 2010 ENEOS Premium Motor Oil SUSTINA, which sustains and maximizes engine performance.

With SUSTINA, dramatically reducing the sulfur content of a newly developed friction modifier has made it possible to inhibit the generation of sulfuric acid inside car engines and curb depletion of an alkaline additive that



contributes to cleaning performance and fuel economy. In addition, combining one of the world's finest base oils and an independently developed additive has resulted in high performance that delivers up to a 2% increase in fuel economy compared to currently available fuel-efficient motor oils and

engine cleaning performance that lasts twice as long. What's more, the ability to maintain fuel economy is doubled.

Switching all gasoline vehicles in Japan over to SUSTINA would result in an annual reduction of 2.7 million tons in carbon dioxide emissions in Japan, the equivalent of emissions from approximately 0.56 million households, due to the fuel efficiency benefits.

JX Nippon Oil & Energy will contribute to the realization of a low-carbon society through the supply of SUSTINA and further improve the performance of lubricating oil.



Contributing to a resource recycling-oriented society while achieving superb product characteristics

The use of electronics in automobiles is increasing, and hybrids and other environmentally friendly vehicles are expected to come into wider use.

Accordingly, high performance and recyclability are required even in materials used for the connectors that connect electronic devices and cables.



Hyper Eco Alloy

To meet those challenges JX Nippon Mining & Metals developed Hyper Eco Alloy, a new copper alloy material for automotive applications.

Brass (an alloy of copper and zinc) is widely used as a connector material, an application in which its spring properties and bending workability are advantageous. On the other hand, since brass has low electrical conductivity, there is concern about temperature increase from heat generation when large amounts of electricity flow to a small terminal. In addition, brass terminal material is tin-plated to facilitate connector insertion and removal. Since tin isn't a component of brass, the inability to recycle used terminal material as melted raw material has been an issue.

Since Hyper Eco Alloy, developed by JX Nippon Mining & Metals, consists of copper, zinc and tin, used tin-plated products can be reused as a product raw material. In addition, optimization of alloy composition and a meticulously controlled rolling process result in high electrical conductivity far exceeding that of brass while providing equivalent mechanical properties and also contribute to reducing connector size and increasing reliability while improving recyclability.

In February 2011, JX Nippon Mining & Metals decided to build a new plant to engage in the pressing and plating of automotive electronic parts. The plant will contribute to the realization of a resource recycling-oriented society by expanding and enhancing the company's integrated supply system, which encompasses processes from advanced materials development to the pressing and plating of parts for environmentally friendly vehicles, which are expected to come into wider use.



The planned site of a pressing and plating plant. (Kakegawa City, Shizuoka Prefecture)

Hyper Eco Alloy

Search

http://www.nmm.jx-group.co.jp/english/products/01_atsuen/04hpea.html

Activities at Toyoha Mine From Exploration, Development, and Production to Processing after Mine Shutdown

Contribution to economic development as one of Japan's leading mines

For many years, JX Nippon Mining & Metals Group member Toyoha Mines Co., Ltd. (Sapporo City) has operated one of Japan's leading mines and played an important role in supplying society with raw materials (copper, zinc, lead, silver and indium) essential to people's lives and industry.

Since the start of mine development in 1914, the amount of mineral ore (raw ore) produced at the Toyoha Mine has totaled approximately 22 million tons, thanks to the repeated discovery of new veins and technological innovations. The mine ranked among the world's largest producers of indium, which is used in materials for Liquid Crystal Display televisions and solar power generation panels.

Through the stable supply of these mineral resources, the Toyoha Mine greatly contributed to the development of the local economy and Japan's national economy. However, in March 2006 the mine ceased operation due to ore depletion, the eventual fate of every mine.



The Toyoha Mine when it was operating.

Environmental protection activities after mine shutdown

The environmental protection activities carried out when the mine was in production continue even after shutdown. An especially critical activity is measures to permanently detoxify the mine water (water that flows out of mines) and wastewater (percolation water from slag deposit sites) that contain metal contents and prevent pollution of nearby rivers.

To further purify wastewater at the Toyoha Mine, in October 2008 Toyoha Mines built a new wastewater treatment facility following repeated detailed discussions with the Hokkaido Industrial Safety and Inspection Department and the City of Sapporo. Although the water-quality standards in a pollution prevention agreement concluded with the City of Sapporo are stricter than the national wastewater standards (in the Water Pollution Control Law), the wastewater from the facility has good water quality that consistently meets



Exterior view of the wastewater treatment facility

the standards. In addition, the company plans to build a new mine water treatment facility and commence full-scale operation in November 2011 following test operation. Both of these facilities are groundbreaking privately owned water treatment facilities designed and built using the latest technologies that enable long-term, stable, efficient treatment of water in the harsh natural environment around the mine, an area of heavy snowfall.

Environment restoration through forest development

Since forests have high water-retention capacity, they serve the purposes of equalizing river flow rates, mitigating flooding and drought, and purifying water. In addition, they play a role in preventing soil erosion and runoff from rainfall because the soil is covered by fallen leaves and underbrush.

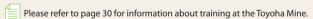
At the Toyoha Mine, to restore the natural environment damaged by mine operation, an environment has been developed in which vegetation can grow by covering slag deposit sites with soil and removing mining equipment, as it strives to restore the natural environment and maintain and improve biodiversity.



A restored site (Slag pile site)

Use as a human resource development site

These activities at the closed Toyoha Mine, as well as the high ethical standards that are the basis for the activities, will serve as a model case for harmony with the global environment in overseas resource development at JX Nippon Mining & Metals. The company has positioned the Toyoha Mine as the starting point for CSR in resource development and utilizes the mine as an employee training facility.



Geothermal development, a clean, renewable energy source that is attracting widespread attention

The Toyoha Mine zone has attracted attention as one of Japan's premier geothermal areas, and its geothermal energy reserves rank among the largest in Japan.

In fiscal 2010, JX Nippon Mining & Metals, in response to the implementation of geothermal development promotion surveys by New Energy and Industrial Technology Development Organization (NEDO), has begun a geothermal power generation development feasibility study at the Toyoha Mine. Geothermal power generation is a source of sustainable clean energy that enables the stable supply of electricity unaffected by the weather. The company plans to earnestly proceed with the study with the aim of commercialization in around 10 years.



Environmental Performance

The environmental performance data on pages 49 to 51 covers a total of 52 business sites at 21 companies engaged in the Petroleum Refining and Marketing Business, the Oil and Gas Exploration and Production Business, the Metals Business, and Other Businesses.

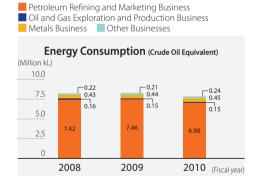
- Petroleum Refining and Marketing Business: 15 sites at 5 companies
- Oil and Gas Exploration and Production Business: 3 sites at 1 company
- Metals Business: 23 sites at 12 companies
- Other Businesses: 11 sites at 3 companies

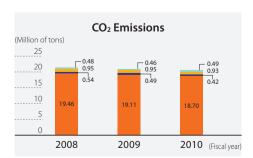
For the Petroleum Refining and Marketing Business, we have recorded data on business sites involved in petroleum product refining and production only. We have checked the figures for the Metals Business and made necessary adjustments. We have also newly included NIPPO CORPORATION and JX Nippon Real Estate Corporation in Other Businesses. Since we have retroactively restated the figures for the years fiscal 2008 to fiscal 2010 to reflect these changes, the figures differ from the data for previous fiscal years in "JX Report for a Sustainable Future 2010."

Initiatives to Prevent Global Warming

Global warming is a problem that faces all of us. The companies within the JX Group are addressing this issue by setting proprietary activity targets and concrete countermeasures, and energetically reducing energy consumption and taking steps to cut CO₂ emissions.

Energy consumption in fiscal 2010 (crude oil equivalent) was 6.98 million kL in the Petroleum Refining and Marketing Business, 0.15 million kL in the Oil and Gas Exploration and Production Business, 0.45 million kL in the Metals Business, and 0.24 million kL in Other Businesses. The JX Group total was 7.82 million kL, 0.44 million kL lower than in fiscal 2009.





*CO₂ emissions include emissions from energy consumption (electricity, fuel, etc.) as well as greenhouse gases emitted mainly in oil and gas production converted to CO₂.

 CO_2 emissions were 18.70 million tons in the Petroleum Refining and Marketing Business, 0.42 million tons in the Oil and Gas Exploration and Production Business, 0.93 million tons in the Metals Business, and 0.49 million tons in Other Businesses. The JX Group total was 20.54 million tons, 0.47 million tons lower than in fiscal 2009.

Actual results versus targets for specific energy consumption and CO₂ emission reductions in the Medium-Term Environmental Management Plan and elsewhere are shown on page 46. All businesses are making steady progress.

Initiatives to Prevent Air Pollution

2008

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. The Group also works diligently to prevent air pollution by adopting a range of equipment to enhance environmental performance and by switching to low-sulfur fuels, among other actions.

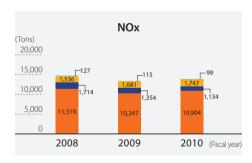
The JX Group's total SOx (sulfur oxide) emissions in fiscal 2010 were 15,815 tons, 347 tons higher than in fiscal 2009.

The JX Group's total NOx (nitrogen oxide) emissions in fiscal 2010 were 13,884 tons, 487 tons higher than in fiscal 2009.



2009

2010 (Fiscal year)



*Emissions figures for overseas sites (Malaysia and Vietnam) have been newly included in emissions in the Oil and Gas Exploration and Production Business, retroactive to fiscal 2008.

Figures for NIPPO CORPORATION in Other Business were estimated by its 50 main plants.

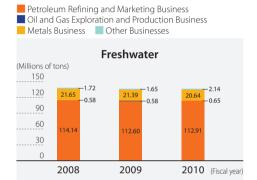
Initiatives for Protecting Water Resources

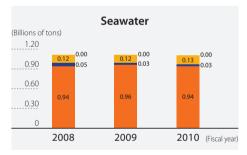
As one of its resource conservation measures, the JX Group firmly manages its use of water resources and monitors wastewater produced by its facilities in line with laws, ordinances, accords and voluntary standards, in an effort to reduce its environmental impact.

In the water resources consumed in fiscal 2010, freshwater resources consumed were 112.91 million tons in the Petroleum Refining and Marketing Business, 0.65 million tons in the Oil and Gas Exploration and Production Business, 20.64 million tons in the Metals Business, and 2.14 million tons in Other Businesses. The JX Group total was 136.34 million tons, 0.12 million tons higher than in fiscal 2009.

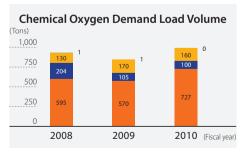
Seawater consumption was 940 million tons in the Petroleum Refining and Marketing Business, 30 million tons in the Oil and Gas Exploration and Production Business, and 130 million tons in the Metals Business. The JX Group total was 1,100 million tons, 10 million tons lower than in fiscal 2009.

The chemical oxygen demand (COD) load volume, an indicator of water pollution levels, was 727 tons in the Petroleum Refining and Marketing Business, 100 tons in the Oil and Gas Exploration and Production Business, and 160 tons in the Metals Business. The JX Group total was 987 tons, 141 tons higher than in fiscal 2009.





*Figures for overseas sites (Malaysia and Vietnam) have been newly included in the Oil and Gas Exploration and Production Business, retroactive to fiscal 2008.



^{*}Figures for overseas sites (Malaysia and Vietnam) are not included 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. The Group also strives to reduce chemical emission levels as part of steps to reduce environmental impact. Where the Material Safety Data Sheet (MSDS) system is concerned, the Group presents information on the behavior and handling of target chemical substances in a readily accessible manner.

The release and transfer of specified chemical substances in fiscal 2010 was 692 tons in the Petroleum Refining and Marketing Business, 173 tons in the Oil and Gas Exploration and Production Business, 367 tons in the Metals Business, and 446 tons in Other Businesses. The JX Group total was 1,678 tons, 247 tons higher than in fiscal 2009. The reasons for the increase were increases in the Metals Business and at Toho Titanium Co., Ltd.

At JX Nippon Mining & Metals Corporation's HMC Works, which engages in metals recycling, nickel compound transfers showed a particularly high increase due to factors including a sharp increase in the amount recycled in fiscal 2010 from the fiscal 2009 level and variation in the grade of raw material for recycling and the recovery rate.

The release and transfer of specified chemical substances at Toho Titanium Co., Ltd. occurs almost entirely in connection with catalyst production.

Although production volume itself was flat in fiscal 2010, the number of test production lots increased due to new catalyst development. Since test production lots are produced using production lines, the release and transfer of specified chemical substances also increased.



*Figures for overseas sites (Malaysia and Vietnam) are not included in the figure for the Oil and Gas Exploration and Production Business.

Initiatives to Reduce Waste

JX Group companies each set waste reduction targets in line with their own medium-term environmental management plans, and take steps to reduce both their waste-to-landfill ratio and final waste disposal intensity.

The final waste disposal volume in fiscal 2010 was 382 tons in the Petroleum Refining and Marketing Business, 19 tons in the Oil and Gas Exploration and Production Business, 1,822 tons in the Metals Business, and 5,279 tons in Other Businesses. The JX Group total was 7,502 tons, 4,311 tons lower than in fiscal 2009. The decrease is attributable to a sharp reduction in final waste disposal volume at NIPPO CORPORATION.

JX Group Values

Harmony with the environment

Actual results versus targets for fiscal 2010 in the Medium-Term Environmental Management Plan are shown on page 46. Steady progress is being made.



*Figures for overseas sites (Malaysia and Vietnam) have been newly included in the Oil and Gas Exploration and Production Business, retroactive to fiscal 2008

Conclusion

As described on page 46, in fiscal 2010 the JX Group was able to achieve all the targets in the Medium-Term Environmental Management Plan. Nevertheless, emissions of SOx, NOx, and freshwater resources consumed, the chemical oxygen demand (COD) load volume, and the release and transfer of specified chemical substances increased from fiscal 2009.

In fiscal 2011, we will strive for improvement in all environmental performance items.

Column

Environmental Activities at Toho Titanium Co., Ltd.

Toho Titanium Co., Ltd. constructed a titanium sponge plant in Wakamatsu Ward, Kitakyushu, and commenced operation at the plant in April 2010. The Wakamatsu Plant has achieved world-class production efficiency by combining technologies and expertise accumulated over the years. Since industrial wastewater is discharged into Dokai Bay, the plant has installed the latest drainage facilities. It gives the utmost consideration to the environment and ecosystem in other ways including the design of exhaust gas equipment using its own rigorous standards and installation of the latest power transformers and lighting equipment.

The Yahata Plant in Yahatahigashi Ward, Kitakyushu, melts titanium sponge to produce titanium ingots. Locating the Wakamatsu Plant near the Yahata Plant made it possible to reduce CO₂ emissions and engage in highly efficient production through distribution streamlining.

The Yahata Plant has an electron-beam melting furnace that ranks among the largest in the world and can produce some of the world's largest ingots and is achieving energy savings. In addition, the plant aims to establish Japan's first titanium recycling system to conserve resources by taking advantage of the ability to use raw materials of various shapes and actively engage in recycling melting of titanium scrap.



Toho Titanium Co., Ltd., Kitakyushu

The UN Global Compact's Ten Principles

Human Rights			
Principle 1	Businesses should support and respect the protection of internationally proclaimed human rights; and	P33-34	
Principle 2	make sure they are not complicit in human rights abuses.	P33-34	
Labour			
Principle 3	Businesses should uphold the freedom of association and the effective recognition of the right to collective bargaining;	P33-34	
Principle 4	the elimination of all forms of forced and compulsory labour;	P33-34	
Principle 5	the effective abolition of child labour; and	P33-34	
Principle 6	the elimination of discrimination in respect of employment and occupation.	P29–30, P33–34	
Environme	nt		
Principle 7	Business should support a precautionary approach to environmental challenges;	P26, P28, P45-46	
Principle 8	undertake initiatives to promote greater environmental responsibility; and	P26, P41-42, P45-51	
Principle 9	encourage the development and diffusion of environmentally friendly technologies.	P7–8, P13–24, P35–38, P44, P47–48	
Anti-corruption Anti-corruption			
Principle 10	Businesses should work against corruption in all its forms, including extortion and bribery.	P26, P37–38	

Guide to JX Group Websites

JX Holdings

http://www.hd.jx-group.co.jp/english/



About JX Group

- Establishment of JX Group
- JX Group Mission Statement
- Objectives and Basic Concept
- Disclosure Materials of the Integration

Corporate Profile

- JX Group Mission Statement
- Group Companies
- Management Policies
- Corporate Data
- Executives
- Organization
- Corporate History

News Release

► Investor Relations

- Management Policies
- Financial Highlights
- IR Library
- Shareholder & Stock Information
- IR Calendar
- Latest IR Materials

► Corporate Social Responsibility

• CSR Reports

JX Nippon Oil & Energy

http://www.noe.jx-group.co.jp/english/



- Corporate Profile
- ► CSR Report
- Products

JX Nippon Oil & Gas Exploration

http://www.nex.jx-group.co.jp/english/



- Business Activities
- Exploration Development and Production Flow
- Corporate Profile
- ► Safety, Environment and Community
- ▶ Recruit

JX Nippon Mining & Metals

http://www.nmm.jx-group.co.jp/english/



- Corporate Profile
- ▶ Business Segments
- ▶ Products
- Corporate Social Responsibility

http://www.nippo-c.co.jp/english/index.html

http://www.toho-titanium.co.jp/en/index.html

Third-Party Opinion

We received comments from an outside expert on the JX Report for a Sustainable Future 2011.



Masaatsu Doi Associate Professor Faculty of Regional Policy Takasaki City University of Economics

Professor Doi earned his undergraduate degree at the Hitotsubashi University Faculty of Economics, and completed his doctoral degree at the Hitotsubashi University Graduate School of Commerce and Management in March 2011. He joined the faculty of Takasaki City University of Economics in 2006, and is the co-author of CSR Management: Corporate Social Responsibility and Stakeholders and The Rise of Social Enterprise, both published by CHUOKEIZAI-SHA, Inc.

One feature of this year's JX Group CSR report is a detailed description of the relationship between each of the JX Group's businesses and society, and of the supply chain in each business from development through to sales. This paints a very clear picture of the importance of the role played by the JX Group's Petroleum Refining and Marketing, Oil and Gas Exploration and Production, and Metals Businesses in our daily lives, from the supply of petroleum products at ENEOS service stations to materials development for mobile phones and PET plastic bottles. The report also summarizes the impact of the Great East Japan Earthquake and the JX Group's response, describing the progress of restoration and reconstruction of group companies and the provision of multilayered support utilizing the management resources of group companies, such as monetary donations, the dispatch of volunteers, and support for farms in areas affected by rumors of radioactive contamination. With these points in mind, I would like to mention some aspects of CSR that will be required of the JX Group in the future.

First, the JX Group's three CSR focus areas are 1) compliance, 2) social contribution, and 3) the environment. In addition to these, as described on pages 13 to 16, the stable supply of energy, principally oil, is an extremely important management issue for a corporate group with an integrated energy company. The Sendai, Kashima, and Negishi refineries incurred damage in the recent Great East Japan Earthquake, damage that had a tremendous impact on people's lives, especially in eastern Japan. The earthquake led to discussion that refinery locations should not be decided from the standpoint

of oil company efficiency alone and that a certain degree of redundancy is necessary to maintain the functioning of the overall supply system even when a disaster strikes. Although the problem of refinery capacity reduction and location currently being discussed within the JX Group is also an issue that affects the stable supply of energy nationwide, from the perspective of a single company, the relationship with local communities, including the effect on the employment situation, is an unavoidable issue when discussing CSR. It is likely that the JX Group will be required to explain the proposed process for discussion to the satisfaction of its various stakeholders.

In addition, with respect to relations with local communities and the environment, as discussed on page 45, in fiscal 2010 an extremely regrettable fact came to light about the JX Group. For many years the recording of dust concentration data was falsified at the JX Nippon Oil & Energy Corporation Mizushima Refinery and the Wakayama Petroleum Refining Co., Ltd. Kainan Plant. The Mizushima Industrial Complex is one of Japan's foremost industrial zones and an area where in the past local residents filed a lawsuit claiming health problems caused by air pollution. I think it is necessary for the entire JX Group to recognize anew that its businesses can exist only on the basis of a relationship of trust with its neighbours.

Although in fiscal 2010 the JX Group achieved favorable results in an adverse business environment, fiscal 2011 is likely to be a year in which the true power of the JX Group as a whole will be put to the test in matters including reconstruction after the Great East Japan Earthquake and change in the group's position in the industry. With regard to expectations for new technologies and products, the products introduced on pages 35 and 36 — CO₂ EOR technology, positive-electrode material for lithium-ion batteries, and world's first next-generation high-efficiency fuel cells—hold great promise and will bear watching. Furthermore, I have high expectations that the JX Group will demonstrate leadership in new energy fields such as liquefied natural gas, fuel cells, and solar power generation and continue to create new energy innovations to develop a new paradigm in the industry, as befits a business group with an integrated energy company. I firmly believe that beyond those efforts lies a bright "X" (future) for Japan's energy, resources, and materials industry.

Response

We are very grateful for Professor Doi's valuable opinions and suggestions for improving the JX Group's CSR activities again this year.

This report is the JX Group's second CSR report. We have endeavored to explain in an easily understandable way the JX Group's public mission of providing a stable and efficient supply of energy, resources, and materials and the close links between the JX Group's businesses and various aspects of people's daily lives. We are pleased that Professor Doi has recognized our efforts in that regard.

We take to heart Professor Doi's views on relations with local communities and the environment and his expectations with respect to new technology and product development. The JX Group will continue to work together with our stakeholders to contribute to the development of a sustainable economy and society.

Yuji Nakajima Executive Officer, General Manager, Corporate Social Responsibility Department JX Holdings, Inc.



Independent Review Report

(TRANSLATION)

Independent Review Report

September 6, 2011

Mr. Mitsunori Takahagi, Representative Director, President, JX Holdings, Inc.

> Deloitte Tohmatsu Evaluation and Certification Organization Co., Ltd. Chief Executive Officer, Hiroshi Inanaga

1. Scope of Review

We have reviewed the "JX Report for a Sustainable Future 2011" (the "Report") prepared by JX Holdings, Inc. (the "Company"). The purpose of our review was to provide limited assurance from an independent practitioner about whether the material environmental information for the period from April 1, 2010 to March 31, 2011 included in pp.45-51 of the Report was accurately measured and calculated, with reference to the Environmental Reporting Guidelines - Year 2007 version (issued by the Japanese Ministry of the Environment), GRI Sustainability Reporting Guidelines (Version 3.0) and GRI Mining and Metals Sector Supplement, in accordance with the calculation methods adopted by the Company.

2. Responsibility of Management

The Report is the responsibility of the Company's management. Our responsibility is to provide our limited assurance with respect to our review performed on the Report as an independent practitioner.

3. Summary of Review

To obtain an adequate and valid standard of basis for providing limited assurance with respect to our conclusion, we performed our review with reference to the International Standard on Assurance Engagements (ISAE) 3000 (issued by the International Federation of Accountants in December 2003). The review procedures performed for the material environmental information for the period from April 1, 2010 to March 31, 2011 included in pp.45-51 of the Report consisted of: 1) agreeing information to summary tables and supporting documents on a sample basis; 2) interviewing the responsible Company's personnel and the persons in charge; 3) reviewing and agreeing information to the relevant Company's minutes, the Company's regulations, and ISO-related documents, etc.; 4) site visits; and 5) comparing information with other available supporting internal and external materials of the Company.

4. Conclusion

On the basis of the review procedures described in the preceding paragraph, nothing has come to our attention that caused us to believe the material environmental information for the period from April 1, 2010 to March 31, 2011 included in pp.45-51 of the Report was not accurately measured or calculated, with reference to the Environmental Reporting Guidelines - Year 2007 version (issued by the Japanese Ministry of the Environment), GRI Sustainability Reporting Guidelines (Version 3.0) and GRI Mining and Metals Sector Supplement, in accordance with calculation methods adopted by the Company.



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Corporate Social Responsibility Department Inquiries (e-mail) csr@hd.jx-group.co.jp

As of September 30, 2011, JX Holdings was a constituent of the following major SRI Indexes:



DJSI Asia Pacific: A global index of approximately 160 companies selected for their outstanding sustainability from among the 600 largest companies in the Asia-Pacific region.



MS-SRI: This index comprises 150 stocks selected from among listed companies in Japan on the basis of noteworthy social responsibility efforts. This is Japan's first socially responsible investment index.







This report was printed using an environmentally friendly waterless printing process and vegetable oil ink. In support of the $\it Kizukai Undo$ (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 Haramura, Suwa-gun, Nagano Prefecture, where JX Nippon Oil & Energy Corporation is engaged in forest maintenance. This contributes to increased absorption of $\rm CO_2$ in Japanese forests.

Original Japanese Version Published in September 2011