



JFE Group TODAY

# 2015



Corporate Vision

**The JFE Group—  
contributing to society with the world's  
most innovative technology.**

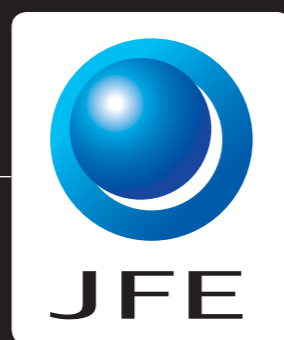
Corporate Values

**Challenging Spirit, Flexibility & Sincerity**

Steel Business

Engineering Business

Trading Business



#### JFE Group Name

"J" stands for Japan; "F" for "Fe," the atomic symbol for iron; and "E" for engineering. Informally, the letters also refer to "Japan future enterprise," expressing the Group's aspiration to contribute to Japan's future through its core businesses of steel production and engineering.

**01** Corporate Vision &  
Corporate Values

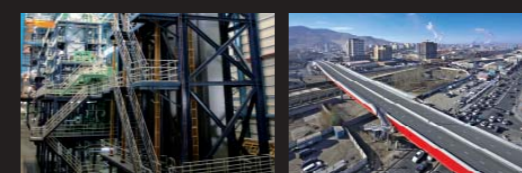
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A large industrial converter is shown in the process of pouring molten metal. The converter is a massive, dark, cylindrical vessel with a large spout at the bottom. It is being tilted by a crane, and a bright, glowing stream of molten metal is being poured out of the spout. The scene is set at night, with the bright orange glow of the molten metal contrasting sharply with the dark surroundings. The background shows the complex steel framework of the industrial facility, with various pipes, walkways, and structural beams visible. The lighting is dramatic, with the primary light source being the molten metal itself, which illuminates the immediate area around the pour.

# Competing on the Global Stage with Cutting-edge Technologies —West Japan Works Brings Its New Converter Online

The Fukuyama District of JFE Steel West Japan Works brought its third converter at the No. 3 steel mill on stream in December 2014. Boasting a cutting-edge system for the preliminary treatment of molten pig iron, the converter has enabled a considerable reduction in resource and energy consumption. Looking ahead, we will aggressively take on the challenge of developing new technologies to further improve our manufacturing processes.

# East Japan Works Surpasses 100 Million Tons Cumulative Crude Steel Output

JFE Steel East Japan Works comprises vast steel-making facilities located on both the west and east shores of Tokyo Bay. In May 2015, the works' cumulative crude steel output surpassed 100 million tons. To accommodate diverse customer needs, JFE's reduced-impact, technologically advanced urban steelworks provide stable supplies of highly value-added products offering superior functionality.



# Bridging Islands to Link Aspirations

The 3,540-meter Irabu-Ohashi Bridge, Japan's longest road bridge, connects Irabujima and Miyakojima islands of Okinawa Prefecture. A huge girder measuring 140 meters and weighing 1,300 tons was fabricated at the Tsu Works and installed in only one day. The structure is yet another example of the outstanding bridge-construction technologies that JFE Engineering has developed for projects worldwide.





## Helping to Reconstruct and Revitalize Fukushima

JEF Engineering continues to treat waste and decontaminated debris caused by the 2011 tsunami disaster in four locations of Fukushima Prefecture. Leveraging extensive expertise and know-how for safe, smooth and prompt execution, the company aims to complete its incineration and bulk reduction of waste and debris by June 2019. The JFE Group continues to focus technological strengths on helping people in the disaster-stricken areas to reconstruct their communities as quickly as possible.

Project: Waste treatment (bulk reduction) in Minamisoma City contamination zone in fiscal 2014  
Outsourcer: Fukushima Office for Environmental Restoration, Tohoku Regional Environmental Office, Ministry of the Environment  
Photo: Treatment facility in Odaka-Ku, Minamisoma City, Fukushima Prefecture (March 24, 2015)

# Full-scale Entry into North America's Steel Pipe Market

In December 2014, JFE Shoji Trade acquired U.S.-based Kelly Pipe Co., LLC, a major steel pipe distributor founded in 1898. Headquartered in California, Kelly Pipe boasts offices in 21 locations in the U.S. and three others in Canada, the U.K. and Colombia, in addition to 45 external warehouses. JFE Shoji Trade is combining its trade functions and global business network with Kelly Pipe's wide-ranging product lineup and nationwide sales network. The acquisition is another way that JFE Shoji Trade is expanding its product lineup and boosting sales of steel products manufactured by various domestic and overseas mills.



# VLCC Laden with Cutting-edge Technologies

*Eneos Ocean* is the first in JMU's new series of very large crude oil carriers (VLCCs) built at the Kure Shipyard. Longer than a conventional VLCC to take advantage of eased port-traffic regulations, the vessel has been optimally engineered for eco-friendly, cost-effective operation. In addition to cutting-edge hull-analysis technologies, several energy-saving devices in the stern complement the ship's main, state-of-the-art, electronically controlled main engine, which is compliant with stricter second-phase International Maritime Organization NOx emissions regulations.





# More Diverse Human Resources Bolster Manufacturing Frontlines

JFE promotes workforce diversity to ensure that its workplaces enable each employee to realize their full potential and achieve success regardless of gender or nationality. Diversity initiatives led to JFE receiving its second “Nadeshiko” designation, which is awarded to listed companies that have excellent track records in facilitating career development for female employees. The program is sponsored by Japan’s Ministry of Economy, Trade and Industry and the Tokyo Stock Exchange. JFE also received the designation in fiscal 2014.





Having assumed the office of president of JFE Holdings, Inc. on April 1, 2015, I am pleased to extend these greetings to all stakeholders, especially those who have been with us since our rebirth as JFE since 2002.

JFE strives to maximize the potential of steel and related materials for the benefit of society. Over the years, we have steadily pursued growth in a sustainable manner, adhering to policies for harmonious coexistence with the global environment and strict compliance with standards for corporate ethics. We strive continuously to enhance our value for all stakeholders.

## Fifth Medium-term Business Plan

In April 2015, the JFE Group announced its fifth medium-term business plan, which will guide operations over the three-year period from fiscal 2015 to 2017.

Demand in Japan is showing growth potential due to government policies to strengthen economic resilience and preparations for the upcoming 2020 Summer Olympics and Paralympics in Tokyo. Outside Japan, particularly in emerging nations, demands continue to grow for infrastructure development and energy-saving, eco-friendly technologies. On the opposing side, however, business may be affected negatively by factors such as demographic aging in Japan, major fluctuations in the prices of resources such as crude oil, rapidly shifting foreign currency exchange rates, and political and economic uncertainty in many countries. It has become increasingly important to accurately assess the potential impact of such changes and then quickly implement appropriate countermeasures.

In its fifth medium-term business plan, JFE has set forth initiatives to enhance technological advantages, diversify human resources and boost comprehensive strengths, aiming to make the JFE Group more responsive to fast-changing external factors. At the same time, we are strengthening

our profit base in Japan and improving the profitability of our overseas businesses, aiming to achieve more sustainable growth and higher corporate value.

### Main Initiatives of New Business Plan

- Strengthen JFE's domestic profit base
- Enhance corporate value by leveraging technological advantages
- Increase overseas business profitability
- Secure and nurture diverse human resources
- Strengthen corporate structure for sustainable growth

## Growing with Stakeholders

An unwavering commitment to equity, fairness and transparency has always been a cornerstone of our operations. Under the slogan "Challenging Spirit, Flexibility, Sincerity," an avowal of our most dearly held values, we work tirelessly to fulfill our corporate vision of contributing to society with the world's most innovative technology while striving toward excellence as a 21st-century corporate group.

We aspire to maintain longstanding relationships of trust with our customers, shareholders, employees, local communities and other stakeholders. I sincerely ask for your support as we pursue initiatives to grow with our stakeholders.

June 2015

林田 英治

Eiji Hayashida  
President and CEO  
JFE Holdings, Inc.

## Q.1 What was the outcome of the fourth medium-term business plan and what are your upcoming challenges?

Under our recently completed business plan, we sought to establish a stronger corporate structure by taking steps such as reviewing our business portfolio, reducing costs, augmenting domestic manufacturing platforms and increasing overseas projects. We succeeded in these initiatives while steadily improving profitability.

However, due to the oversupply of steel world-wide, the overseas market for steel has become harsher than expected. To best address this situation, we have focused on improving the cost-effectiveness of our production and marketing activities. While the resulting savings have been far greater than what similar efforts had netted us in the past, we were not able to raise our return on sales (ROS) to 10%, which was one of the targets of the plan. Nevertheless, we succeeded in building a structure for securing greater and more stable profits by developing our domestic manufacturing platforms from a medium- to long-term perspective.

## Q.2 What are main aims of the fifth medium-term business plan?

We have set forth five key initiatives.

### (1) Strengthen JFE's Domestic Profit Base

In Japan, we are striving to fully accommodate market demands. We are enhancing customer services by developing a more robust sales structure, one that is capable of addressing customer needs more accurately and promptly than before. To improve the profitability of our manufacturing bases, we are enhancing platforms in each base through facility upgrades and repairs aimed at stabilizing operations even further. In addition, we are renovating facilities to reduce manufacturing costs and to accommodate a product mix that is increasingly focused on high-end steel. We expect these measures to boost our competitiveness.

### (2) Enhance Corporate Value by Leveraging Technological Advantages

To enhance our competitiveness and maintain our position in the vanguard of global technological innovation, we are working hard to develop new technologies. This includes relentlessly pursuing ever more sophisticated resource- and energy-saving technologies to raise our profile as a supplier of cutting-edge technologies and products that offer world-leading quality.

### (3) Increase Overseas Business Profitability

#### JFE Group Overseas Investment

¥200 billion over three years (planned)

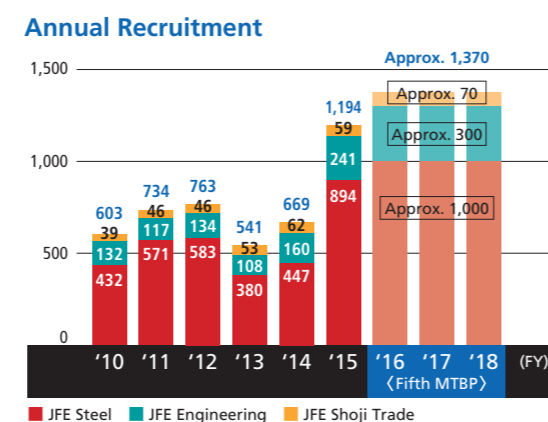
To enhance the profitability of our ongoing overseas investment projects, we are sharpening our attentiveness to local demands and optimizing our operations in line with the characteristics of each region. At the same time, we are fully leveraging our technical capabilities and global network to invest in projects in strategic fields and regions that have growth potential.

### (4) Secure and Nurture Diverse Human Resources

#### Recruitment Plan (by Group company)

JFE Steel:	1,000 employees/year
JFE Engineering:	300 employees/year
JFE Shoji Trade:	70 employees/year

To carry out our fifth medium-term business plan, we will steadily recruit and nurture diverse human resources.



### (5) Strengthen Corporate Structure for Sustainable Growth

#### Financial Targets in Plan's Final Year (Fiscal 2017)

ROE: 10% or greater  
Financial position: "A" rating equivalency

#### Basic Policy for Shareholder Returns

Dividend payout ratio: 25% to 30%

We aim to improve our financial position, profitability and cash flow by undertaking investments that facilitate business expansion, strengthen our profit base in Japan and raise the profitability of our overseas businesses.

With regard to shareholder returns, we will increase the dividend payout ratio from the current 25%. At the same time, we will strengthen corporate governance while developing more eco-friendly operations.

## Q.3 Please explain the details of your initiatives by business segment.

### Steel Business

JFE Steel aims to become a global steel supplier that steadily creates new value and grows with its customers. To this end, we will enhance production capabilities and take a more customer-

oriented approach to domestic and overseas marketing. In these ways, we aim to secure a stronger market presence and greater recognition of JFE-brand steel products, ultimately to generate higher profits. JFE Steel is targeting annual steel sales increasing to 40 million tons by the end of the medium-term plan and 50 million tons thereafter.

#### Profit Target in Plan's Final Year (Fiscal 2017)

ROS: 10%

### Concrete Initiatives

#### • Enhance production capabilities

We will augment our domestic manufacturing platforms to improve manufacturing cost-effectiveness and accommodate demand focused on high-end steel. Such moves are expected to secure steady reductions in costs. In addition, JFE Steel will replace the ICT systems at its steelworks with advanced systems that facilitate operational reforms. Overall, this is expected to further upgrade JFE Steel's world-class production capabilities.

**Cost reductions:** ¥110 billion/3 years  
**Domestic capital expenditures:** ¥650 billion/3 years

(up ¥170 billion from previous plan)

• **Reinforce technological development**  
To address customer needs, we will develop new products that incorporate cutting-edge technologies and innovative manufacturing processes, ultimately to boost sales. We will also reduce costs and enhance production capabilities by improving process technologies. To this end, we have allocated increases of 10% in our R&D budget and 7% in our researcher workforce.

• **Strengthen customer-oriented marketing**  
To offer more attractive services, JFE Steel will improve its proposal-development capabilities by better coordinating product R&D and sales functions and by facilitating more collaboration among Group companies.

• **Develop business overseas**  
JFE Steel will strive to increase the profitability of its ongoing overseas investment projects. Also, technological advantages will be leveraged to expand businesses in priority sectors, such as automobiles and energy.

• **Passing on technical skills and developing human resources**  
To nurture human resources, we will ensure that the knowledge, technical skills and expertise accumulated by senior employees are passed on to younger employees, including at JFE Steel steel-works, Group companies and subcontractors. Also, we will improve technological and onsite capabilities by further diversifying our workforce and introducing more information technology.

**Engineering Business**  
JFE Engineering will strive to develop as many business opportunities as possible in the Japanese market. The company's business expansion will also involve securing a greater global presence in the fields of urban infrastructure, the environment and energy, to be accomplished by leveraging competitive advantages as a producer of waste incineration facilities, water treatment facilities and steel structures. Moreover, JFE Engineering will provide customers with more

comprehensive solutions, including undertaking projects encompassing construction, facility operation and other wide-ranging services.

Profit Targets in Plan's Final Year (Fiscal 2017)	
Net sales:	¥500 billion
Ordinary income:	¥30 billion

- Concrete Initiatives in Engineering Business**
- a. Expand overseas business
  - b. Support electricity generation from various energy resources
  - c. Offer proposal-based services
  - d. Develop and promptly launch products and services

**Trade Business**  
The JFE Shoji Trade Group adapts its strategies to conditions in specific markets, particularly the trend toward local procurement in emerging markets. The company is boosting sales of steel materials while strategically coordinating the JFE Group's storage, processing, retailing and marketing functions. As a result, we are positioned to propose solutions that enhance the value of customers' entire supply chains. We will also improve the profitability of ongoing investments overseas and invest in new projects aimed at securing a stronger presence for JFE Shoji Trade.

Profit Target in Plan's Final Year (Fiscal 2017)	
Ordinary income	¥30 billion

- Concrete Initiatives in Trade Business**
- a. Develop new markets and increase steel sales volume
  - b. Create added value
  - c. Improve overall strengths

**Q.4 Please discuss your newly formulated Basic Policy on Human Resource Management.**

When we announced our fifth medium-term business plan, at the same time we introduced JFE Group's Basic Policy on Human Resource Management with the aim of developing workplaces in which all Group members can realize their full potential.

- JFE Group's Basic Policy on Human Resource Management**
- 1. Respect Human Rights and Facilitate Fair Management of Human Resources**  
Manage human resources fairly by respecting the human rights of all employees and nurturing employees who embrace our corporate values and standards of business conduct.
  - 2. Foster a Corporate Culture that Nurtures People and Satisfying Workplaces**  
Facilitate interactive communication among employees to cultivate a corporate culture that nurtures human resources and creates safe, attractive workplaces where everyone can enjoy working.
  - 3. Diversify Human Resources**  
Ensure a diverse workforce and ensure that all employees, including women, non-Japanese, the elderly and the disabled, can demonstrate their full potential.
  - 4. Recruit and Steadily Nurture Excellent Human Resources**  
To survive in an increasingly complicated and diversified global environment, steadily recruit diverse, high-quality human resources, ensure that they acquire the skills and knowledge necessary to continue strengthening our technological capabilities, and nurture their global capabilities.

**Q.5 What is your main goal as the president of JFE Holdings?**

For the JFE Group to secure sustainable growth, I believe that every business segment should embrace a combination of individuality and a sense of unity. This means that I expect each business segment to hone its individual strengths and utilize them to drive growth. The Group will spare no effort in encouraging such efforts. At the same time, however, as a corporate leader, in addition to managing our financial discipline, I must ensure that everyone adheres to the common values, policies and philosophy that form our unified core. By striking a balance between the two, I intend to do my best to enhance JFE's overall corporate value.

**Q.6 Lastly, could you share your future vision of the JFE Group and explain your thoughts about the human resources that will be needed?**

I want us to be a corporate group capable of growing sustainably as we pursue ever loftier goals. Of course, our growth is dependent on the technologies possessed by our individual operating companies. In addition to our expertise in steel and engineering, we should be able to further leverage our specialized trade-related knowledge and know-how to create new businesses tailored to customer needs. We are confident that by following this course we can expand.

But I also believe that our vision of contributing to society with the world's most innovative technology will remain unchanged, even after a decade.

Finally, I ask each employee to clearly identify their mission, remain passionate about their duties and act proactively. I also ask everyone to broaden their perspective and be even more attentive to emerging customer and social needs, so that they can determine for themselves whether they are on the right track or not.

# GLOBAL SOLUTIONS

## —Creating a New World—

In the 2014 edition of *JFE Group TODAY*, we introduced initiatives based on the theme “Revitalizing Japan.” The initiatives reflected the fact that Japan had made solid progress toward recovery from the Great East Japan Earthquake in 2011 and was beginning to turn its attention toward initial preparations for the Tokyo 2020 Summer Olympics and Paralympics. Based on priorities at that moment, the 2014 edition of this publication featured the roles that JFE has been playing in helping to restore the country to full strength.

In this edition, our focus has shifted to two major issues confronting the world, namely, how to ensure sustainable social and economic development and how to preserve the global environment, or restore it where necessary. Hereafter, we are pleased to introduce our initiatives to address these two challenges.

### Realizing Secure, Affluent Societies Based on Sustainable Economic Development

Develop infrastructure and human resources needed to achieve social and economic development on a sustainable and global scale.

#### Concrete Initiatives:

- 1 **Infrastructure development centered on emerging nations**  
Develop infrastructure and localize production
- 2 **Human resource development to foster tomorrow's leaders**  
Nurture local engineers as part of developing a globally capable workforce

### Preserve and Restore the Global Environment

Protect the earth's environment in the face of worldwide industrial development and a burgeoning global population

#### Concrete Initiatives:

- 1 **Realize a resource-conserving, minimized-impact society**  
Prevent global warming while promoting power generation centered on recyclable energy
- 2 **Preserve and restore the marine environment**  
Protect marine ecosystems, including through improved water quality.

## JFE Group

JFE Steel Corporation

JFE Engineering Corporation

JFE SHOJI TRADE CORPORATION

Japan Marine United Corporation

JFE, drawing on its comprehensive strengths and world-leading technological capabilities, is developing solutions to ensure sustainable social and economic development and to preserve/restore the global environment in countries worldwide.

# Realizing Secure, Affluent Societies Based on Sustainable Economic Development

Assisting emerging nations with infrastructure development is an essential part of JFE's effort to realize secure, affluent societies based on sustainable economic development. Although such nations possess abundant potential for economic growth, their needs for infrastructure such as electricity and gas supply, bridges, roads and port facilities is often left unmet. Furthermore, securing and nurturing capable human resources is crucial to developing and invigorating key industries that drive economic growth.

JFE supplies high-quality steel products needed to establish almost any kind of infrastructure, and it proposes solutions incorporating cutting-edge technologies developed by its engineering businesses.

## 1 Infrastructure Development Centered on Emerging Nations

### JFE Engineering

#### Economic Growth through Bridge Construction

JFE Engineering has constructed a number of bridges, some quite well known, in overseas locations since the 1980s. In October 2012, for example, the company completed Sun Bridge, an elevated bridge located in the center of the Mongolian capital of Ulan Bator. The bridge provides a useful connection between the city's northern commercial and southern industrial zones, which previously had been separated by railroad tracks. Today, Sun Bridge is playing a significant role by facilitating smoother, more efficient traffic in bustling Ulan Bator, a city that is making rapid economic progress.

JFE Engineering has also secured a foothold in Myanmar, a country in the process of shifting to democracy as “Asia's last frontier.” In November 2013, JFE Engineering established the joint venture J&M Steel Solutions with Myanmar's Ministry of Construction. The next month, J&M Steel Solutions initiated the construction of a factory in Yangon, the capital of Myanmar, to manufacture prefabricated steel components for structures such as bridges. In July 2014, the factory made its first shipment of bridge blocks, supplying materials for truss bridge construction in Laos. The factory is currently

operating at maximum capacity to meet needs for infrastructure materials in Myanmar and surrounding countries. In response to burgeoning demand, capacity will be doubled to 20,000 tons per year within the current fiscal year. The factory buildings and other facilities will also be expanded in the future.

JFE Engineering looks forward to contributing to global economic progress by steadily supporting infrastructure development in the newly emerging nations of Southeast Asia, as well as the Middle East and Africa.



Sun Bridge, Mongolia's largest steel bridge



Steel structural components produced at J&M Steel Solutions' factory

## JFE Steel

### Local Production of High-Performance Automotive Steel Sheets in Asia

Asia is experiencing demand growth in a range of industrial fields. Numerous automakers have established factories in Asia, turning the region into an automotive manufacturing powerhouse with an output that today accounts for half of global production. To accommodate Asia's robust demand for high-performance automotive steel sheets, JFE Steel has been developing local supply bases in Thailand, India and China, in addition to exporting from Japan. Furthermore,

efforts are under way to establish a hot-dip galvanizing line for automotive parts in Indonesia, with production scheduled to kick off in March 2016.

In such ways, JFE Steel will continue to deliver high-quality products that satisfy automakers' needs for local procurement and thereby contribute to the further development of Asian automotive industries and economies.



Hot-dip galvanizing line in Thailand

## JFE Steel

## JFE Shoji Trade

### Development of Energy Infrastructure in North America

The development of energy infrastructure overseas involves having to deal with local conditions and business environments that tend to change over time. The situation is no different

in North America, where JFE Steel has had to adapt to diversifying customer needs. Against this backdrop, California Steel Industries, Inc. (CSI), a joint venture in which JFE Steel has a

50% equity interest, brought a new electrical resistance welded pipe mill online in October 2014. The launch of this facility boosted CSI's production capacity 2.6 times and inaugurated the manufacture of pipes offering larger diameters, thicker walls and greater strength.

Meanwhile, JFE

Shoji Trade wholly acquired Kelly Pipe Co., LLC, a major steel pipe distributor with a century of experience. Kelly Pipe supplies line pipes that directly connect oil mines and refineries, tubular goods for oil and natural gas drilling, and other standard pipes for water and gas supply systems. Headquartered in California, it has 21 bases in the United States and one base each in Canada, the U.K. and Colombia.

To fulfill the needs of global customers, the JFE Group aims to fully leverage Kelly Pipe's global business network to market high-quality steel pipes produced by CSI, thereby contributing to energy infrastructure in North America and beyond.



CSI

## JFE Steel

### Local Steel Pipe Production to Support Development in the Middle and Near East

The demand for pipeline materials is showing strong potential in the Gulf Cooperation Council (GCC) member countries—the UAE, Saudi Arabia and four other countries—that together boast the world's largest combined oil and natural gas reserves.

In line with the projected surge in demand, JFE Steel established a joint

venture in the UAE capital of Abu Dhabi for the manufacture and sale of large-diameter welded steel pipes. Co-founders of this joint venture were Marubeni-Itochu Steel Inc. (MISI) and SENAAT, a general holding company wholly owned by the Emirate of Abu Dhabi.

With the production kickoff scheduled for October 2018, the new joint

venture will draw on JFE Steel's technological expertise in the manufacture of high-end large-diameter welded steel pipes, MISI's marketing capabilities and SENAAT's significant presence in the local market. Through this undertaking, JFE Steel expects to contribute to the sustainable development of energy industries in the Middle and Near East.

## 2

## Nurturing Future Pioneers Who Will Lead Global Business

## JFE Steel

### Technological Assistance for a New Factory in India

JFE Steel has been assisting its Indian alliance partner, JSW Steel Ltd., with the launch and operation of its new cold-rolling mill since July 2012. In addition to basic planning, JFE Steel has contributed expertise toward the establishment and operation of manufacturing lines at the mill. The company also dispatched 19 supervisors from the trial operation stage to help bring the facility online. Today, technological assistance to JSW Steel encompasses areas such as product certification acquisition, product quality enhancement and operational stability, among the various ways that JFE Steel is contributing to India's steel industry.



Working alongside JSW Steel employees

## JFE Engineering

### Training Local Engineers to Nurture Asia's New Industrial Leaders

As JFE Engineering expands its operations overseas, it is building up business networks consisting of local personnel who are involved in the entire gamut of operations, including sales, design and manufacturing. The company views it crucial to secure such personnel because they are so well versed in local conditions.

JFE Techno Manila, Inc., a subsidiary engaged in plant design in the Philippines, hired some 300 local engineers who became the core of the firm's workforce. As shown in this example, JFE Engineering is striving to recruit increasing numbers of outstanding people in local markets, aiming to nurture them as future leaders in Asia's engineering field.



Potential engineering leaders working at a JFE Group subsidiary

## Ensuring Stable Food Supplies to Support the Global Population

## JFE Engineering

### Smart Agriculture System Realizes Stable Crops Yields

The JFE Smart Agriculture System, or "smartagri," combines JFE Engineering's natural gas, biomass, geothermal, etc., utilization technologies and the sophisticated greenhouse climate-control technologies of Priva B.V., a Dutch company that tied up with JFE Engineering in June 2014. The system optimizes both greenhouse climate conditions and energy usage for highly efficient cultivation processes.

In August 2014, the first smartagri facility entered production in Tomakomai, Hokkaido Prefecture, Japan. In April 2015, tomatoes produced at a similar facility in Singapore were served at tasting and sales events and garnered favorable reviews for their

rich sugar content of 10 degrees Brix or more. Looking ahead, JFE Engineering will design cultivation facilities tailored to specific local conditions, among its various initiatives to help global farmers ensure more stable supplies of produce.



Harvesting tomatoes at a smartagri greenhouse in Tomakomai

## JFE Shoji Trade

### GEISHA Brand Canned Goods Contributing to African Dining Tables

It is estimated that the global population will grow from 7 billion at present to more than 10 billion by 2100. The rate of increase is particularly notable on the African continent, with Nigeria expected to emerge as the world's third most populous country early in the 22nd century.

Since the 1950s, Kawasho Foods Corporation, a wholly owned subsidiary of JFE Shoji Trade, has been marketing GEISHA brand canned goods in Africa, China and Southeast Asia. Food

self-sufficiency has lagged in Africa, particularly with regard to freezing and refrigeration infrastructure, so GEISHA canned fish has been well received by local consumers as a safe source of protein. Today, fish and other GEISHA canned goods are welcomed throughout the continent as highly popular and reliable food products.



GEISHA brand canned goods

# Preserving and Restoring the Global Environment

To realize a sustainable society, economic growth must progress in tandem with efforts to preserve the global environment. The advance of modern society has negatively impacted the environment, with industrial development and population growth causing air, soil and water pollution that have resulted in the destruction of clean natural resources which were once abundantly available. Unfortunately, international initiatives to reduce CO<sub>2</sub> emissions have made little significant progress of late, and all the while ocean ecosystems are being damaged due to the deterioration of water quality.

To address such problems, JFE is adapting its much-acclaimed expertise in steelmaking, through which it has achieved world-leading energy efficiency to manufacture eco-friendly steel materials offering superior functionality. Moreover, the Group is promoting recycling-oriented processes that employ renewable energy and waste-to-energy power generation, aiming to simultaneously promote both economic growth and environmental protection.

## 1 Realizing Resource-saving and Eco-friendly Societies

### JFE Steel

#### Highly Energy-efficient Manufacturing—Super-SINTER® Cuts CO<sub>2</sub> Emissions

JFE Steel actively develops technologies that reduce resource consumption in steel manufacturing, aiming to minimize society's burden on the environment.

Super-SINTER® is a novel technology that has won multiple prizes, including the Prize of the Minister of Economy, Trade and Industry under



Super-SINTER® facility in the Keihin District

the National Commendation for Invention 2015 award program and the Okochi Memorial Technology Prize. The technology utilizes common hydrocarbon "city" gas to produce sintered ore for use as blast furnace feed, allowing steelmakers to substitute a widely available utility gas for a portion of the powder coke. As the combustion point of hydrocarbon gas is higher than that of powder coke, it enables better control of the combustion temperature and ensures an optimal temperature for the calcining reaction. Super-SINTER® realizes

superior energy efficiency and thereby helps to reduce CO<sub>2</sub> emissions.

JFE Steel has also developed an advanced Super-SINTER® OXY technology to more than double the duration of the calcining reaction at the optimal temperature. Commercialization of this unprecedented, world's-first technology has enabled JFE Steel to further enhance its manufacturing operations.

Going forward, JFE Steel intends to remain a global forerunner in technology that contributes to more eco-friendly societies.

### JFE Engineering

#### Construction of Waste-to-Energy and Biomass Power Plants in Anticipation of New Energy Policies

In the face of an upcoming shift in energy policies worldwide and the growing need for eco-friendly alternative energy sources for urban settings, waste-to-energy and biomass power plants are attracting growing attention. In particular, they are seen as promising clean energy sources that operate around the clock and regardless of climate, unlike solar power generation.

Having already constructed more than 350 facilities, including a stoker furnace and a high-temperature gasification direct fusion furnace, JFE Engineering has become Japan's top

maker of waste-to-energy plants. In regions across Japan, it also handles construction of large biomass power plants with circulating fluidized bed boilers.

In December 2014, JFE Engineering wholly acquired Standardkessel Power Systems Holding GmbH (SPSH), a German plant-engineering company that operates mainly in Europe. SPSH has constructed more than 200 highly efficient waste-to-energy and biomass power plants that incorporate advanced technology for the combustion of various fuels.

As JFE Engineering steps up its

global expansion, it will continue striving to realize more resource-saving societies, including by reducing environmental burdens through the provision of cutting-edge technologies.



Waste-to-energy plant built by a subsidiary of SPSH in Spremberg, Germany (daily processing capacity: 960 tons of waste)

### JFE Engineering

#### Environmental Preservation through Water Treatment Solutions in Tune with Local Needs

The Philippines, with a population of approximately 100 million, is the second most populous ASEAN country next to Indonesia. Currently, water supply and sewerage systems are being developed rapidly in Manila's metropolitan areas, which have been divided since the 1997 privatization of water services.

Among these facilities, JFE Engineering built the Poblacion sewage water treatment facility on a flood control reservoir located in front

of Makati's city hall. Thanks to innovative designing that fully utilized the limited space available, JFE Engineering was chosen to receive the Project Innovation Award from the International Water Association.

Drawing on its experience in establishing this and other facilities in 29 locations within Manila, JFE Engineering continues to help preserve Southeast Asian environments with its sewage treatment facilities.



Poblacion sewage water treatment facility in Manila, Philippines (daily processing capacity: 11,000 m<sup>3</sup>)

## 2 Preserving and Restoring the Marine Environment

### JFE Steel

#### Restoring Coral Reefs with Marine Block® Made of Steelmaking Byproducts

In 1998, JFE Steel introduced its unique Marine Block® construction blocks made with steel slag, a byproduct derived from steel manufacturing. Marine Block® is principally solidified



Coral growing from eggs that colonized a Marine Block®

calcium carbonate (CaO<sub>3</sub>) and has virtually the same composition as sea-shells. It is made through a process involving the reaction of carbon dioxide (CO<sub>2</sub>) with calcium oxide (CaO), the main substance of steelmaking slag. Thanks to its sea-life friendliness, Marine Block® is now being used to restore coral reefs near Japan and in other seas.

In 2007, a joint study was conducted by Tokyo University of Marine Science and Technology and Universitas Sam Ratulangi Manado in Indonesia to examine the habitat environment of coral reefs near Indonesia. The study confirmed the settlement

and growth of coral larvae on Marine Block®, prompting the universities to launch a full-scale verification of coral growth.

In addition to Marine Block®, JFE Steel produces Marine Stone®, a gravel-type slag product used for coastal engineering aimed at nurturing sea creatures and seagrass beds, and Marine Rock®, an artificial rock boasting strength equivalent to semi-hard stone.

Going forward, JFE Steel will look for other opportunities to effectively utilize steel slag to help preserve and restore marine environments.

### JFE Engineering

#### JFE BallastAce® Manages Ships' Ballast Water to Protect Ocean Ecosystems

Marine vessels are loaded with extra ballast water when they are not carrying cargo to ensure their stability at sea. Later, when the ship is loaded with cargo, the excess ballast water is then released. The water, which sometimes comes from faraway oceans, can have a negative impact if it contains alien organisms that threaten local sea life and ecosystems. This has become a global concern, so the International Maritime Organization adopted the International Convention for the Control and Management of Ships' Ballast Water and Sediments. As a result, it is expected to become

mandatory that all long-distance ocean-going ships install ballast water management systems.

In response, JFE Engineering developed Ballast Ace®, a system for effectively managing ballast water. The system removes unwanted organisms, first by filtering the ballast water at the time of loading, after which the water is treated with chemical agents to finish the cleansing process. To date, the system has been installed in more than 700 marine vessels.

JFE Engineering is now developing Ballast Ace® inspection and main-

tenance facilities worldwide, along with continuing to search for new solutions to help further preserve our global marine environment.



Bulk carrier equipped with JFE BallastAce®

# JFE Group

## Exploring Broad Applications for Steel and Related Materials

The JFE Group was formed in 2002 when Nippon Kokan K.K. and Kawasaki Steel Corporation jointly established the holding company JFE Holdings. The Group steadily pursues excellence as a 21st-century corporate group that contributes to global society with the world's most innovative technology.



### Holding Company

## JFE Holdings, Inc.

### Strategically Maximizing Corporate Value

JFE Holdings formulates strategy and manages funding for the JFE Group as its holding company. It also handles information disclosure as a listed company. Led by JFE Holdings, each Group operating company adopts its own operating structure optimized for its respective business, striving constantly to improve competitiveness, profitability and corporate value for the Group's sustainable growth.



### Steel Business

## JFE Steel Corporation

### Highly Functional Steel Products Tailored to Customer Needs

JFE Steel is one of the world's leading integrated steel producers. A strong international player with a sophisticated production system consisting of two major steelworks, one each in eastern and western Japan, JFE Steel leverages its cutting-edge technologies and development know-how to manufacture and market a wide range of highly functional steel products that are finely tuned to diverse customer needs.



### Engineering Business

## JFE Engineering Corporation

### Innovative Technologies for Energy Savings and the Environment

JFE Engineering technologies enhance the effective use of resources for clean energy in environmental infrastructure and power generation. In addition to these core businesses, JFE Engineering also offers specialized expertise in the fields of industrial machinery and steel structures, such as bridges.



### Trading Business

## JFE Shoji Trade Corporation

### Creating Value as the Group's Core Trading Company

JFE Shoji Trade engages in trading in Japan and the import/export of products centering on steel materials, as well as steel raw materials, nonferrous metals, chemicals, fuels, materials and machinery, and marine vessels. It is also expanding its involvement with food-stuffs and electronics.

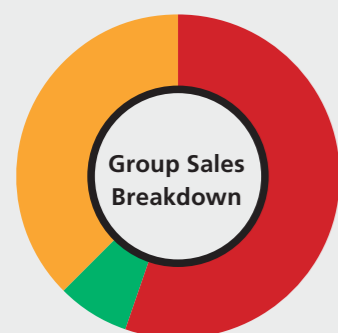


### (Equity-method affiliate)

## Japan Marine United Corporation

### Leveraging Energy-saving Technologies to Meet Global Needs

Japan Marine United operates seven shipyards/works and two technical research centers as a leader in the new building and repair of large merchant ships, including tankers, bulk carriers and container ships, and specialty vessels such as destroyers, minesweepers and icebreakers.



**3,850.3** billion yen\*  
(FY 2014)

JFE Steel	74.6%	2,873.8 billion yen
JFE Engineering	9.5%	3.673 billion yen
JFE Shoji Trade	50.2%	1,934.4 billion yen

\* Excluding inter-Group transactions of ¥1,325.3 billion (34.3% of Group sales)



**Boosting Production Capabilities for New Value and Growth**

As a steelmaker boasting world-leading production facilities and excellent technologies, JFE Steel is well positioned to meet growing demands for high-end steel. By actively developing innovative and unique products that offer superior functionality, JFE Steel will continue to ensure its capability to stably supply high-end steel to customers in Japan, as well as further develop markets worldwide through outstanding production and distribution networks that it is expanding in partnership with other leading steelmakers. JFE Steel also remains committed to providing solutions to social needs such as environmental protection.

President & CEO **Koji Kakigi**



# JFE Steel Corporation

**Two Major Steelworks Equipped with Large-scale Blast Furnaces**

The Chiba District of the JFE Steel East Japan Works was the country's first integrated coastal steelworks constructed after World War II. The East Japan Works also includes the Keihin District, a complex of facilities situated on Ohgishima, a 5.5-million-m<sup>2</sup> manmade island along the shores of Tokyo Bay.

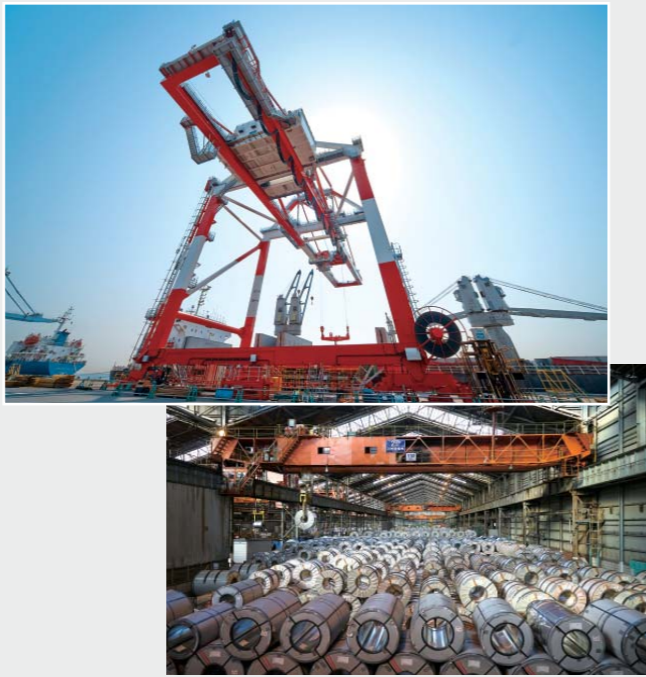
The West Japan Works includes the Kurashiki District and Fukuyama District, both of which boast advantageous locations due to their proximity to deep harbors. Together, they occupy a total area equivalent to 540 times that covered by the Tokyo Dome. The East and West Japan works, which feature large, world-class blast furnaces, are part of an extensive, highly efficient production structure.

JFE Steel's production network also includes the Chita Works located in the Chukyo Industrial Zone. This facility boasts world-leading production capabilities, including for specialty steel pipes and tubes such as tubular goods for the oil industry and line pipes.



**Enhancing Customer Satisfaction and Brand Strength**

JFE Steel is strengthening its integrated service and technology support system, which encompasses everything from planning and product design, manufacturing and delivery to quality assurance, thereby securing greater customer satisfaction and ensuring that JFE remains the brand of choice.



**JFE Steel Manufacturing Bases**

**West Japan Works**



Fukuyama District



Kurashiki District

**East Japan Works**



Chiba District



Keihin District

**Chita Works**



Developing Manufacturing Platforms in Japan

With the aims of ensuring stable operations and achieving greater cost competitiveness for its manufacturing bases in Japan, JFE Steel is tackling immediate priorities such as enhancing its manufacturing platforms in terms of both facilities and human resources. This includes repairs and upgrades, mainly to raise the operational efficiency of aging facilities for greater competitiveness. Recent upgrades have included coke ovens and facilities for raw material loading, unloading and distribution, all of which received extensive

repairs. With regard to human resources, JFE Steel has introduced a unique training system by appointing a group of dedicated trainers to pass on knowledge in the face of mass retirements by baby boomers. The trainers, who have been selected from among veteran employees and rehired retirees, are now dispatched to every manufacturing site to impart skills to younger employees, with a particular emphasis on know-how for troubleshooting and other technical matters.



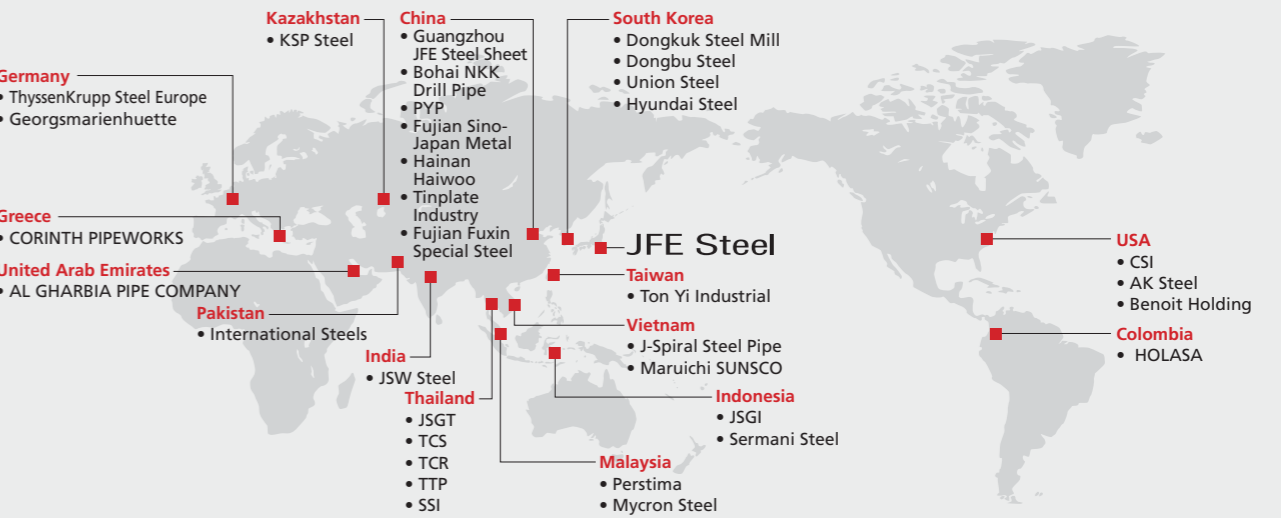
Securing Footholds in Burgeoning Markets Worldwide

With an eye on the global steel market, which is poised for growth, JFE Steel is reinforcing its ability to respond to rising demand, including through increased exports from Japan. For emerging markets such as China, India and Southeast Asia, high-end steel production and distribution networks have been established with local partners to supply automotive steel sheets.

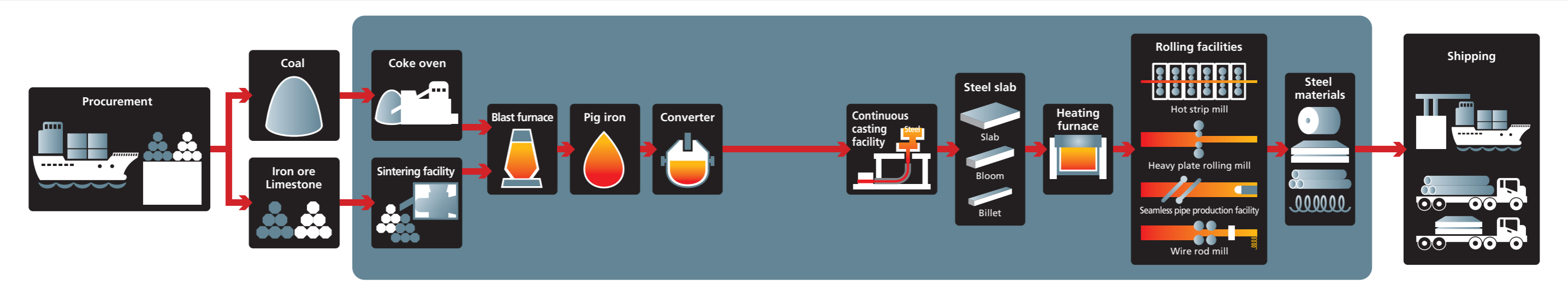
In China, a cold-rolling mill and a hot-dip galvanizing line are operated by Guangzhou JFE Steel Sheet Co., Ltd., a 50-50 joint venture, while in Thailand, JFE Steel Galvanizing (Thailand) Ltd., a wholly owned subsidiary, runs a hot-dip galvanizing line. These facilities are enjoying stable operations. In India, strategic partner JSW Steel Ltd. began operating a second cold-rolling mill at its Vijayanagar Works, which licenses automotive steel sheet production technologies from JFE Steel. In Indonesia, PT. JFE Steel

Galvanizing Indonesia, a wholly owned subsidiary, is constructing a hot-dip galvanizing line. Also, efforts are under way to establish a supply structure for steel pipe to accommodate expected growth in energy-infrastructure demand over the medium to long term. The U.S.-based 50-50 joint venture California Steel Industries, Inc. has completed its No. 2 electrical resistance welded pipe mill, which began operating in October 2014. In the Middle and Near East, where abundant reserves yield world-leading crude oil and natural gas production, JFE Steel established a joint venture in the UAE capital of Abu Dhabi for the manufacture and sale of large-diameter welded steel pipes for the energy industry. The JV was undertaken in tandem with Marubeni-Itochu Steel Inc. and SENAAT, a general holding company that is wholly owned by the Emirate of Abu Dhabi.

Main Capital and Alliance Partners



JFE Steel Production Process



# Highlights in 2014



## Super-SINTER® Wins Two Prizes

JFE Steel was chosen to receive the Prize of the Minister of Economy, Trade and Industry under the National Commendation for Invention 2015 award program, and also the Okochi Memorial Technology Prize, both in recognition of Super-SINTER®, a novel technology that utilizes a gaseous fuel to produce steelmaking raw materials and thereby helps to reduce CO<sub>2</sub> emissions. Super-SINTER® enables manufacturers to partially replace powder coke with a widely available hydrocarbon utility gas to produce sintered ore, a main blast furnace feed. The result is superior energy efficiency and reduced CO<sub>2</sub> emissions. Notably, this is the sixth consecutive year in which JFE Steel has received an Okochi Memorial Prize.



## Outstanding Performances by Company Sports Teams

The JFE East and West Japan baseball teams participated in an intercity tournament and the Japan Amateur Baseball Championship. A group of enthusiastic JFE fans joined local residents in rooting for the teams. With regard to individual records, at the latter game the JFE West Japan baseball team member Takuya Hashimoto shone as the leading hitter. In addition, Tsukasa Kohmatsu from the JFE East Japan baseball team was commended by both Chiba and Saga prefectural governments for his outstanding performance. Also, in running sports, loud cheering from roadside supporters inspired strong performances in a number of competitions. JFE Steel employee Charles Ndirangu won two races during the year.



## Fukuyama District Brings Third Converter Online at No. 3 Steel Mill

The Fukuyama District of the West Japan Works began operating a third converter at its No. 3 steel mill. The cutting-edge converter, which is used for the preliminary treatment of molten pig iron, has raised efficiency in terms of both resource and energy consumption.

## Customers' Center Fukuyama Opens at Steel Research Lab.

The Fukuyama District of the West Japan Works opened a Customers' Center, a place to provide customers with opportunities to take a close look at the JFE Group's material development activities and technologies. This move is intended to enable the Group to reach a broader domestic customer base in its initiatives aimed at facilitating "Early Vendor Involvement" by encouraging collaboration between customers and the Group in tackling technological challenges and undertaking joint R&D projects.



## CSI Launches No. 2 Electrical Resistance Welded Pipe Mill

California Steel Industries, Inc. (CSI), a U.S.-based steelmaking joint venture in which JFE Steel has a 50% equity interest, brought its No. 2 electrical resistance welded pipe mill online to accommodate growing demand for high-end steel pipes in the energy field. The launch of this facility boosted CSI's electrical resistance welded pipe production capacity 2.6 times while enabling it to begin manufacturing pipes with larger diameters, thicker walls and greater strength.



## Joint Venture Established in UAE for Large-diameter Welded Steel Pipes

In tandem with Marubeni-Itochu Steel Inc. (MISI) and SENAAT, a general holding company wholly owned by the Emirate of Abu Dhabi, JFE Steel established a joint venture in Abu Dhabi for the manufacture and sale of large-diameter welded steel pipes for the energy industry and other fields. Demands for crude oil and natural gas development, as well as production infrastructure, are expected to remain strong in the UAE and surrounding region, which boasts the world's largest combined reserves of oil and natural gas. The new joint venture is positioned to satisfy related needs for high-quality steel pipes.

## April 2014

- Received a Commendation for Science and Technology from the Minister of Education, Culture, Sports, Science and Technology for technologies to produce high-performance steel plate employing an innovative thermo-mechanical control process
- Received JSME Medal for New Technology from the Japan Society of Mechanical Engineers for a non-contacting actuator for the stabilization of strip vibration and shape with dual coil electromagnets
- Chita Works' cumulative output of seamless steel pipe surpasses 15 million tons

## May 2014

- Held spring festivals at Fukuyama District of West Japan Works and Keihin District of East Japan Works
- First-ever installation of new, highly-corrosion resistant steel plate in the cargo hold of a coal carrier
- Developed JIP Clean Mix® ZERO, an iron powder for sintered machine parts boasting superior weight and bulk stability during molding process

## June 2014

- Won order for JFE-UHP®-17CR-110 tubular pipe casing for offshore oil development project in Brazil

## July 2014

- Super-SINTER® received Prize of the Minister of Economy, Trade and Industry, part of the National Commendation for Invention 2015 award program
- JFE East and West Japan baseball teams participated in 85th intercity tournament
- Developed Super-SINTER® OXY for unprecedented combination of oxygen- and hydrogen-based gases as a sintering-machine feed

## August 2014

- Released Kona Bijin®, a premix iron powder for coating seeds

## September 2014

- Initiated operation of CSI's No. 2 electrical resistance welded pipe mill in the United States

## October 2014

- Held autumn festival at Chiba District of East Japan Works
- Developed world's thickest high crack-arresting steel plate with yield strength of 460MPa

- Developed high-tensile-strength alloyed hot-dip galvanized steel sheet with high extensibility and stretch flanging property for automotive frame components
- Opened Customer Center Fukuyama (CCF) at Steel Research Lab. in Fukuyama District of West Japan Works

## November 2014

- Held autumn festivals at Kurashiki District of West Japan Works
- JFE East and West Japan baseball teams participated in 40th Japan Amateur Baseball Championship
- JFE-TF1, a resource-saving stainless steel with superior thermal resistance, received one of the 2014 R&D 100 Awards
- Agreed to merger of indirect subsidiary Nacional Minerios S.A. (NAMISA) and Brazilian iron-ore mining company
- TCR (Thailand) received Prime Minister's Industry Award on Environment Quality Preservation

## December 2014

- JFE-HA980SB, a hot-rolled steel sheet with a high tensile strength of 980 MPa, adopted as material for truck-body collision protection
- Fukuyama District of West Japan Works begins operating third converter at No. 3 steel mill

## January 2015

- Developed FE-EPMA, carbon-content analysis equipment boasting world-leading precision

## February 2015

- Charles Ndirangu of JFE Steel running team won first place in both Chiba International Cross Country race and Japan Industrial Track & Field Association half marathon
- Super-CR, newly developed equipment for steel plate cooling, selected for Minister of Economy, Trade and Industry Prize under Promoting Machine Industry Awards program sponsored by the Japan Society for the Promotion of Machine Industry

## March 2015

- 440MPa Class UNI HITEN®, a high-strength steel sheet for automotive outer panels, selected for Otani Art Museum Award
- Super-SINTER® selected for 61st Okochi Memorial Technology Award
- Decided to establish joint venture in Abu Dhabi to manufacture and sell large-diameter welded steel pipes (established in May 2015)



## Pioneering Company Leveraging Timely Engineering Technologies

JFE Engineering supports industry, and indeed broader society, through its engineering business. The company's outstanding track record includes its timely development of cutting-edge technologies for systems targeting natural gas and energy generation employing waste and sewage sludge. In recent years, JFE Engineering has engaged in a number of construction projects for renewable energy generation, including biomass, photovoltaic and geothermal power plants. It has also brought its superior technological capabilities to bear in the construction of transportation, distribution and water and sewerage infrastructure that is supporting economic growth in countries worldwide. Going forward, JFE Engineering will remain committed to providing optimal solutions that meet societal needs for crucial underpinnings of daily life.

President & CEO **Hisanori Kanou**

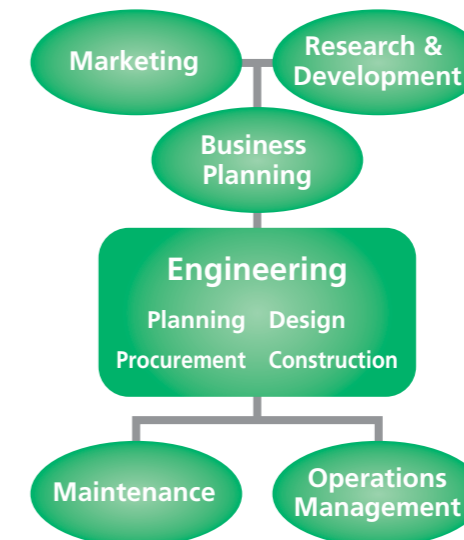
## Businesses

### Energy Supply

- Oil & gas storage and transmission
- Effective use of renewable energy
- Gas and diesel engine power generation

### Recycling

- Recycling
- Waste-to-energy and biomass power generation
- Wastewater treatment



### National Infrastructure

- Bridges
- Port facilities
- Embankments

### Machinery and Systems

- Industrial machinery
- Ballast water treatment systems
- Distribution systems

## Overview

# JFE Engineering Corporation

## Solutions Encompassing Diverse Engineering, from Planning to Operations

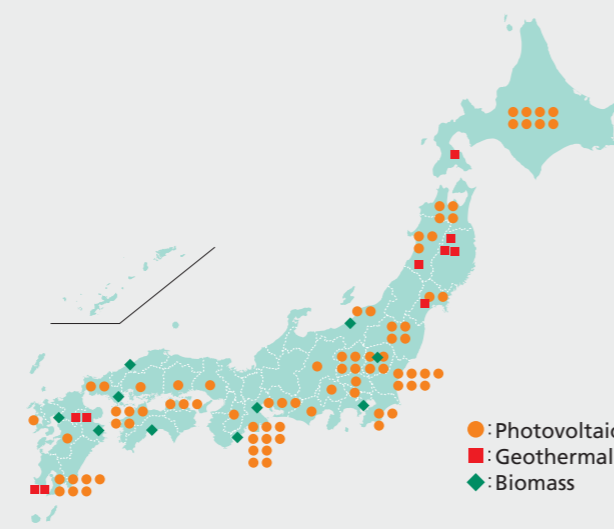
Engineering companies are being expected to play ever-broader roles in industry and society. In addition to conventional facility construction projects, JFE Engineering provides integrated solutions that encompass both planning and operations. Solutions for urban and marine environments can be managed under private finance initiative (PFI) or design-build-operate (DBO) frameworks. In either case, comprehensive proposals cover project flow, layout and equipment specifications based on the client's requirements (performance order) and operations and maintenance plans.



JFE Engineering has operated a waste-biogas power generation center on a PFI basis for Nagaoka City since fiscal 2013.

## One-stop Engineering Service to Generate New Energy

Following the introduction of feed-in tariff (FIT) schemes under Japan's Renewable Electric Energy Act, biomass, photovoltaic and geothermal power plants are expected to become a promising next-generation energy source for the nation. JFE Engineering expects to handle a range of engineering projects associated with such plants, including the provision of one-stop services encompassing business planning and facility design, construction and operation.



Renewable energy power plants constructed and/or run by JFE Engineering

## Stepping Up Global Expansion by Reinforcing Local Workforces

JFE Engineering is expanding its global business networks by actively engaging local personnel in all facets of the business, including sales, design and manufacturing. In Germany, JFE Engineering acquired Standardkessel Power Systems Holding GmbH (SPSH), a plant engineering company specializing in environment and energy, and established new bases for sales

and design in Indonesia and India through M&A. Going forward, the company will transfer technological expertise to enable these bases to provide high-quality, cost-effective engineering services, thereby ensuring continued growth overseas.

## Global Business Network



# Highlights in 2014

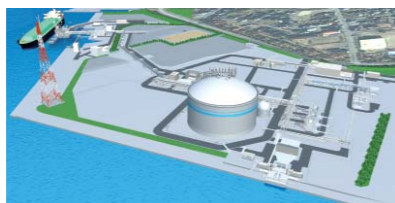
## Solar Power Plant Completed in Shizuoka City

JFE Engineering completed its Miho Solar Power plant at the former site of its Shimizu Shipyard. The JFE Group has constructed photovoltaic power plants at more than 80 locations nationwide, amounting to a combined maximum output of approximately 285MW. The Group operates eight of these plants, generating approximately 40MW of renewable energy.



## Order Received for Toyamashinko Port LNG Supply Facilities

JFE Engineering received an order for the construction of LNG storage and regasification facilities and a pipeline to serve the first LNG-fed thermal power station run by Hokuriku Electric Power Company. An underground LNG storage facility will be one of Japan's largest, boasting a maximum capacity of 180,000 kl.



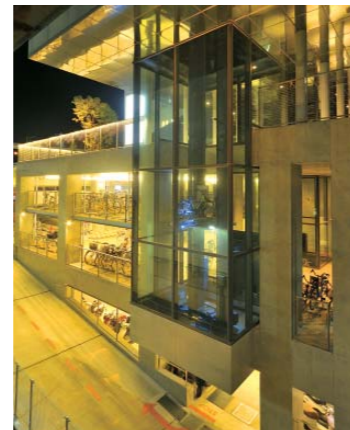
## Takaoka Koiki Eco Clean Center Completed

This new waste-to-energy plant was completed in only two and half years thanks to the adoption of a high-performance Hyper Z Series stoker furnace that shortened both the design and construction periods.



## President Hisanori Kanou Accompanies Japan's Prime Minister to Bangladesh

Mr. Kanou joined an official economic mission to engage in discussions with government officials and business leaders in Bangladesh.



## Parking Facility with "Cycle Tree" System Wins Good Design Award

A Good Design Award was presented in recognition of the outstanding functionality and beauty of Cycle Station Toride, a structure featuring JFE Engineering's Cycle Tree Bicycle Parking System, which was completed in front of East Japan Railway's Toride Station.



## Industrial Waste Incineration Plant Completed in Malaysia

This new facility, constructed for a joint venture between Trienekens GmbH, Germany's largest waste treatment company, and the Malaysian state of Sarawak, will treat industrial waste from hospitals and oil refineries in East Malaysia.



## Rapid Installation of Onitaka PA Exit Ramp

JFE Engineering required just six hours to complete an exit ramp for the Onitaka Parking Area on the Tokyo Metropolitan Expressway's Komatsugawa Line. The job included the installation of a huge 60-meter 290-ton block, which had to be put in place rapidly to minimize traffic disruption.

## Order Received for Expansion of Minami-Nagaoka Gas Field Facilities

JFE Engineering will install compressors and other equipment in natural gas refineries and treatment facilities to raise yields from gas wells, thereby increasing recoverable reserves by approximately 20% and extending the field's production period by about 20 years.



## Japan's Largest-ever Container Crane Completed

A container crane installed at Yokohama Port's Minami Honmoku Pier accommodates the world's largest container ships. Its design includes advanced seismic isolation capable of enduring a major tremor equivalent to that of the powerful Great Kanto Earthquake of 1923.

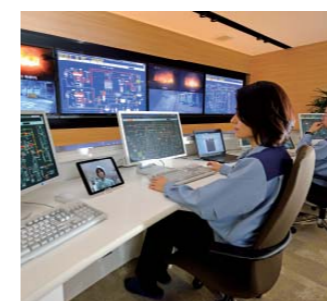


## Commercializing the Biomass Power Generation Business

JFE Engineering established Green Energy Tsu Corporation on the premises of its Tsu Works as a joint venture with Development Bank of Japan Inc. and four other companies to launch a commercial biomass power-generation business.

## Steel Structure Component Facility in Myanmar Slated for Expansion

After inaugurating production in April 2014, J&M Steel Solutions received orders that raised production to the plant's maximum annual capacity of 10,000 tons, prompting the decision to expand its facilities in the foreseeable future.



## Remote Operational Support for Waste-to-Energy Plants Nationwide

Having established a Remote Service Center at its Yokohama Head Office, JFE Engineering rolled out the JFE Hyper Remote System to provide operational support in the form of around-the-clock centralized monitoring and management of waste-to-energy plants throughout Japan.

## Internship Program for University Students from Southeast Asia

The program, now in its second year, develops personnel who are expected to play crucial roles in leading economic development in their respective countries. So far, the program has welcomed 20 students from four countries.



## April 2014

- Hisanori Kanou assumed office of President & CEO
- Opened Okinawa Branch
- Received simultaneous orders for Ishikari LNG supply facilities and pipelines
- Entered electricity retail market by establishing Urban Energy Corporation
- Received order for Toyamashinko Port LNG supply facilities

## May 2014

- Integrated waterworks plant business with Isomura Hosui Kiko Co., Ltd.
- JEI team received Impressive Prize from Nationwide QC Circle Conference sponsored by Union of Japanese Scientists and Engineers

## June 2014

- Opened Fukushima Reconstruction Branch
- Entered alliance in smart agribusiness with Netherlands-based Priva B.V.
- Received Technology Award from Japan Gas Association for three "Only One" technologies
- Completed first natural gas pipeline in Okinawa Prefecture

## July 2014

- Established engineering centers in Indonesia and India
- Production at steel structure component manufacturing facility in Myanmar reached maximum capacity
- Received order for construction of western segment of Kyushu Hokubu mega pipeline for SAIBUGAS Co., Ltd.
- Received order to upgrade small water-supply facilities on Oshima and Jinoshima islands in Fukuoka Prefecture
- Received Contributor Award from Engineering Advancement Association of Japan for Shwegondine elevated bridge construction project in Myanmar. Also received Special Encouragement Award for hybrid tide embankment
- Launched internship program for university students from Southeast Asia

## August 2014

- Established Shape Up 20 project team
- Released explosion-resistant LANEX-Tablet incorporating iPad mini
- Initiated production at first smart-agriculture facility in Tomakomai City
- Received order for Myaynigone Overpass steel elevated bridge in Yangon, Myanmar
- Received order for biomass power plant with maximum output of 50MW from Saiki City, Oita Prefecture

## September 2014

- President Hisanori Kanou joined Prime Minister Abe's delegation to Bangladesh
- Initiated remote support for waste-to-energy plants nationwide
- Established project team to guide internal reforms
- Commercialized biomass power generation business
- Received order for expansion of Minami-Nagaoka Gas Field facilities

- Completed Takaoka Koiki Eco Clean Center

## October 2014

- Completed Miho Solar Power plant in Shizuoka City
- Commenced shipment of tomatoes from smart-agriculture facility in Tomakomai City
- Completed Ibusuki geothermal binary power generation facility in Kagoshima Prefecture
- Facility incorporating Cycle Tree bicycle parking system won Good Design Award

## November 2014

- Received order for bridge construction in India-Japan project to establish cargo railway connecting Delhi and Mumbai
- Completed elevated access road for Yokkaichi Junction of Tomei Expressway
- Completed industrial waste incineration plant in Malaysia
- JFE Engineering employee won first prize in Japan Boiler Association's Nationwide Boiler Welding Competition for second consecutive year

## December 2014

- Expanded Tokyo Head Office to consolidate sales departments
- Completed acquisition of Standardkessel Power Systems Holding GmbH in Germany
- Received order for Japan's first combined biomass power plant as private finance initiative project
- Completed renovation of north wholesale market of Kawasaki City
- Completed jet fuel supply facilities for new terminal at Noi Bai International Airport

## January 2015

- Expanded smart-agriculture facility in Tomakomai City
- Expanded after-sales service structure for JFE Ballast Ace®
- Received order for sewage-water treatment facility in Paranaque, Philippines
- Completed Irabu-Ohashi Bridge

## February 2015

- Received order for sewage-water treatment facility in Kandy, Sri Lanka
- Initiated verification test of Japan's first energy recycling-type garbage recovery system for waste-to-energy power generation
- Initiated collaboration to commercialize cutting-edge cancer diagnostic reagent
- Decided to expand J&M Steel Solutions' manufacturing facilities
- Completed Japan's largest container crane
- Commenced treatment of disaster waste in Fukushima Prefecture
- Completed overnight installation of bridge block for exit ramp of Onitaka Parking Area

## March 2015

- Completed 26.2MW mega solar photovoltaic power generation facility on former golf course in Fukushima Prefecture



## Developing New Markets to Expand Group Business

JFE Shoji Trade is engaged in the domestic trade and export/import of steel products, steel raw materials and steel-production machinery, and various tripartite trading businesses. It is also expanding business in the food and electronics fields.

JFE Shoji Trade has built a robust sales system in Japan, while overseas it is expanding its business bases in 19 countries worldwide. By fully leveraging this global network, JFE Shoji Trade is both driving the Group's export initiatives and developing a business structure supported by local production and consumption. JFE Shoji Trade also is cultivating promising markets by leveraging the sales channels of affiliates it has acquired through M&A.

JFE Shoji Trade also plays a key role in securing stable supplies of cost-competitive raw materials and machinery for each Group company. As the pioneer of JFE Group, JFE Shoji Trade will continue to overcome hurdles and it pave the way for the JFE Group's involvement in an increasing range of promising fields.

President & CEO **Tsutomu Yajima**

## Highlights in 2014

### April 2014

- K&I received order for specialized pipes for Chubu Electric Power Company's Nishi-Nagoya Thermal Power Station
- Established joint venture with r. bour-geois S.A. in North America
- Participated in conferences of Japanese Standards Association and Institute of Electrical and Electronics Engineers, and transformer industry exhibition in Chicago
- FASTek container loading system first used by Cold Iron Melting Section of Ferrous Raw Material Department
- PT. JFE Shoji Steel Indonesia (JSSI) received Best Partner Prize from P.T.SUZUKI INDOMOBIL MOTOR and Maruti Suzuki India

- Electrical Appliance Steel Overseas Department selected Premier Partner by Fuji Xerox Co., Ltd. for third consecutive year

### May 2014

- Acquired majority stake in Shin Kiyoi Kogyo K.K.
- JFE Shoji Pipe & Fitting Trade Corporation acquired pipe distributor Showa Kogyo K.K.

### June 2014

- JFE Shoji Terre One Corporation participated in EE Tohoku '14 engineering exhibition
- JFE Shoji Electronics participated in NEPCON Thailand 2014 exhibition

### July 2014

- JFE Shoji Trade's Sheet & Strip Overseas Sec. 1 and JFE Shoji Trade Philippines, Inc. designated "best suppliers" by Mindanao Container Corporation

### October 2014

- JFE Shoji Trade Steel Construction Materials Corporation launched task force to support Okinawa Project
- JFE Shoji Pipe & Fitting Trade Corporation dispatched expatriates to Bangkok, Thailand

### November 2014

- Opened branch in Rio de Janeiro, Brazil

- JFE Shoji Trade Steel Construction Materials Corporation launched Steel Structure Construction Safety Association and convened first general meeting

### December 2014

- Agreed to acquire U.S.-based steel pipe distributor Kelly Pipe

### February 2015

- Established Automotive Steel Division
- Decided to integrate JFE Shoji Trade Group's bar and wire rod businesses

### March 2015

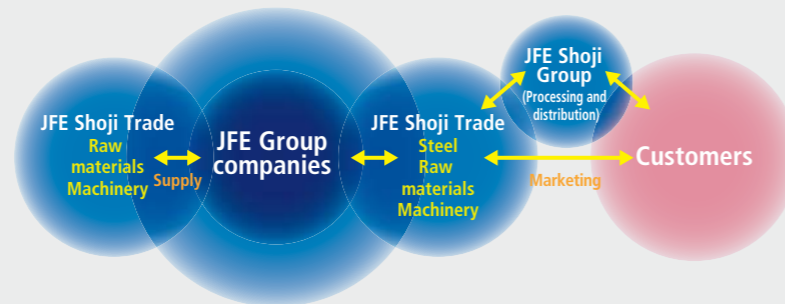
- Agreed to establish joint venture for cold drawn tubes in Mexico

## Overview

# JFE Shoji Trade Corporation

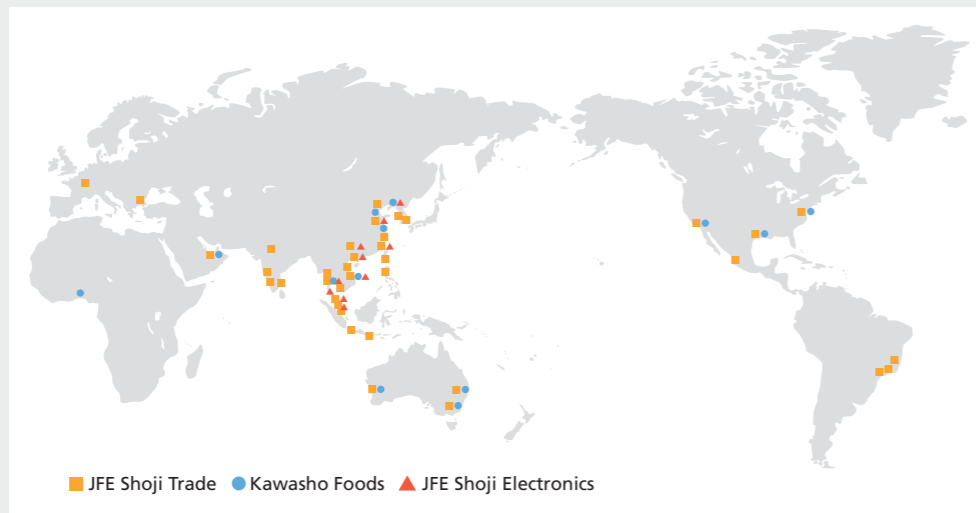
### Steel Business

To ensure competitiveness both in Japan and overseas, JFE Shoji Trade continually works to strengthen the JFE Group's steel supply chain by identifying and responding to customer needs in all phases of operations, from raw materials procurement and technical services to product processing.



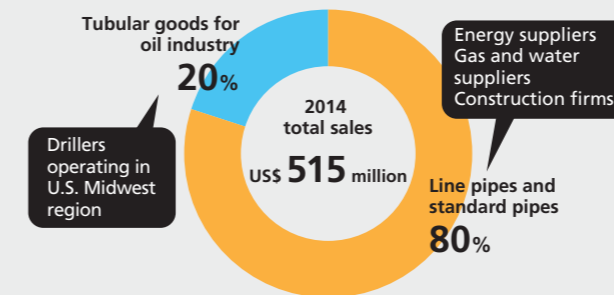
### Globally Expanding Network

JFE Shoji Trade is the JFE Group's core trading company. Operating 55 bases in 19 countries, it most recently set up operations in Mexico City and Rio de Janeiro in 2014. JFE Shoji Trade utilizes these strongholds in promising markets to trade in steel products and raw materials, as well as to spearhead the JFE Group's market-development initiatives.



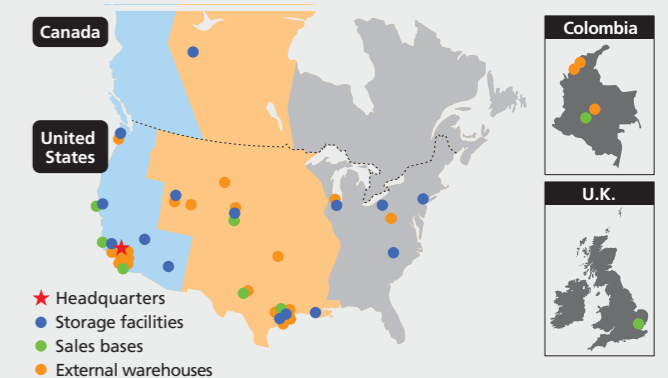
### Major Pipe Distributor Acquired in the United States

JFE Shoji Trade acquired Kelly Pipe Co., LLC, a major steel pipe distributor with more than a century of experience in the United States, in December 2014. Established in 1898, Kelly Pipe boasts a robust lineup of steel pipe products used in a wide variety of applications, along with a broad sales network serving the U.S. and other markets.



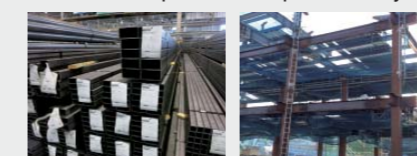
### Kelly Pipe's Sales Bases

The company has 24 sales bases— 21 in the United States and one each in Canada, the U.K. and Colombia



### Welcoming Yashimanada into JFE Shoji Trade Group

Based in Osaka, Yashimanada Corporation processes and markets steel construction materials such as columns. It boasts a business network covering western Japan, abundant stockpiles, robust processing facilities and a flexible delivery structure. JFE Shoji Trade Steel Construction Materials Corporation acquired a majority share of the company to



Rectangular structural steel tubes and columns Structure being constructed with columns

leverage synergies by combining its sales network with Yashimanada's processing capabilities.

### Yashimanada's Processing Facilities and Sales Bases



Processing facilities and sales bases in Osaka, Mie, Okayama and Fukuoka prefectures



### Establishing Shipbuilding Leadership through Superior Manufacturing Technologies

Two years have passed since the formation of Japan Marine United Corporation (JMU) through the merger of Universal Shipbuilding Corporation and IHI Marine United Inc. in January 2013.

The merger has enabled JMU to combine the two former companies' substantial engineering and technological resources and know-how, as well as marketing capabilities and facilities for large projects.

By leveraging these competencies, JMU is expanding its product lineup while taking a leading role in developing advanced technologies for increased energy savings and environmental load reduction. Going forward, JMU will continue to push ahead with its design and production of marine vessels offering superior performance and quality that meet the discriminating needs of its customers.

President & CEO **Shinjiro Mishima**

## Japan Marine United

### Newly Completed Fleet of Eco-ships



SHOYOH

In 2014, a year when JMU completed a variety of low-impact marine vessels, the company also saw its 97,000 DWT coal carrier, *SHOYOH*, delivered in July 2013, receive the Ship of the Year 2013 award in the large cargo vessel category. The

award was presented by the Japan Society of Naval Architects and Ocean Engineers. *SHOYOH* is the world's first large bulk carrier to be fitted with contra-rotating propellers (CRP). This system, along with other cutting-edge energy-saving devices installed in *SHOYOH*'s stern, enables the ship to realize 16% greater fuel efficiency than a conventional vessel. Moreover, its power turbine generator uses exhaust gas from the main engine to help cut fuel consumption for electricity generation by 50%.

One of the low-impact vessels completed in 2014 was the *ENEOS OCEAN*, the first ship in a series of very large crude oil carriers (VLCCs). *ENEOS OCEAN* is specifically designed to take advantage of changes in Japan's port traffic regulations. Two other newly completed vessels were the *PELOREUS*, the first G182BC series Dunkirkmax-class large bulk carrier, and the *IVS NARUO*, a FUTURE 60 bulk carrier in JMU's FUTURE series. These vessels were delivered to customers in May, July and December, respectively.

JMU employed its state-of-the-art analytical technologies to optimally design the hulls of these eco-ships, and deployed

cutting-edge energy-saving devices for enhanced environmental performance. Moreover, each ship boasts an Energy Efficiency Design Index (EEDI) that is approximately 20% lower than the EEDI baseline that will be introduced in 2020, thereby ensuring energy efficiency that more than satisfies the latest international standards for ocean-going vessels. With advantages such as these, it is no wonder that JMU's new eco-ships are winning strong praise from customers.



ENEOS OCEAN



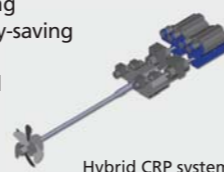
IVS NARUO



PELOREUS

### Orders Received for Large Ferries with High-efficient Hybrid CRP Systems

In fiscal 2014, JMU received orders for its first two large ferries, which will be delivered in 2017. To enhance fuel efficiency, JMU plans to install hybrid contra-rotating propellers (CRP) systems and other energy-saving devices, which will be combined with optimally designed hulls. Both vessels will ply the waters between Oarai Port in Ibaraki Prefecture and Tomakomai Port in Hokkaido Prefecture.



Hybrid CRP system

### Highlights in 2014

#### April 2014

- Established Offshore and Engineering Division and Ship Life Cycle Division
- Received orders for eight 14,000-TEU container ships

#### May 2014

- ENEOS OCEAN*, cutting-edge VLCC, named and delivered

#### June 2014

- SHOYOH* selected as Ship of the Year 2013 in large cargo vessel category

#### July 2014

- PELOREUS*, first next-generation energy-saving G182BC bulk carrier, delivered

- Mr. Naoki Tsuda, former president of IHI Marine United Inc., received Prime Minister's Commendation for contributing to Japan as maritime nation

#### October 2014

- Received orders for large ferries with highly efficient hybrid CRP systems

- Mr. Seiya Norimatsu of JMU Business Support Co., Ltd. received gold medal at Asian Para Games as member of wheelchair rugby national team

#### December 2014

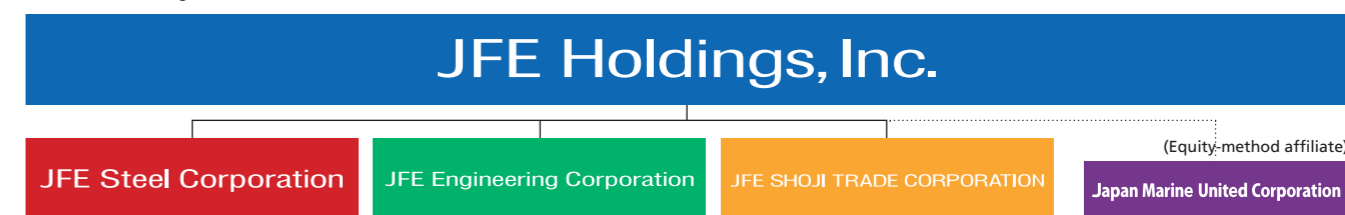
- IVS NARUO*, first FUTURE 60 series eco-ship, delivered

#### March 2015

- HATSUSHIMA* mid-sized mine-sweeper delivered
- IZUMO*, one of Japan's largest class of helicopter destroyer, delivered

## JFE Group History

From January 1, 2013



April 1, 2003: Established operating companies



September 27, 2002: Inaugurated JFE Holdings, Inc.

<b>July 1969</b> Landfill operations commenced at West Plant, Chiba Works		<b>December 1971</b> Construction of Ohgishima commenced at Keihin Steel Works	
<b>July 1961</b> Mizushima Works established in Kurashiki, Okayama Prefecture		<b>January 1969</b> Tsu Shipyard inaugurated operations	
<b>February 1951</b> Chiba Works established as first modern integrated iron and steel works in postwar Japan		<b>April 1968</b> Keihin Steel Works established (consolidation of Kawasaki, Tsurumi and Mizue works)	
<b>August 1950</b> Steel division of Kawasaki Heavy Industries spun off as independent Kawasaki Steel Corporation		<b>February 1965</b> Fukuyama Works established	
<b>August 1943</b> Chita Works established in Aichi Prefecture		<b>October 1940</b> Tsurumi Steelmaking and Shipbuilding Company (formerly Asano Shipyard) acquired and absorbed	
<b>May 1917</b> Fukiai Works established in Kobe		<b>June 1936</b> First blast furnace blown in and integrated steel production started	
<b>October 1896</b> Kawasaki Dockyard Company, Ltd. established (later renamed Kawasaki Heavy Industries, Ltd.)		<b>April 1916</b> Yokohama Shipyard launched (later renamed Asano Shipyard Co., Ltd.)	
<b>April 1878</b> Shozo Kawasaki established Kawasaki Tsukiji Shipyard in Tsukiji, Tokyo		<b>June 1912</b> Nippon Kokan K.K. established	
Kawasaki Steel Corporation		Nippon Kokan K.K.	

# Contributing to Sustainable Societies

## Customers and Business Partners

The JFE Group delivers products and services of the highest quality to support the robust competitiveness of its customers and meet other diverse needs. To underpin these efforts, the Group acquires and maintains all necessary technical certifications, adopts best-practice management systems and collaborates with customers in joint-development activities.



Training session

## Shareholders and Investors

The JFE Group places high priority on the timely and appropriate disclosure of corporate information, making every effort to release information online and publish business results promptly. Plant tours and investor briefings are conducted to enhance stakeholders' understanding of the Group's business and activities.



Plant tour for JFE Group shareholders

## Pursuing Eco-friendly Manufacturing Processes

JFE's steel business utilizes world-leading energy-efficient manufacturing processes enabled by the active introduction of energy-saving facilities. Going forward, the company will continue to reduce its resource and energy consumption and lower the environmental impact of its operations by developing advanced new eco-friendly technologies.



Ferro-coke production facility

## Providing Eco-friendly Products and Services

In supplying highly functional steel materials that are indispensable to economic development, JFE also pursues resource recycling and renewable energy-related initiatives to help realize increasingly low-carbon societies through eco-friendly products and services.



Photovoltaic power generation facility

## Social Progress



## Employees

The JFE Group actively hires new recruits and maintains healthy labor-management relations in its commitment to provide a dynamic working environment for a diverse workforce. The Group is an equal opportunity employer for persons with physical disabilities and encourages respect for human rights. Occupational safety and the maintenance of favorable work environments for employees are top priorities.



Cultivating human resources

## Community Residents

The JFE Group supports the communities where it operates with a variety of long-term initiatives, such as support for university research and educational events, cultural and social welfare activities and disaster-related reconstruction.



Manufacturing workshop for children

JFE Group  
Environmental  
Philosophy

JFE Group  
Environmental  
Policy

## Environmental Protection



## Meeting Social Needs with Environment-friendly Solutions

Leveraging its world-leading technologies and products, JFE develops environment-friendly solutions, particularly for developing countries, to help reduce resource and energy consumption on a global basis.



Eco-Products 2014

## JFE Group CSR Report (September 2015 issue)

The JFE Group CSR Report provides detailed information about its societal and environmental initiatives.

 [www.jfe-holdings.co.jp/en/environment/](http://www.jfe-holdings.co.jp/en/environment/)



Data

Corporate Information

Holding Company (As of April 1, 2015)			
Name:	JFE Holdings, Inc.	Paid-in Capital:	147.1 billion yen
Head Office:	2-2-3 Uchisaiwaicho, Chiyoda-ku, Tokyo 100-0011	URL:	www.jfe-holdings.co.jp/en
Phone:	+81-3-3597-4321 (main)		
Establishment:	September 27, 2002		

Operating and Main Group Companies (As of April 1, 2015)

Steel Business Net sales: 2,873.8 billion yen; Employees: 43,680

JFE Steel Corporation Head Office: Chiyoda-ku, Tokyo

Group Companies

- Electric Furnaces and Bar/Shaped Steel
  - JFE Bars & Shapes Corporation
- Manufacture and Sale of Processed Steel Products, Raw Materials, etc.
  - JFE Chemical Corporation
  - JFE Metal Products & Engineering Inc.
  - JFE Galvanizing & Coating Co., Ltd.
  - JFE Container Co., Ltd.
  - JFE Mineral Company, Ltd.
  - JFE Welded Pipe Manufacturing Co., Ltd.
  - Mizushima Ferroalloy Co., Ltd.
  - JFE Pipe Fitting Mfg. Co., Ltd.
  - JFE Kozai Corporation
  - JFE Material Co., Ltd.
  - JFE Precision Co., Ltd.
  - River Steel Co., Ltd.
  - JFE Electrical Steel Co., Ltd.
  - Philippine Sinter Corporation
  - Nova Era Silicon S.A.
  - JFE Steel Galvanizing (Thailand) Ltd.
  - Thai Coated Steel Sheet Co., Ltd.
  - PT. JFE Steel Galvanizing Indonesia
  - Shinagawa Refractories Co., Ltd.\*
  - Nippon Chuzo K.K.\*
  - Nippon Chutetsukan K.K.\*
  - NKK Seamless Steel Pipe K.K.
  - Dongkuk Steel Mill Co.,Ltd.\*
  - Guangzhou JFE Steel Sheet Co., Ltd.\*
  - Thai Cold Rolled Steel Sheet Public Co., Ltd.\*
  - JSW Steel Ltd.\*
  - Inner Mongolia Erdos EJM Manganese Alloys Co., Ltd.\*
  - Pancheng Yihong Pipe Co.
  - California Steel Industries, Inc.\*
- Logistics & Warehousing, Facility Maintenance & Construction and Utility Supply, etc.
  - JFE Logistics Corporation
  - JFE Civil Engineering & Construction Corp.
  - JFE Mechanical Co., Ltd.
  - JFE Electrical & Control Systems, Inc.
  - Setouchi Joint Thermal Power Co., Ltd.\*
  - K.K. JFE Sanso Center\*
- Trading and Other Steel-Related Businesses
  - JFE Life Corporation
  - JFE Systems, Inc.
  - JFE Techno-Research Corporation
  - JFE East Japan GS Co., Ltd.
  - JFE Steel Australia Resources Pty Ltd.
  - GECOSS CORPORATION\*
  - Brazil Japan Iron Ore Corporation\*
  - Japan-Brazil Niobium Corporation\*
  - Exa Corporation\*

Engineering Business Net sales: 367.3 billion yen; Employees: 8,472

JFE Engineering Corporation Head Office: Chiyoda-ku, Tokyo Yokohama Head Office: Yokohama

Group Companies

- JFE Technos Corporation
- JFE Kankyo Corporation
- Asuka Soken Co., Ltd.
- Japan Recycling Corporation
- JFE Environmental Service Corporation
- Kitanippon Industrial Co., Ltd.
- Tohoku Dock Tekko K.K.
- Standardkessel Baumgarte Group
- Japan Tunnel Systems Corporation\*
- JP Steel Plantech Co.\*

\*Affiliated company accounted for using equity method  
Net sales: Fiscal 2014 (ended March 31, 2015)  
Employees: as of March 31, 2015

Trading Business Net sales: 1,934.4 billion yen; Employees: 6,667

JFE Shoji Trade Corporation Tokyo Head Office: Chiyoda-ku, Tokyo Osaka Head Office: Osaka

Group Companies

- Japan
  - Heavy Steel Plate Processing
    - JFE Shoji Zosen Kako Corporation
  - Thin Steel Plate Processing
    - JFE Shoji Coil Center Corporation
    - JFE Shoji Kohnan Steel Center Co., Ltd.
    - Mizushima Steel Corporation
  - Manufacturing and Distribution of Steel Construction Materials
    - JFE Shoji Trade Steel Construction Materials Corporation
    - JFE Shoji Usuitakenzai Corporation
  - Steel Pipe Processing and Distribution
    - K&I Tubular Corporation
    - JFE Shoji Pipe & Fitting Trade Corporation
  - Terre Armée
    - JFE Shoji Terre One Corporation
  - Food Business
    - Kawasho Foods Corporation
  - Electronics
    - JFE Shoji Electronics Corporation
- Overseas
  - China
    - Dongguan JFE Shoji Steel Products Co., Ltd.
    - Guangzhou JFE Shoji Steel Products Co., Ltd.
    - Zhejiang JFE Shoji Steel Products Co., Ltd.
    - Jiangsu JFE Shoji Steel Products Co., Ltd.
  - The Philippines
    - JFE Shoji Steel Philippines, Inc.
  - Thailand
    - Central Metals (Thailand) Ltd.
    - Steel Alliance Service Center Co., Ltd.
  - Vietnam
    - JFE Shoji Steel Vietnam Co.,Ltd.
    - JFE Shoji Steel Hai Phong Co.,Ltd.
  - India
    - JFE Shoji Steel India Private Limited
  - Malaysia
    - JFE Shoji Steel Malaysia Sdn. Bhd.
  - Singapore
    - Kawarin Enterprise Pte. Ltd.
  - Indonesia
    - PT. JFE Shoji Steel Indonesia
  - United States
    - Vest Inc.
    - Kelly Pipe Co., LLC
  - Mexico
    - JFE Shoji Steel De Mexico, S.A. De C.V.

(Equity-method affiliate)

Japan Marine United Corporation Head Office: Minato-ku, Tokyo

Group Companies

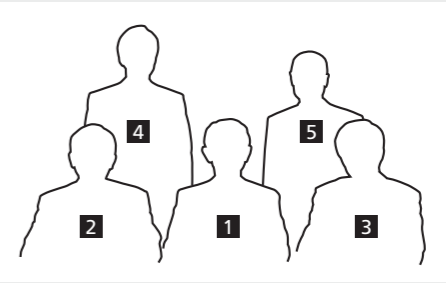
- JMU AMTEC Co., Ltd.
- IMC Co., Ltd.
- JMU Defence Systems Co., Ltd.

Management Team

Members of the Board, Corporate Officers and Corporate Auditors of JFE Holdings



- Members of the Board
- 1 Eiji Hayashida .....President & CEO
  - 2 Koji Kakigi .....Member of the Board
  - 3 Shinichi Okada .....Member of the Board
  - 4 Masafumi Maeda\* .....Member of the Board
  - 5 Masao Yoshida\* .....Member of the Board
- \* External



Corporate Officers

Eiji Hayashida .....President & CEO

Shinichi Okada .....Executive Vice President, Supervision of General Administration Dept. Investor Relations Dept. and Finance Dept. and in charge of Corporate Planning Dept.

Masashi Terahata .....Vice President, In charge of General Administration Dept.

Tetsuo Ohki.....Vice President, In charge of Investor Relations Dept. and Finance Dept.

Corporate Auditors

Sakio Sasamoto .....Full-time Auditor

Yasushi Kurokawa.....Full-time Auditor

Hiroyuki Itami\* .....Corporate Auditor

Shigeo Oyagi\* .....Corporate Auditor

\* Messrs. Hiroyuki Itami and Shigeo Oyagi are external corporate auditors

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Note:Fiscal Year (FY) 2014 in the following pages refers to the period beginning April 1, 2014 and ended March 31, 2015.

Five-year Financial Summary

JFE Holdings, Inc. and Consolidated Subsidiaries

	Millions of yen				
	FY2014	FY2013	FY2012	FY2011	FY2010
Operating results (for the year)					
Net sales	¥3,850,355	¥3,666,859	¥3,189,196	¥3,166,511	¥3,195,560
Operating income	222,599	153,327	39,873	44,779	182,810
Ordinary income before interest and discount expenses*1	245,533	187,622	66,588	68,075	182,268
Ordinary income	231,001	173,676	52,214	52,977	165,805
Net income	139,357	102,382	39,599	(36,633)	58,608
Comprehensive income	281,936	178,013	111,672	(19,268)	29,086
Cash flows (for the year)					
Cash flows from operating activities	297,380	254,809	287,071	110,087	302,603
Cash flows from investing activities	(216,313)	(164,020)	(163,616)	(205,494)	(302,282)
Free cash flows*2	81,067	90,789	123,455	(95,406)	320
Cash flows from financing activities	(78,247)	(105,576)	(147,550)	96,078	23,073
Financial position (at the year end)					
Total assets	4,639,412	4,241,700	4,107,519	4,007,263	3,976,644
Property, plant and equipment, net	1,629,591	1,599,148	1,606,862	1,644,884	1,712,318
Net assets	1,990,023	1,745,930	1,596,797	1,456,340	1,478,310
Debt outstanding	1,501,760	1,534,036	1,596,363	1,593,633	1,496,413
Capital investment and others					
Capital investment	225,902	175,715	179,679	197,449	180,492
Depreciation and amortization	176,017	181,311	194,062	238,316	246,666
R&D expenses	32,488	31,177	33,662	34,243	33,523
Crude steel output (thousand tons)	31,045	31,584	30,687	29,235	31,472
Employees	58,856	57,210	57,044	54,133	54,400
Ratio					
Return on sales (ROS)*3	6.0%	4.7%	1.6%	1.7%	5.2%
Return on assets (ROA)*4	5.5%	4.5%	1.6%	1.7%	4.6%
Return on equity (ROE)*5	7.7%	6.3%	2.7%	(2.6%)	4.1%
Equity capital ratio	41.8%	40.1%	37.9%	35.3%	36.2%
Debt-to-equity ratio*6	59.0%	67.9%	76.9%	83.5%	76.5%
Per share data					
Net income	¥ 241.60	¥ 177.44	¥ 71.20	¥ (68.71)	¥ 110.73
Net assets	3,362.22	2,950.61	2,700.83	2,627.63	2,708.51
Cash dividends	60	40	20	20	35

Notes:   \*1 Ordinary income before interest and discount expenses = Ordinary income + interest and discount expenses

          \*2 Free cash flows = Cash flows from operating activities + cash flows from investing activities

          \*3 Return on sales (ROS) = Ordinary income/net sales ×100

          \*4 Return on assets (ROA) = (Ordinary income+interest and discount expenses)/total assets ×100

          \*5 Return on equity (ROE) = Net income/total shareholders’ equity ×100

          \*6 Debt-to-equity ratio = Debt outstanding/total shareholders’ equity ×100

Debt-to-equity ratio in the rating of debt having a capital component, with 75% of this 300 billion yen in debt deemed to be capital, as assessed by rating agencies.

Financial Information

# Consolidated Balance Sheets

JFE Holdings, Inc. and Subsidiaries  
March 31, 2015 and 2014

	Millions of yen		Thousands of U.S. dollars (Note 1)
	FY2014	FY2013	FY2014
<b>Assets</b>			
<b>Current assets:</b>			
Cash and deposits (Notes 5 and 13) .....	¥ 85,889	¥ 62,913	\$ 714,729
Notes and accounts receivable (Notes 8 and 13) .....	771,574	630,061	6,420,687
Allowance for doubtful accounts .....	(2,326)	(3,615)	(19,355)
Merchandise and finished goods .....	357,733	336,216	2,976,891
Raw materials and supplies .....	408,871	380,972	3,402,438
Other current assets (Note 8) .....	249,538	247,767	2,076,541
<b>Total current assets</b> .....	<b>1,871,280</b>	<b>1,654,315</b>	<b>15,571,939</b>
<b>Property, plant and equipment (Note 8):</b>			
Land (Note 9) .....	499,512	506,570	4,156,711
Buildings and structures .....	1,790,227	1,776,367	14,897,453
Machinery and equipment .....	5,678,123	5,584,266	47,250,753
Construction in progress .....	80,664	59,121	671,249
Subtotal .....	8,048,528	7,926,325	66,976,183
Accumulated depreciation .....	(6,418,937)	(6,327,176)	(53,415,469)
<b>Property, plant and equipment, net</b> .....	<b>1,629,591</b>	<b>1,599,148</b>	<b>13,560,713</b>
<b>Investments and other assets:</b>			
Investments in unconsolidated subsidiaries and affiliates (Note 13) .....	437,199	405,197	3,638,170
Investments in securities (Notes 6, 8 and 13) .....	533,051	421,173	4,435,807
Allowance for doubtful accounts .....	(6,152)	(7,024)	(51,194)
Net defined benefit asset (Note 10) .....	13,231	11,652	110,102
Other assets (Note 8) .....	161,211	157,237	1,341,524
<b>Total investments and other assets</b> .....	<b>1,138,540</b>	<b>988,235</b>	<b>9,474,411</b>
<b>Total assets</b> .....	<b>¥4,639,412</b>	<b>¥4,241,700</b>	<b>\$38,607,073</b>

The accompanying notes are an integral part of these statements.

	Millions of yen		Thousands of U.S. dollars (Note 1)
	FY2014	FY2013	FY2014
<b>Liabilities</b>			
<b>Current liabilities:</b>			
Short-term borrowings (Note 13) .....	¥ 128,761	¥ 102,649	\$ 1,071,490
Current portion of long-term debt (Notes 7 and 13) .....	239,243	260,475	1,990,871
Commercial paper (Note 13) .....	—	22,998	—
Notes and accounts payable (Note 13) .....	469,107	401,922	3,903,694
Other current liabilities .....	378,540	317,048	3,150,037
<b>Total current liabilities</b> .....	<b>1,215,653</b>	<b>1,105,094</b>	<b>10,116,110</b>
<b>Long-term liabilities:</b>			
Long-term debt (Notes 7 and 13) .....	1,133,756	1,147,912	9,434,600
Reserve for rebuilding furnaces .....	26,015	25,981	216,484
Deferred tax liabilities (Notes 9 and 16) .....	78,998	22,800	657,385
Allowance for losses on specific waste disposal business .....	24,112	26,222	200,649
Net defined benefit liability (Note 10) .....	119,331	115,058	993,018
Other long-term liabilities .....	51,521	52,701	428,734
<b>Total long-term liabilities</b> .....	<b>1,433,735</b>	<b>1,390,675</b>	<b>11,930,889</b>
<b>Total liabilities</b> .....	<b>2,649,388</b>	<b>2,495,769</b>	<b>22,047,000</b>
<b>Contingencies (Note 11)</b>			
<b>Net assets</b>			
<b>Shareholders' equity:</b>			
Common stock:			
Authorized 2,298,000,000 shares			
Issued 614,438,399 shares as of March 31, 2015			
614,438,399 shares as of March 31, 2014 .....	147,143	147,143	1,224,457
Capital surplus .....	647,121	647,121	5,385,046
Retained earnings .....	1,066,517	965,204	8,875,068
Treasury stock, at cost:			
37,754,166 shares as of March 31, 2015			
37,566,828 shares as of March 31, 2014 .....	(179,430)	(178,977)	(1,493,134)
<b>Total shareholders' equity</b> .....	<b>1,681,350</b>	<b>1,580,491</b>	<b>13,991,428</b>
<b>Accumulated other comprehensive income:</b>			
Net unrealized gains and losses on securities .....	194,733	102,574	1,620,479
Net unrealized gains and losses on hedges .....	(535)	(411)	(4,452)
Revaluation reserve for land, net of tax (Note 9) .....	15,654	14,541	130,265
Translation adjustments .....	41,107	9,949	342,073
Remeasurements of defined benefit plans (Note 10) .....	6,626	(5,024)	55,138
<b>Total accumulated other comprehensive income</b> .....	<b>257,587</b>	<b>121,628</b>	<b>2,143,521</b>
Minority interests (Note 9) .....	51,085	43,810	425,106
<b>Total net assets</b> .....	<b>1,990,023</b>	<b>1,745,930</b>	<b>16,560,064</b>
<b>Total liabilities and net assets</b> .....	<b>¥4,639,412</b>	<b>¥4,241,700</b>	<b>\$38,607,073</b>

Consolidated Statements of Income

JFE Holdings, Inc. and Subsidiaries  
Years ended March 31, 2015 and 2014

	Millions of yen		Thousands of U.S. dollars (Note 1)
	FY2014	FY2013	FY2014
Net sales.....	¥3,850,355	¥3,666,859	\$32,040,900
Cost of sales .....	3,312,981	3,215,380	27,569,118
Gross profit.....	537,373	451,479	4,471,773
Selling, general and administrative expenses.....	314,774	298,151	2,619,405
Operating income.....	222,599	153,327	1,852,367
Non-operating income (expenses):			
Interest income .....	1,078	1,148	8,970
Interest expense .....	(14,532)	(13,945)	(120,928)
Dividends received.....	10,544	8,940	87,742
Foreign exchange gains .....	12,267	6,833	102,080
Equity in earnings of affiliates .....	18,280	19,374	152,117
Other, net.....	(19,235)	(2,001)	(160,064)
Ordinary income.....	231,001	173,676	1,922,285
Extraordinary income (loss) (Note 20) .....	(4,309)	(13,167)	(35,857)
Income before income taxes and minority interests .....	226,692	160,509	1,886,427
Income taxes (Note 16):			
Current .....	34,936	28,886	290,721
Deferred .....	47,642	25,125	396,455
	82,579	54,011	687,184
Income before minority interests .....	144,112	106,497	1,199,234
Minority interests .....	(4,754)	(4,114)	(39,560)
Net income .....	¥ 139,357	¥ 102,382	\$ 1,159,665

	Yen		U.S. dollars (Note 1)
	FY2014	FY2013	FY2014
Net income per share .....	¥ 241.60	¥ 177.44	\$ 2.01
Cash dividends per share.....	60	40	0.49

The accompanying notes are an integral part of these statements.

Consolidated Statements of Comprehensive Income

JFE Holdings, Inc. and Subsidiaries  
Years ended March 31, 2015 and 2014

	Millions of yen		Thousands of U.S. dollars (Note 1)
	FY2014	FY2013	FY2014
Income before minority interests .....	¥144,112	¥106,497	\$1,199,234
Other comprehensive income (Note 17):			
Net unrealized gains and losses on securities .....	90,808	32,035	755,662
Net unrealized gains and losses on hedges .....	(232)	359	(1,930)
Revaluation reserve for land .....	1,012	—	8,421
Translation adjustments.....	12,712	15,345	105,783
Remeasurements of defined benefit plans .....	11,905	—	99,067
Share of other comprehensive income of affiliates accounted for using equity method .....	21,617	23,775	179,886
Total other comprehensive income.....	137,823	71,516	1,146,900
Comprehensive income .....	¥281,936	¥178,013	\$2,346,142

Total comprehensive income attributable to:

Shareholders of the parent .....	¥275,304	¥172,135	\$2,290,954
Minority interests .....	6,631	5,878	55,180

The accompanying notes are an integral part of these statements.

Consolidated Statements of Changes in Net Assets

JFE Holdings, Inc. and Subsidiaries  
Years ended March 31, 2015 and 2014

	Millions of yen				
	Shareholders' equity				
	Common stock	Capital surplus	Retained earnings	Treasury stock, at cost	Total shareholders' equity
Balance at April 1, 2013	¥147,143	¥647,121	¥886,338	¥(178,529)	¥1,502,072
Cash dividends			(23,113)		(23,113)
Net income			102,382		102,382
Acquisition of treasury stock				(2,201)	(2,201)
Disposal of treasury stock			(99)	1,753	1,654
Decrease by change of scope of consolidation			(5)		(5)
Transfer from land revaluation account			(297)		(297)
Net changes in items other than shareholders' equity					—
Total changes in items during the year			78,866	(448)	78,418
Balance at March 31, 2014	¥147,143	¥647,121	¥965,204	¥(178,977)	¥1,580,491

	Millions of yen								
	Accumulated other comprehensive income								
	Net unrealized gains and losses on securities	Net unrealized gains and losses on hedges	Revaluation reserve for land, net of tax	Translation adjustments	Remeasurements of defined benefit plans	Total accumulated other comprehensive income	Minority interests	Total net assets	
Balance at April 1, 2013	¥ 69,184	¥(138)	¥14,243	¥(26,687)	¥ —	¥ 56,602	¥38,121	¥1,596,797	
Cash dividends								(23,113)	
Net income								102,382	
Acquisition of treasury stock								(2,201)	
Disposal of treasury stock								1,654	
Decrease by change of scope of consolidation								(5)	
Transfer from land revaluation account								(297)	
Net changes in items other than shareholders' equity	33,389	(273)	297	36,636	(5,024)	65,026	5,689	70,715	
Total changes in items during the year	33,389	(273)	297	36,636	(5,024)	65,026	5,689	149,133	
Balance at March 31, 2014	¥102,574	¥(411)	¥14,541	¥ 9,949	¥(5,024)	¥121,628	¥43,810	¥1,745,930	

	Millions of yen				
	Shareholders' equity				
	Common stock	Capital surplus	Retained earnings	Treasury stock, at cost	Total shareholders' equity
Balance at April 1, 2014	¥147,143	¥647,121	¥ 965,204	¥(178,977)	¥1,580,491
Cumulative effects of changes in accounting policies			(14,867)		(14,867)
Restated balance at April 1, 2014	147,143	647,121	950,337	(178,977)	1,565,623
Cash dividends			(23,086)		(23,086)
Net income			139,357		139,357
Acquisition of treasury stock				(498)	(498)
Disposal of treasury stock			(16)	45	29
Decrease by change of scope of consolidation			(63)		(63)
Transfer from land revaluation account			(11)		(11)
Net changes in items other than shareholders' equity					—
Total changes in items during the year			116,179	(452)	115,727
Balance at March 31, 2015	¥147,143	¥647,121	¥1,066,517	¥(179,430)	¥1,681,350

	Millions of yen								
	Accumulated other comprehensive income								
	Net unrealized gains and losses on securities	Net unrealized gains and losses on hedges	Revaluation reserve for land, net of tax	Translation adjustments	Remeasurements of defined benefit plans	Total accumulated other comprehensive income	Minority interests	Total net assets	
Balance at April 1, 2014	¥102,574	¥(411)	¥14,541	¥ 9,949	¥(5,024)	¥121,628	¥43,810	¥1,745,930	
Cumulative effects of changes in accounting policies								(14,867)	
Restated balance at April 1, 2014	102,574	(411)	14,541	9,949	(5,024)	121,628	43,810	1,731,063	
Cash dividends								(23,086)	
Net income								139,357	
Acquisition of treasury stock								(498)	
Disposal of treasury stock								29	
Decrease by change of scope of consolidation								(63)	
Transfer from land revaluation account								(11)	
Net changes in items other than shareholders' equity	92,159	(123)	1,113	31,157	11,651	135,958	7,275	143,233	
Total changes in items during the year	92,159	(123)	1,113	31,157	11,651	135,958	7,275	258,960	
Balance at March 31, 2015	¥194,733	¥(535)	¥15,654	¥41,107	¥ 6,626	¥257,587	¥51,085	¥1,990,023	

The accompanying notes are an integral part of these statements.

	Thousands of U.S. dollars (Note 1)				
	Shareholders' equity				
	Common stock	Capital surplus	Retained earnings	Treasury stock, at cost	Total shareholders' equity
Balance at April 1, 2014	\$1,224,457	\$5,385,046	\$8,031,988	\$(1,489,365)	\$13,152,126
Cumulative effects of changes in accounting policies			(123,716)		(123,716)
Restated balance at April 1, 2014	1,224,457	5,385,046	7,908,271	(1,489,365)	13,028,401
Cash dividends			(192,111)		(192,111)
Net income			1,159,665		1,159,665
Acquisition of treasury stock				(4,144)	(4,144)
Disposal of treasury stock			(133)	374	241
Decrease by change of scope of consolidation			(524)		(524)
Transfer from land revaluation account			(91)		(91)
Net changes in items other than shareholders' equity					—
Total changes in items during the year			966,788	(3,761)	963,027
Balance at March 31, 2015	\$1,224,457	\$5,385,046	\$8,875,068	\$(1,493,134)	\$13,991,428

	Thousands of U.S. dollars (Note 1)							
	Accumulated other comprehensive income							
	Net unrealized gains and losses on securities	Net unrealized gains and losses on hedges	Revaluation reserve for land, net of tax	Translation adjustments	Remeasurements of defined benefit plans	Total accumulated other comprehensive income	Minority interests	Total net assets
Balance at April 1, 2014	\$ 853,574	\$(3,420)	\$121,003	\$ 82,791	\$(41,807)	\$1,012,132	\$364,566	\$14,528,834
Cumulative effects of changes in accounting policies								(123,716)
Restated balance at April 1, 2014	853,574	(3,420)	121,003	82,791	(41,807)	1,012,132	364,566	14,405,117
Cash dividends								(192,111)
Net income								1,159,665
Acquisition of treasury stock								(4,144)
Disposal of treasury stock								241
Decrease by change of scope of consolidation								(524)
Transfer from land revaluation account								(91)
Net changes in items other than shareholders' equity	766,905	(1,023)	9,261	259,274	96,954	1,131,380	60,539	1,191,919
Total changes in items during the year	766,905	(1,023)	9,261	259,274	96,954	1,131,380	60,539	2,154,947
Balance at March 31, 2015	\$1,620,479	\$(4,452)	\$130,265	\$342,073	\$ 55,138	\$2,143,521	\$425,106	\$16,560,064

The accompanying notes are an integral part of these statements.

Consolidated Statements of Cash Flows

JFE Holdings, Inc. and Subsidiaries  
Years ended March 31, 2015 and 2014

	Millions of yen		Thousands of U.S. dollars (Note 1)
	FY2014	FY2013	FY2014
Cash flows from operating activities:			
Income before income taxes and minority interests	¥226,692	¥160,509	\$1,886,427
Adjustments for:			
Depreciation and amortization	176,017	181,311	1,464,733
Decrease in reserves	(2,772)	(9,626)	(23,067)
Interest and dividend income	(11,623)	(10,089)	(96,721)
Interest expense	14,532	13,945	120,928
Changes in assets and liabilities:			
Changes in notes and accounts receivable	(105,365)	(26,779)	(876,799)
Changes in inventories	(27,866)	(61,360)	(231,888)
Changes in notes and accounts payable	61,020	13,318	507,780
Other, net	(2,111)	14,327	(17,566)
Subtotal	328,524	275,557	2,733,827
Interest and dividend income received	18,396	21,233	153,083
Interest paid	(14,684)	(14,165)	(122,193)
Income taxes paid	(34,856)	(27,815)	(290,055)
Net cash provided by operating activities	297,380	254,809	2,474,660
Cash flows from investing activities:			
Payments for purchases of property, plant and equipment	(220,809)	(177,867)	(1,837,471)
Proceeds from sales of property, plant and equipment	17,239	3,480	143,455
Payments for purchases of investments in securities	(5,491)	(4,276)	(45,693)
Proceeds from sales of investments in securities	23,655	15,591	196,846
Payments for purchases of shares of subsidiaries resulting in change in scope of consolidation	(30,468)	(47)	(253,540)
Other, net	(439)	(901)	(3,653)
Net cash used in investing activities	(216,313)	(164,020)	(1,800,058)
Cash flows from financing activities:			
(Decrease) increase in short-term borrowings, net	(16,771)	34,437	(139,560)
Increase in long-term debt	226,429	176,950	1,884,238
Repayments of long-term debt	(262,113)	(284,229)	(2,181,184)
Payments for purchases of treasury stock	(483)	(570)	(4,019)
Payments for dividends by parent company	(23,034)	(23,019)	(191,678)
Other, net	(2,275)	(9,145)	(18,931)
Net cash used in financing activities	(78,247)	(105,576)	(651,135)
Effects of exchange rate change on cash and cash equivalents	15,247	12,707	126,878
Net increase (decrease) in cash and cash equivalents	18,066	(2,080)	150,337
Cash and cash equivalents at beginning of the year	62,318	64,463	518,582
Increase (decrease) in cash and cash equivalents at beginning of the year by newly consolidated or deconsolidated subsidiaries	3,157	(64)	26,271
Cash and cash equivalents at end of the year (Note 5)	¥ 83,542	¥ 62,318	\$ 695,198

The accompanying notes are an integral part of these statements.

# Notes to Consolidated Financial Statements

JFE Holdings, Inc. and Subsidiaries

Years ended March 31, 2015 and 2014

## 1. Basis of Presentation

The accompanying consolidated financial statements of JFE Holdings, Inc. (the “Company” hereinafter) and consolidated subsidiaries are prepared on the basis of accounting principles generally accepted in Japan, which are different in certain respects as to application and disclosure requirements of International Financial Reporting Standards, and are compiled from the consolidated financial statements prepared by the Company as required by the Financial Instruments and Exchange Act of Japan.

The Company’s overseas subsidiaries maintain their accounts and records in conformity with generally accepted accounting principles and practices prevailing in their respective countries of domicile.

The notes to the consolidated financial statements include information that is not required under the Japanese GAAP but is presented herein as additional information.

As permitted by the Financial Instruments and Exchange Act, amounts of less than one million yen have been omitted. Consequently, the totals shown in the accompanying consolidated financial statements (both in yen and U.S. dollars) do not necessarily agree with the sums of the individual amounts.

Certain amounts in the prior years’ financial statements have been reclassified to conform to the 2015 presentation.

The translation of the Japanese yen amounts into U.S. dollars is included solely for the convenience of the reader, using the approximate exchange rate at March 31, 2015, which was ¥120.17 to US\$1.00. These convenient translations should not be construed as representations that the Japanese yen amounts have been could have been, or could in the future be converted into U.S. dollars at this or any other rate of exchange.

## 2. Summary of Significant Accounting Policies

### (a) Consolidation principles

The consolidated financial statements include the accounts of the Company’s 328 domestic and foreign subsidiaries (the “Group” as JFE Holdings, Inc. consolidated group, hereinafter). All significant inter-company transactions and accounts are eliminated in consolidation.

65 affiliates are accounted for by the equity method whereby the Group includes in net income its share of income or losses of these companies, and records its investments at cost adjusted for its share of income, losses or dividends received.

### (b) Translation of foreign currencies

Revenues and expenses are translated at the rates of exchange prevailing when transactions are made, and assets and liabilities are translated into Japanese yen at the exchange rates in effect on the respective balance sheet date.

The balance sheet accounts of the foreign subsidiaries are translated into Japanese yen at the current exchange rates at the balance sheet dates except for shareholders’ equity, which is translated at historical rates. Differences arising from such translation are shown as “translation adjustments” in a separate component of net assets in the balance sheets.

### (c) Valuation of securities

Available-for-sale securities

#### Marketable:

Valued primarily at market based on an average of the market prices for a period of one month prior to the settlement date. (Valuation differences are recorded as net unrealized gains and losses on securities, net of tax, in net assets in the balance sheets by the direct capitalization method, with the costs of sales calculated primarily by the moving average method.)

#### Non-marketable:

Valued primarily at cost by the moving average method.

### (d) Valuation of inventories

Inventories are stated at cost determined by the weighted average method. These inventories with lower profitability are written down to their net realizable value.

### (e) Depreciation method for property, plant and equipment (except for leased assets)

Depreciation is calculated primarily by the declining balance method.

### (f) Intangible assets (except for leased assets)

Amortization of intangible assets is calculated primarily by the straight-line method.

Amortization of the software for internal use is computed by the straight-line method based on the estimated useful lives (primarily 5 years).

### (g) Allowance for doubtful accounts

The projected uncollectible amount is provided as the allowance using historical default rates in the past for ordinary credits and individual collectability assessments for credits deemed to have high likelihood of default and for other specific credits.

### (h) Reserve for rebuilding furnaces

Reserve for rebuilding furnaces is provided based on the estimated cost of repair.

### (i) Allowance for losses on specific waste disposal business

Allowance for losses on specific waste disposal business is provided based on the estimated amount sufficient to cover probable loss that will be incurred in the following fiscal years.

### (j) Retirement benefits

The straight-line method is used to attribute expected retirement benefits to each period through the end of the year in calculating retirement benefit obligation.

Prior service cost is amortized in projected average years of service of the employees.

Actuarial losses are amortized in projected average years of service of the employees from the following fiscal year after the year in which they occurred.

### (k) Leases

Leased assets under finance leases that do not transfer ownership to the lessees are capitalized and depreciated to a residual value of zero using the straight-line method with useful life defined by the terms of the contract.

### (l) Revenue recognition for long-term construction-type contracts

The percentage-of-completion method (cost-comparison method to estimate the percentage of completion) is applied for construction contracts where the percentage of completion can be reliably estimated. For other contracts, the completed-contract method is applied.

### (m) Consolidated tax return

The Company files a consolidated tax return with certain domestic subsidiaries.

### (n) Per share information

Basic net income per share is computed by dividing net income available to common shareholders by the weighted average number of shares of common stock outstanding during the period. Net income used in the computation was ¥139,357 million (\$1,159,665 thousand) and ¥102,382 million, and the average number of shares used in the computation was 576,806 thousand and 577,015 thousand for the years ended March 31, 2015 and 2014, respectively.

Cash dividends per share shown in the consolidated statements of income are the amounts applicable to the respective year.

## 3. Changes in Accounting Policies and Adoption of New Accounting Standards

### Accounting standard for retirement benefits

Effective from the year ended March 31, 2015, the Company has adopted the provisions indicated in the main clause of Paragraph 35 of “Accounting Standard for Retirement Benefits” (the Accounting Standards Board of Japan (“ASBJ”) Statement No. 26, issued on May 17, 2012 (hereinafter, the “Standard No. 26”)) and Paragraph 67 of “Guidance on Accounting Standard for Retirement Benefits” (ASBJ Guidance No. 25, issued on March 26, 2015 (hereinafter the “Guidance No. 25”)). Consequently, the method for calculating the projected benefit obligation and service cost has been revised and the method for determining the discount rate has been changed from the method based on the period which approximates the average remaining service period of the employees to the method using a single weighted-average discount rate reflecting the expected timing and amount of benefit payments.

With regard to the adoption of the Standard No. 26 and the Guidance No. 25, in accordance with the transitional treatment indicated in Paragraph 37 of the Standard No. 26, the cumulative effect of the change in the method for calculating the retirement benefit obligation and service cost was recognized by adjusting retained earnings at April 1, 2014.

As a result of this change, net defined benefit liability increased by ¥15,717 million (\$130,789 thousand), net defined benefit asset and retained earnings decreased by ¥6,363 million (\$52,949 thousand) and ¥14,867 million (\$123,716 thousand), respectively, at April 1, 2014, and operating income, ordinary income and income before income taxes and minority interests increased by ¥1,182 million (\$9,836 thousand) for the year ended March 31, 2015. Also, net assets per share decreased by ¥24.45 (\$0.20) and net income per share increased by ¥1.33 (\$0.01) at and for the year ended March 31, 2015.

## 4. Accounting Standard Issued But Not Yet Adopted

### Accounting standards for business combinations

On September 13, 2013, the ASBJ revised “Accounting Standard for Business Combinations” (ASBJ Statement No. 21), “Accounting Standard for Consolidated Financial Statements” (ASBJ Statement No. 22), “Accounting Standard for Business Divestitures” (ASBJ Statement No. 7), “Accounting Standard for Earnings Per Share” (ASBJ Statement No. 2), “Guidance on Accounting Standard for Business Combinations and Accounting Standard for Business Divestitures” (ASBJ Guidance

No. 10) and “Guidance on Accounting Standard for Earnings Per Share” (ASBJ Guidance No. 4).

(1) Overview

Major revisions of these standards and related guidance are as follows:

- The difference relating to change in the parent's ownership interest in its subsidiary while the parent retains its controlling interest in its subsidiary is recorded in “capital surplus”. Also, “minority interests” is renamed to “noncontrolling interests”.
- Acquisition-related costs are accounted for as expenses in the year in which the costs are incurred.
- If the provisional accounting treatments are settled in the following year of the year of business combination, and the consolidated financial statements of the year of the business combination is presented together with the consolidated financial statements of the following year of the business combination, the revision of allocation of the acquisition cost due to settlement of the provisional accounting treatments is reflected to the consolidated financial statements of the year of the business combination.
- “Income before minority interests” under the previous standard is renamed to “net income”. Accordingly, “net income” under the previous standard is renamed to “net income attributable to the parent”.

6. Securities

The following is a summary of available-for-sale securities at March 31, 2015 and 2014:

Marketable:

	Millions of yen					
	Available-for-sale securities					
	FY2014			FY2013		
	Book value (Estimated fair value)	Cost, net of accumulated impairment losses	Unrealized gain (loss)	Book value (Estimated fair value)	Cost, net of accumulated impairment losses	Unrealized gain (loss)
Cost lower than book value:						
Equity securities .....	¥486,045	¥195,741	¥290,304	¥343,150	¥171,920	¥171,230
Bonds .....	20	19	0	20	19	0
Sub total .....	486,065	195,761	290,304	343,171	171,940	171,230
Cost exceeding book value:						
Equity securities .....	18,048	19,584	(1,535)	46,957	55,605	(8,648)
Other .....	594	602	(8)	—	—	—
Sub total .....	18,643	20,187	(1,543)	46,957	55,605	(8,648)
Total .....	¥504,709	¥215,949	¥288,760	¥390,128	¥227,545	¥162,582

(2) Expected adoption date

These standards and related guidance will be adopted from the beginning of the year ending March 31, 2016. The provisional accounting treatments will be adopted effective for business combinations, which will occur on or after the beginning of the year ending March 31, 2016.

(3) Effects of the adoption of the standard and the guidance

The Company is currently evaluating the effect that these revisions will have on its consolidated results of operations and financial position.

5. Cash and Cash Equivalents and Nonmonetary Transactions

Cash and cash equivalents at March 31, 2015 and 2014 consisted of the following:

	Millions of yen		Thousands of U.S. dollars
	FY2014	FY2013	FY2014
Cash and deposits .....	¥85,889	¥62,913	\$714,729
Time deposits with a maturity of more than three months .....	(2,346)	(594)	(19,522)
	¥83,542	¥62,318	\$695,198

	Thousands of U.S. dollars		
	Available-for-sale securities		
	FY2014		
	Book value (Estimated fair value)	Cost, net of accumulated impairment losses	Unrealized gain (loss)
Cost lower than book value:			
Equity securities .....	\$4,044,645	\$1,628,867	\$2,415,777
Bonds .....	166	158	0
Sub total .....	4,044,811	1,629,033	2,415,777
Cost exceeding book value:			
Equity securities .....	150,187	162,969	(12,773)
Other .....	4,942	5,009	(66)
Sub total .....	155,138	167,987	(12,840)
Total .....	\$4,199,958	\$1,797,029	\$2,402,929

The impairment losses on available-for-sale securities for the years ended March 31, 2015 and 2014 were ¥237 million (\$1,972 thousand) and ¥1,128 million, respectively.

7. Long-term Debt

Long-term debt at March 31, 2015 and 2014 consisted of the following:

	Millions of yen		Thousands of U.S. dollars
	FY2014	FY2013	FY2014
1.351% yen bonds, due September 2015 .....	¥ 20,000	¥ 20,000	\$ 166,430
0.927% yen bonds, due July 2014 .....	—	40,000	—
0.708% yen bonds, due March 2015 .....	—	40,000	—
0.572% yen bonds, due May 2015 .....	60,000	60,000	499,292
0.858% yen bonds, due May 2017 .....	20,000	20,000	166,430
1.326% yen bonds, due June 2021 .....	30,000	30,000	249,646
0.455% yen bonds, due September 2016 .....	20,000	20,000	166,430
0.686% yen bonds, due September 2018 .....	15,000	15,000	124,823
0.453% yen bonds, due April 2017 .....	30,000	30,000	249,646
0.804% yen bonds, due March 2024 .....	10,000	10,000	83,215
0.703% yen bonds, due September 2024 .....	20,000	—	166,430
Loans, principally from banks and insurance companies, due 2016-2073 .....	1,147,999	1,123,387	9,553,124
Less current portion .....	(239,243)	(260,475)	(1,990,871)
Total long-term debt .....	¥1,133,756	¥1,147,912	\$9,434,600

## 8. Pledged Assets

At March 31, 2015 and 2014, pledged assets were as follows:

	Millions of yen		Thousands of U.S. dollars
	FY2014	FY2013	FY2014
Notes receivable.....	¥ 945	¥ 945	\$ 7,863
Property, plant and equipment...	4,649	4,400	38,686
Investments in securities.....	713	350	5,933
Other assets.....	288	401	2,396

The Company sets pledges as collateral on the consolidated subsidiaries' short-term loans receivable from the Company related to warranty for equipment performance (book value of ¥7,300 million [\$60,747 thousand] and ¥8,000 million on the financial statements of individual consolidated subsidiaries at March 31, 2015 and 2014, respectively).

## 9. Revaluation of Land for Business

In the years ended March 31, 2001 and 2002, part of the subsidiaries and affiliates revaluated the land for business purposes based on the Law Concerning Revaluation of Land and its amendment issued on March 31, 2001 and 2002, respectively. Revaluation differences, net of the portion charged to "deferred tax liabilities" and "minority interests," were recorded as "revaluation reserve for land, net of tax" in net assets.

The fair value of these lands is lower than the revaluated book value, and the difference was ¥16,630 million (\$138,387 thousand) and ¥17,043 million on March 31, 2015 and 2014, respectively.

## 10. Retirement Benefits

### Defined benefit plans

The changes in retirement benefit obligation for the years ended March 31, 2015 and 2014 were as follows:

	Millions of yen		Thousands of U.S. dollars
	FY2014	FY2013	FY2014
Balance at beginning of year	¥271,032	¥289,544	\$2,255,404
Cumulative effects of changes in accounting policies	22,080	—	183,739
Restated balance at beginning of year	¥293,112	¥289,544	\$2,439,144
Service cost	14,074	12,558	117,117
Interest cost	1,629	4,223	13,555
Actuarial losses	3,543	977	29,483
Retirement benefits paid	(30,386)	(35,364)	(252,858)
Prior service cost	283	(985)	2,354
Other	2,445	77	20,346
Balance at end of year	¥284,702	¥271,032	\$2,369,160

The changes in plan assets for the years ended March 31, 2015 and 2014 were as follows:

	Millions of yen		Thousands of U.S. dollars
	FY2014	FY2013	FY2014
Balance at beginning of year ....	¥167,626	¥168,788	\$1,394,907
Expected return on plan assets ·	2,777	2,727	23,108
Actuarial losses .....	18,721	9,274	155,787
Contributions from the employer.....	3,629	3,083	30,198
Retirement benefits paid.....	(13,846)	(16,318)	(115,220)
Other .....	(306)	70	(2,546)
Balance at end of year.....	¥178,601	¥167,626	\$1,486,236

Reconciliation between the balances of retirement benefit obligation and plan assets and net defined benefit liability and net defined benefit asset recorded on the consolidated balance sheets at March 31, 2015 and 2014 was as follows:

	Millions of yen		Thousands of U.S. dollars
	FY2014	FY2013	FY2014
Funded retirement benefit obligation .....	¥240,996	¥236,691	\$2,005,458
Fair value of plan assets .....	(178,601)	(167,626)	(1,486,236)
	62,394	69,064	519,214
Unfunded retirement benefit obligation .....	43,706	34,341	363,701
Net liability and asset recorded on the consolidated balance sheet .....	¥106,100	¥103,405	\$ 882,915

	Millions of yen		Thousands of U.S. dollars
	FY2014	FY2013	FY2014
Net defined benefit liability.....	¥119,331	¥115,058	\$993,018
Net defined benefit asset.....	(13,231)	(11,652)	(110,102)
Net liability and asset recorded on the consolidated balance sheet .....	¥106,100	¥103,405	\$882,915

The components of retirement and pension costs for the years ended March 31, 2015 and 2014 were as follows:

	Millions of yen		Thousands of U.S. dollars
	FY2014	FY2013	FY2014
Service cost.....	¥14,074	¥12,558	\$117,117
Interest cost .....	1,629	4,223	13,555
Expected return on plan assets...	(2,777)	(2,727)	(23,108)
Recognized actuarial losses .....	2,938	(959)	24,448
Amortization of prior service cost .....	(52)	1,846	(432)
Other .....	415	517	3,453
Total .....	¥16,226	¥15,459	\$135,025

The components of remeasurements of defined benefit plans (before income tax effect) in other comprehensive income for the years ended March 31, 2015 and 2014 were as follows:

	Millions of yen		Thousands of U.S. dollars
	FY2014	FY2013	FY2014
Prior service cost .....	¥ 144	¥—	\$ 1,198
Actuarial gains .....	(17,959)	—	(149,446)
Other .....	20	—	166
Total .....	¥(17,795)	¥—	\$(148,081)

The components of remeasurements of defined benefit plans (before income tax effect) in accumulated other comprehensive income at March 31, 2015 and 2014 were as follows:

	Millions of yen		Thousands of U.S. dollars
	FY2014	FY2013	FY2014
Unrecognized prior service cost	¥ 27	¥ (170)	\$ 224
Unrecognized actuarial (gains) losses.....	(10,151)	7,343	(84,471)
Other .....	—	220	—
Total .....	¥(10,123)	¥7,394	\$(84,238)

The components of plan assets at March 31, 2015 and 2014 were as follows:

	FY2014	FY2013
General account.....	37%	44%
Equity securities .....	46	40
Bonds .....	15	14
Cash and deposits.....	1	1
Others.....	1	1
Total .....	100%	100%

37% and 31% of the total plan assets is retirement benefit trust at March 31, 2015 and 2014, respectively.

The expected long-term rate of return on plan assets is determined considering current and expected distribution of plan assets and current and expected long-term rate of return derived from various components of the plan assets.

Principal assumptions used for the actuarial calculation for the years ended March 31, 2015 and 2014 were as follows:

	FY2014	FY2013
Discount rate.....	Primarily 0.3%	Primarily 1.5%
Expected long-term rate of return on plan assets.....	Primarily 1.5%	Primarily 1.5%

### Defined contribution plans

The required contribution amount to the defined contribution plan by the Group was ¥3,652 million (\$30,390 thousand) and ¥3,691 million for the years ended March 31, 2015 and 2014, respectively.

## 11. Contingencies

At March 31, 2015 and 2014, the Group was contingently liable as follows:

	Millions of yen		Thousands of U.S. dollars
	FY2014	FY2013	FY2014
Guarantees of debt .....	¥27,399	¥25,798	\$228,001
Trade notes discounted.....	2,171	2,658	18,066
Trade notes endorsed .....	751	864	6,249

At March 31, 2015 and 2014, commitments outstanding for loan commitments were ¥601 million (\$5,001 thousand) and ¥281 million, respectively.

## 12. Leases

The Group leases certain buildings and structures, machinery and equipment, office space and other assets.

As discussed in Note 2 (k), lease assets under finance leases that do not transfer ownership to lessees are capitalized and depreciated to residual value of zero using the straight-line method with useful life defined by the terms of the contract.

Future minimum lease payments subsequent to March 31, 2015 and 2014 for non-cancelable operating leases are summarized as follows:

(Year ending March 31)

	Millions of yen	Thousands of U.S. dollars
<b>2015</b>		
2016 .....	¥ 3,282	\$ 27,311
2017 and thereafter.....	11,990	99,775
Total .....	¥15,272	\$127,086
<b>2014</b>		
2015 .....	¥ 4,274	
2016 and thereafter.....	10,815	
Total .....	¥15,089	

### 13. Financial Instruments

#### (a) Overview

##### (1) Group policy for financial instruments

The Group raises funds mainly through the bank loans or by commercial paper/ bond issues based on the capital investment plans considering the stability of the fund and financing costs. Temporary surplus of funds are operated only for short-term investments. Derivative transactions are only utilized to hedge the following risks and the Group does not enter into derivative transactions for trading or speculative purposes.

##### (2) Types of financial instruments and related risk and risk management

Trade receivables such as notes and accounts receivable are exposed to credit risk. The Group manages this risk by monitoring the financial conditions of its customers periodically. Some trade receivables are sold before their maturities.

Trade payables such as notes and accounts payable are due within one year. Some accounts receivable and accounts payable are denominated in foreign currency and exposed to foreign currency risk. Foreign exchange forward contracts are utilized in a timely manner to hedge the net balance of foreign currencies received from export and foreign currencies paid for raw material purchase.

Stocks as investment securities are exposed to market fluctuation risk. Investment securities denominated in foreign currencies are exposed to foreign currency risk. Investment securities mainly consist of securities of companies with which a business relationship has been established and the Group reviews these fair values periodically.

Debts and bonds are managed so as not to concentrate the maturities considering the liquidity risk. Variable interest rate debts are exposed to interest fluctuation risk. Some of

the debts and bonds, which are exposed to interest fluctuation risk, are hedged by the interest rate swap agreements to correspond with and to decrease interest payments.

Derivative transactions are exposed to market fluctuation risk of future foreign exchange and interest rates. However, the Group utilizes the derivative transactions to correspond with the actual demands of imports and exports, debts and bonds, and thus the risk is limited to the extent of opportunity loss. The Group enters into derivative transactions only with financial institutions with high credit ratings, and thus there is almost no credit risk, which is the risk of default by the counterparties' bankruptcy, etc. The Group implemented the internal rules of derivative transactions and transactions are operated based on these rules. Derivative transactions are executed based on the above internal rules, which require getting the approval from the financial operating officer. The balances, fair values and valuation differences are reported to the management meetings periodically. Consolidated subsidiaries operate the derivative transactions based on the internal rules.

##### (3) Supplemental information on fair value of financial instruments

As well as the values based on market prices, fair values of financial instruments include values, which are reasonably calculated in cases where market prices do not exist. As the calculation of those values uses certain assumptions, those values may vary in cases where different assumptions are applied. Also, for the contract amount regarding derivative transactions described in Note 14. "Derivatives and Hedging Activities," the contract amount itself does not indicate market risk related to derivative transactions.

#### (b) Fair value of financial instruments

Carrying value on the consolidated balance sheets, fair value and difference as of March 31, 2015 and 2014 are as follows. The financial instruments whose fair value is extremely difficult to determine are not included below.

	Millions of yen					
	FY2014			FY2013		
	Carrying value	Fair value	Difference	Carrying value	Fair value	Difference
Cash and deposits	¥ 85,889	¥ 85,889	¥ —	¥ 62,913	¥ 62,913	¥ —
Notes and accounts receivable	771,574	771,574	—	630,061	630,061	—
Investments in securities:						
Available-for-sale securities	504,709	504,709	—	390,128	390,128	—
Total assets	¥1,362,173	¥1,362,173	¥ —	¥1,083,103	¥1,083,103	¥ —
Notes and accounts payable	¥ 469,107	¥ 469,107	¥ —	¥ 401,922	¥ 401,922	¥ —
Short-term borrowings	128,761	128,761	—	102,649	102,649	—
Commercial paper	—	—	—	22,998	22,998	—
Current portion of long-term debt	239,243	239,279	36	260,475	260,664	188
Long-term debt:						
Bonds	145,000	146,170	1,170	205,000	205,929	929
Long-term borrowings	988,756	991,697	2,941	942,912	944,406	1,493
Total liabilities	¥1,970,868	¥1,975,015	¥4,147	¥1,935,958	¥1,938,570	¥2,611
Derivative transactions*1:						
Hedge accounting not applied	¥ (184)	¥ (184)	¥ —	¥ 418	¥ 418	¥ —
Hedge accounting applied	(286)	(286)	—	163	163	—
Total derivative transactions	¥ (470)	¥ (470)	¥ —	¥ 582	¥ 582	¥ —

	Thousands of U.S. dollars		
	FY2014		
	Carrying value	Fair value	Difference
Cash and deposits	\$ 714,729	\$ 714,729	\$ —
Notes and accounts receivable	6,420,687	6,420,687	—
Investments in securities:			
Available-for-sale securities	4,199,958	4,199,958	—
Total assets	\$11,335,383	\$11,335,383	\$ —
Notes and accounts payable	\$ 3,903,694	\$ 3,903,694	\$ —
Short-term borrowings	1,071,490	1,071,490	—
Commercial paper	—	—	—
Current portion of long-term debt	1,990,871	1,991,170	299
Long-term debt:			
Bonds	1,206,623	1,216,360	9,736
Long-term borrowings	8,227,977	8,252,450	24,473
Total liabilities	\$16,400,665	\$16,435,175	\$34,509
Derivative transactions*1:			
Hedge accounting not applied	\$ (1,531)	\$ (1,531)	\$ —
Hedge accounting applied	(2,379)	(2,379)	—
Total derivative transactions	\$ (3,911)	\$ (3,911)	\$ —

\*1 Derivative transactions are presented on a net basis and net liability position is shown in parenthesis.

Note 1. Valuation method for financial instruments and information of investments in securities and derivative transactions

<b>Assets:</b> <u>Cash and deposits and Notes and accounts receivable</u> These are paid in short-term and the fair value approximates carrying value. Some accounts receivable are subject to the allocation treatment of the foreign exchange forward contracts. <u>Securities</u> Fair value of stocks is based on the quoted price on stock exchanges and that of bonds is based on the quoted price on bond markets or price presented by the counter party financial institutions. Please see Note 6. "Securities" regarding the information of the fair value for the investment in securities by classification.	foreign exchange forward contracts. <u>Bonds and bonds due within one year (included in current portion of long-term debt)</u> Fair value of bonds is based on the quoted market price. Fair value of the bonds subject to the special treatment of the interest rate swaps are calculated by discounting the sum of principal and interest including the interest swap, using the reasonable interest rate applied to the same kind of bond issues. <u>Long-term borrowings</u> Fair value of long-term borrowings is estimated by discounting the sum of principal and interest, using the reasonable interest rate applied to the same kind of new borrowings. Fair value of the long-term borrowings subject to the special treatment of the interest rate swaps is calculated by discounting the sum of principal and interest including the interest swap, using the reasonable interest rate applied to the same kind of long-term debt. <u>Derivative transactions</u> Please see Note 14. "Derivatives and Hedging Activities."
<b>Liabilities:</b> <u>Notes and accounts payable, Short-term borrowings, Current portion of long-term debt (except for bonds due within one year) and Commercial paper</u> These are paid in short-term and the fair value approximates the equivalent of carrying value. Some accounts payable are subject to the allocation treatment of the	

Note 2. Financial instruments whose fair value cannot be reliably determined

	Millions of yen		Thousands of U.S. dollars
	FY2014	FY2013	FY2014
	Carrying value		
Unlisted stock .....	¥28,118	¥31,013	\$233,985
Subscription certificates.....	223	31	1,855

Financial instruments above are not included in securities on the table in (b) "Fair value of financial instruments" because there are no market prices available and it is extremely difficult to determine the fair value.

Note 3. The redemption schedule for financial instruments and securities with maturities

	Millions of yen							
	FY2014				FY2013			
	Due in one year or less	Due after one year through five years	Due after five years through ten years	Due after ten years	Due in one year or less	Due after one year through five years	Due after five years through ten years	Due after ten years
Cash and deposits.....	¥ 85,889	¥—	¥—	¥—	¥ 62,913	¥—	¥—	¥—
Notes and accounts receivable.....	616,505	—	—	—	547,070	75	—	—
Securities:								
Available-for-sale securities with maturities...	20	—	—	—	—	20	—	—
Total .....	¥702,415	¥—	¥—	¥—	¥609,984	¥95	¥—	¥—

	Thousands of U.S. dollars			
	FY2014			
	Due in one year or less	Due after one year through five years	Due after five years through ten years	Due after ten years
Cash and deposits.....	\$ 714,729	\$—	\$—	\$—
Notes and accounts receivable.....	5,130,273	—	—	—
Securities:				
Available-for-sale securities with maturities...	166	—	—	—
Total .....	\$5,845,177	\$—	\$—	\$—

Note 4. Scheduled maturities of short-term borrowings, current portion of long-term debt and long-term debt

	Millions of yen					
	FY2014					
	Due in one year or less	Due after one year through two years	Due after two years through three years	Due after three years through four years	Due after four years through five years	Due after five years
Short-term borrowings .....	¥128,761	¥ —	¥ —	¥ —	¥ —	¥ —
Commercial paper .....	—	—	—	—	—	—
Current portion of long-term debt.....	239,243	—	—	—	—	—
Long-term debt:						
Bonds.....	—	20,000	50,000	15,000	—	60,000
Long-term borrowings .....	—	238,395	98,390	118,326	7,368	526,275
Total .....	¥368,004	¥258,395	¥148,390	¥133,326	¥7,368	¥586,275

	Millions of yen					
	FY2013					
	Due in one year or less	Due after one year through two years	Due after two years through three years	Due after three years through four years	Due after four years through five years	Due after five years
Short-term borrowings .....	¥102,649	¥ —	¥ —	¥ —	¥ —	¥ —
Commercial paper .....	22,998	—	—	—	—	—
Current portion of long-term debt.....	260,475	—	—	—	—	—
Long-term debt:						
Bonds.....	—	80,000	20,000	50,000	15,000	40,000
Long-term borrowings .....	—	156,670	235,440	23,467	80,962	446,370
Total .....	¥386,123	¥236,670	¥255,440	¥ 73,467	¥95,962	¥486,370

	Thousands of U.S. dollars					
	FY2014					
	Due in one year or less	Due after one year through two years	Due after two years through three years	Due after three years through four years	Due after four years through five years	Due after five years
Short-term borrowings .....	\$1,071,490	\$ —	\$ —	\$ —	\$ —	\$ —
Commercial paper .....	—	—	—	—	—	—
Current portion of long-term debt.....	1,990,871	—	—	—	—	—
Long-term debt:						
Bonds.....	—	166,430	416,077	124,823	—	499,292
Long-term borrowings .....	—	1,983,814	818,756	984,655	61,313	4,379,420
Total .....	\$3,062,361	\$2,150,245	\$1,234,833	\$1,109,478	\$61,313	\$4,878,713

14. Derivatives and Hedging Activities

Derivative transactions for which hedge accounting is not applied for the years ended March 31, 2015 and 2014 were as follows:

	Millions of yen				Thousands of U.S. dollars	
	FY2014		FY2013		FY2014	
	Contracted amount	Recognized gain (loss)	Contracted amount	Recognized gain (loss)	Contracted amount	Recognized gain (loss)
Foreign exchange forward contracts:						
USD (Selling) .....	<b>¥10,781</b>	<b>¥(342)</b>	¥ 8,083	¥ 64	<b>\$ 89,714</b>	<b>\$(2,845)</b>
EUR (Selling) .....	<b>125</b>	<b>3</b>	1,955	(35)	<b>1,040</b>	<b>24</b>
AUD (Selling) .....	—	—	7	(0)	—	—
THB (Selling) .....	<b>6</b>	<b>(0)</b>	64	(0)	<b>49</b>	<b>(0)</b>
MYR (Selling) .....	<b>191</b>	<b>(1)</b>	—	—	<b>1,589</b>	<b>(8)</b>
USD (Buying) .....	<b>1,673</b>	<b>44</b>	1,654	32	<b>13,921</b>	<b>366</b>
EUR (Buying) .....	<b>67</b>	<b>(0)</b>	161	10	<b>557</b>	<b>(0)</b>
GBP (Buying) .....	<b>2</b>	<b>(0)</b>	3	0	<b>16</b>	<b>(0)</b>
CHF (Buying) .....	—	—	2	0	—	—
THB (Buying) .....	<b>24</b>	<b>0</b>	9	(0)	<b>199</b>	<b>0</b>
JPY (Buying) .....	<b>5</b>	<b>(0)</b>	—	—	<b>41</b>	<b>(0)</b>
Total .....		<b>¥(296)</b>		¥ 70		<b>\$(2,463)</b>
Interest rate swap agreements:						
To receive floating and pay fixed rates .....	<b>¥20,000</b>	<b>¥ (6)</b>	¥20,000	¥ (7)	<b>\$166,430</b>	<b>\$ (49)</b>
To receive fixed rates and pay floating .....	<b>20,000</b>	<b>112</b>	20,000	352	<b>166,430</b>	<b>932</b>
Total .....		<b>¥ 105</b>		¥344		<b>\$ 873</b>
Commodity forward contracts:						
Nonferrous metal (Selling) .....	<b>¥ 213</b>	<b>¥ 9</b>	¥ 112	¥ 2	<b>\$ 1,772</b>	<b>\$ 74</b>
Nonferrous metal (Buying) .....	<b>142</b>	<b>(3)</b>	53	0	<b>1,181</b>	<b>(24)</b>
Total .....		<b>¥ 6</b>		¥ 2		<b>\$ 49</b>

Derivative transactions for which hedge accounting is applied for the years ended March 31, 2015 and 2014 were as follows:

(a) Currency related

		Millions of yen				Thousands of U.S. dollars	
		FY2014		FY2013		FY2014	
		Contract amount	Fair value	Contract amount	Fair value	Contract amount	Fair value
Hedged item							
Benchmark method							
Foreign exchange forward contracts:							
USD (Selling)	Accounts receivable (forecasted transactions)	¥ 1,217	¥ (45)	¥ 427	¥ (3)	\$ 10,127	\$ (374)
EUR (Selling)	Accounts receivable (forecasted transactions)	298	15	7	(0)	2,479	124
GBP (Selling)	Accounts receivable (forecasted transactions)	411	10	—	—	3,420	83
CAD (Selling)	Accounts receivable (forecasted transactions)	44	(1)	316	(1)	366	(8)
JPY (Selling)	Accounts receivable (forecasted transactions)	4,883	0	—	—	40,634	0
USD (Buying)	Accounts payable (forecasted transactions)	121,082	550	94,315	500	1,007,589	4,576
EUR (Buying)	Accounts payable (forecasted transactions)	446	(25)	422	15	3,711	(208)
GBP (Buying)	Accounts payable (Forecasted transactions)	3,563	(137)	80	(0)	29,649	(1,140)
CNY (Buying)	Accounts payable (forecasted transactions)	300	12	401	6	2,496	99
THB (Buying)	Accounts payable (forecasted transactions)	62	0	29	0	515	0
SAR (Buying)	Accounts payable (forecasted transactions)	13,071	(139)	—	—	108,770	(1,156)
KWD (Buying)	Accounts payable (forecasted transactions)	327	(52)	—	—	2,721	(432)
Allocation method							
Foreign exchange forward contracts:							
USD (Selling)	Accounts receivable	291	Note 1	508	Note 1	2,421	Note 1
EUR (Selling)	Accounts receivable	5	Note 1	—	—	41	Note 1
THB (Selling)	Accounts receivable	7	Note 1	—	—	58	Note 1
USD (Buying)	Accounts payable and deposits received	44,816	Note 1	42,912	Note 1	372,938	Note 1
EUR (Buying)	Accounts payable and deposits received	21	Note 1	—	—	174	Note 1
THB (Buying)	Accounts payable and deposits received	12	Note 1	—	—	99	Note 1
Cross currency swap contracts:							
To receive USD floating and pay JPY fixed rates	Long-term debt	62,527	Note 1	36,206	Note 1	520,321	Note 1

Fair value of derivative transactions is measured at the quoted price obtained from financial institutions.

Note 1. Fair value of the foreign exchange forward contracts to which allocation treatment has been applied is included in the fair value of corresponding accounts receivable, accounts payable and long-term debt as hedged item.

(b) Interest rate related

		Millions of yen				Thousands of U.S. dollars	
		FY2014		FY2013		FY2014	
	Hedged item	Contract amount	Fair value	Contract amount	Fair value	Contract amount	Fair value
Benchmark method							
Interest rate swap agreements:							
To receive floating and pay fixed rates	Long-term debt	¥123,719	¥(473)	¥123,772	¥(351)	\$1,029,533	\$(3,936)
Special treatment							
Interest rate swap agreements:							
To receive floating and pay fixed rates	Bonds and long-term debt	233,300	Note 1	205,330	Note 1	1,941,416	Note 1
To receive fixed rates and pay floating		100,727	Note 1	145,200	Note 1	838,204	Note 1

Fair value of derivative transactions is measured at the quoted price obtained from financial institutions.

Note 1. Fair value of the interest rate swap agreements to which special treatment method has been applied is included in the fair value of corresponding bonds and long-term debt as hedged item.

## 15. Research and Development Expenses

Research and development expenses charged to income were ¥32,488 million (\$270,350 thousand) and ¥31,177 million for the years ended March 31, 2015 and 2014, respectively.

## 16. Income Taxes

The tax effects of temporary differences that give rise to significant portions of the deferred tax assets at March 31, 2015 and 2014 are presented below:

	Millions of yen		Thousands of U.S. dollars
	FY2014	FY2013	FY2014
<b>Deferred tax assets:</b>			
Loss carry-forwards .....	<b>¥ 55,485</b>	¥112,348	<b>\$ 461,720</b>
Net defined benefit liability.....	<b>32,426</b>	33,728	<b>269,834</b>
Loss on impairment of property, plant and equipment .....	<b>18,442</b>	17,930	<b>153,465</b>
Accrued bonuses .....	<b>14,072</b>	13,778	<b>117,100</b>
Provision for special repairs .....	<b>7,964</b>	8,269	<b>66,272</b>
Allowance for losses on specific waste disposal business .....	<b>7,833</b>	9,177	<b>65,182</b>
Others.....	<b>49,831</b>	46,292	<b>414,670</b>
Total deferred tax assets.....	<b>186,056</b>	241,525	<b>1,548,273</b>
Valuation allowance .....	<b>(65,858)</b>	(78,606)	<b>(548,040)</b>
Deferred tax assets net of valuation allowances .....	<b>120,198</b>	162,919	<b>1,000,233</b>
<b>Deferred tax liabilities:</b>			
Net unrealized gains and losses on securities .....	<b>(93,577)</b>	(56,270)	<b>(778,705)</b>
Others.....	<b>(28,343)</b>	(27,552)	<b>(235,857)</b>
Total deferred tax liabilities.....	<b>(121,920)</b>	(83,822)	<b>(1,014,562)</b>
Net deferred tax assets (liabilities) .....	<b>¥ (1,722)</b>	¥ 79,096	<b>\$ (14,329)</b>

Reconciliation of the statutory tax rate to the effective tax rate for the years ended March 31, 2014 was as follows:

	FY2013
Statutory tax rate .....	38.0%
Equity in earnings of affiliates.....	(4.3)
Effective tax rate .....	33.7%

The reconciliation of the difference between the statutory tax rate and the effective tax rate for the year ended March 31, 2015 was not presented since the difference was less than 5% of the statutory tax rate.

The “Act on Partial Revision of the Income Tax Act” (Act No. 9, 2015) and the “Act on Partial Revision of the Local Tax Act” (Act No. 2, 2015) were promulgated on March 31, 2015. Accordingly, the statutory tax rate used to calculate deferred tax assets and liabilities was changed from 35.0% to

33.0% and 32.0% for temporary differences which are expected to reverse in the year beginning on April 1, 2015 and temporary differences which are expected to reverse from the years beginning on April 1, 2016, respectively. As a result, deferred tax liabilities, net of deferred tax assets, decreased by ¥1,507 million (\$12,540 thousand), and income taxes – deferred, net unrealized gains and losses on securities, net unrealized gains and losses on hedges, remeasurements of defined benefit plans increased by ¥7,476 million (\$62,211 thousand), ¥8,761 million (\$72,905 thousand), ¥10 million (\$83 thousand) and ¥212 million (\$1,764 thousand), respectively, at and for the year ended March 31, 2015. Also, deferred tax liabilities on revaluation reserve for land decreased by ¥1,024 million (\$8,521 thousand) and revaluation reserve for land, net of tax, increased by the same amount at March 31, 2015.

## 17. Comprehensive Income

Reclassification adjustments and income tax effects attributable to other comprehensive income for the years ended March 31, 2015 and 2014 were as follows:

	Millions of yen		Thousands of U.S. dollars
	FY2014	FY2013	FY2014
<b>Net unrealized gains and losses on securities:</b>			
Gains arising during the year .....	<b>¥135,075</b>	¥48,852	<b>\$1,124,032</b>
Reclassification adjustments .....	<b>(8,327)</b>	(586)	<b>(69,293)</b>
Amounts before income tax effects .....	<b>126,748</b>	48,266	<b>1,054,739</b>
Income tax effects .....	<b>(35,939)</b>	(16,230)	<b>(299,067)</b>
Net unrealized gains and losses on securities .....	<b>90,808</b>	32,035	<b>755,662</b>
<b>Net unrealized gains and losses on hedges:</b>			
Gains arising during the year .....	<b>158</b>	378	<b>1,314</b>
Reclassification adjustments .....	<b>(514)</b>	175	<b>(4,277)</b>
Amounts before income tax effects .....	<b>(356)</b>	554	<b>(2,962)</b>
Income tax effects .....	<b>123</b>	(194)	<b>1,023</b>
Net unrealized gains and losses on hedges .....	<b>(232)</b>	359	<b>(1,930)</b>
<b>Revaluation reserve for land:</b>			
Income tax effects .....	<b>1,012</b>	—	<b>8,421</b>
Revaluation reserve for land .....	<b>1,012</b>	—	<b>8,421</b>
<b>Translation adjustments:</b>			
Adjustments arising during the year .....	<b>13,482</b>	15,340	<b>112,191</b>
Reclassification adjustments .....	<b>(770)</b>	4	<b>(6,407)</b>
Amounts before income tax effects .....	<b>12,712</b>	15,345	<b>105,783</b>
Income tax effects .....	—	—	—
Translation adjustments.....	<b>12,712</b>	15,345	<b>105,783</b>
<b>Remeasurements of defined benefit plans:</b>			
Adjustments arising during the year .....	<b>15,422</b>	—	<b>128,334</b>
Reclassification adjustments .....	<b>2,372</b>	—	<b>19,738</b>
Amounts before income tax effects .....	<b>17,795</b>	—	<b>148,081</b>
Income tax effects .....	<b>(5,890)</b>	—	<b>(49,013)</b>
Remeasurements of defined benefit plans .....	<b>11,905</b>	—	<b>99,067</b>

	Millions of yen		Thousands of U.S. dollars
	FY2014	FY2013	FY2014
Share of other comprehensive income of affiliates accounted for using equity method:			
Gains arising during the year .....	¥ 21,067	¥23,832	\$ 175,309
Reclassification adjustments .....	549	(56)	4,568
Share of other comprehensive income of affiliates accounted for using equity method.....	21,617	23,775	179,886
Total other comprehensive income .....	¥137,823	¥71,516	\$1,146,900

## 18. Segment Information

### (a) Overview of reportable segments

The Group places three operating companies, JFE Steel Corporation, JFE Engineering Corporation and JFE Shoji, and executes business based on an operating system specifically designed for its industry under the Company as a holding company. The reportable segments are identified by products and services belonging to the operating companies.

Products and services for each reportable segment are as follows:

“Steel” produces and sells a wide range of steel products, steel processed products and raw materials and operates peripheral business, such as transporting, and maintenance and construction of equipment.

"Engineering" provides engineering services for energy, urban environment, recycle, steel construction and industrial machines and systems.

"Trading" purchases, processes and sells steel products, raw materials for steel production, nonferrous metal products, food, etc.

(b) Method of calculating net sales, income (loss), assets, liabilities and other items by reportable segment

Accounting policies of the reportable segments are consistent with those described in Note 2. "Summary of Significant Accounting Policies." Income by reportable segment is based on ordinary income. Intersegment transactions are based on prevailing market price.

**(c) Net sales, income (loss), assets, liabilities and other items by reportable segment**

	Millions of yen		Thousands of U.S. dollars
	FY2014	FY2013	FY2014
Sales:			
Steel			
Sales to customers.....	¥ 1,857,878	¥ 1,796,667	\$ 15,460,414
Intersegment sales or transfers...	1,015,961	894,955	8,454,364
Total .....	¥ 2,873,839	¥ 2,691,622	\$ 23,914,779
Engineering			
Sales to customers.....	¥ 359,007	¥ 275,918	\$ 2,987,492
Intersegment sales or transfers...	8,380	8,195	69,734
Total .....	¥ 367,388	¥ 284,114	\$ 3,057,235
Trading			
Sales to customers.....	¥ 1,633,469	¥ 1,513,442	\$ 13,592,984
Intersegment sales or transfers...	301,001	267,899	2,504,793
Total .....	¥ 1,934,470	¥ 1,781,341	\$ 16,097,778
Total			
Sales to customers.....	¥ 3,850,355	¥ 3,586,028	\$ 32,040,900
Intersegment sales or transfers...	1,325,343	1,171,049	11,028,900
Total .....	¥ 5,175,698	¥ 4,757,077	\$ 43,069,801
Adjustments			
Sales to customers.....	¥ —	¥ 80,831	\$ —
Intersegment sales or transfers...	(1,325,343)	(1,171,049)	(11,028,900)
Total .....	¥(1,325,343)	¥(1,090,218)	\$(11,028,900)
Consolidated			
Sales to customers.....	¥ 3,850,355	¥ 3,666,859	\$ 32,040,900
Intersegment sales or transfers...	—	—	—
Total .....	¥ 3,850,355	¥ 3,666,859	\$ 32,040,900

	Millions of yen		Thousands of U.S. dollars
	<b>FY2014</b>	FY2013	<b>FY2014</b>
Segment income:			
Steel .....	<b>¥188,574</b>	¥126,231	<b>\$1,569,226</b>
Engineering.....	<b>18,025</b>	18,478	<b>149,995</b>
Trading.....	<b>24,668</b>	21,568	<b>205,275</b>
Total .....	<b>231,267</b>	166,279	<b>1,924,498</b>
Adjustments.....	<b>(266)</b>	7,397	<b>(2,213)</b>
Consolidated.....	<b>¥231,001</b>	¥173,676	<b>\$1,922,285</b>

	Millions of yen		Thousands of U.S. dollars
	<b>FY2014</b>	FY2013	<b>FY2014</b>
Segment assets:			
Steel .....	<b>¥3,911,913</b>	¥3,638,164	<b>\$32,553,158</b>
Engineering.....	<b>396,075</b>	286,116	<b>3,295,955</b>
Trading.....	<b>701,768</b>	589,171	<b>5,839,793</b>
Total .....	<b>5,009,757</b>	4,513,452	<b>41,688,915</b>
Adjustments.....	<b>(370,345)</b>	(271,751)	<b>(3,081,842)</b>
Consolidated.....	<b>¥4,639,412</b>	¥4,241,700	<b>\$38,607,073</b>

	Millions of yen		Thousands of U.S. dollars
	<b>FY2014</b>	FY2013	<b>FY2014</b>
Depreciation:			
Steel .....	<b>¥164,738</b>	¥168,860	<b>\$1,370,874</b>
Engineering.....	<b>6,104</b>	5,610	<b>50,794</b>
Trading.....	<b>5,167</b>	4,873	<b>42,997</b>
Total .....	<b>176,010</b>	179,344	<b>1,464,675</b>
Adjustments.....	<b>6</b>	1,967	<b>49</b>
Consolidated.....	<b>¥176,017</b>	¥181,311	<b>\$1,464,733</b>

	Millions of yen		Thousands of U.S. dollars
	<b>FY2014</b>	FY2013	<b>FY2014</b>
Amortization of goodwill:			
Steel .....	<b>¥124</b>	¥119	<b>\$ 1,031</b>
Engineering.....	<b>507</b>	33	<b>4,219</b>
Trading.....	<b>155</b>	82	<b>1,289</b>
Total .....	<b>788</b>	235	<b>6,557</b>
Adjustments.....	<b>—</b>	—	<b>—</b>
Consolidated.....	<b>¥788</b>	¥235	<b>\$16,557</b>

	Millions of yen		Thousands of U.S. dollars
	<b>FY2014</b>	FY2013	<b>FY2014</b>
Interest income:			
Steel .....	<b>¥1,043</b>	¥ 809	<b>\$ 8,679</b>
Engineering .....	<b>120</b>	100	<b>998</b>
Trading .....	<b>403</b>	651	<b>3,353</b>
Total .....	<b>1,567</b>	1,560	<b>13,039</b>
Adjustments .....	<b>(489)</b>	(411)	<b>(4,069)</b>
Consolidated .....	<b>¥1,078</b>	¥1,148	<b>\$ 8,970</b>

	Millions of yen	Thousands of U.S. dollars
	<b>FY2014</b>	<b>FY2013</b>
<b>Interest expense:</b>		<b>FY2014</b>
Steel .....	<b>¥13,130</b>	<b>¥12,685</b>
Engineering.....	<b>207</b>	<b>189</b>
Trading.....	<b>2,258</b>	<b>1,875</b>
Total .....	<b>15,595</b>	<b>14,750</b>
Adjustments.....	<b>(1,063)</b>	<b>(805)</b>
Consolidated.....	<b>¥14,532</b>	<b>¥13,945</b>

	Millions of yen		Thousands of U.S. dollars
	FY2014	FY2013	FY2014
Equity in earnings of affiliates:			
Steel .....	¥14,586	¥12,519	\$121,378
Engineering .....	16	3,713	133
Trading .....	539	635	4,485
Total .....	15,142	16,867	126,004
Adjustments .....	3,137	2,506	26,104
Consolidated .....	¥18,280	¥19,374	\$152,117

	Millions of yen		Thousands of U.S. dollars
	<b>FY2014</b>	FY2013	<b>FY2014</b>
Investment in affiliates accounted for using equity method:			
Steel .....	<b>¥355,458</b>	¥334,200	<b>\$2,957,959</b>
Engineering .....	<b>6,709</b>	5,908	<b>55,829</b>
Trading .....	<b>12,779</b>	20,301	<b>106,341</b>
Total .....	<b>374,947</b>	360,409	<b>3,120,138</b>
Adjustments .....	<b>59,764</b>	40,238	<b>497,328</b>
Consolidated .....	<b>¥434,712</b>	¥400,648	<b>\$3,617,475</b>

	Millions of yen		Thousands of U.S. dollars
	FY2014	FY2013	FY2014
Increase in property, plant and equipment and intangible assets:			
Steel .....	¥207,286	¥154,222	\$1,724,939
Engineering .....	12,366	10,861	102,904
Trading .....	6,249	9,325	52,001
Total .....	225,902	174,409	1,879,853
Adjustments .....	0	1,306	0
Consolidated .....	¥225,902	¥175,715	\$1,879,853

**(d) Information about products and services**

Information about products and services has not been disclosed since the classification by products and services is the same as the reportable segment.

(e) Information by geographical area

(1) Sales

Millions of yen						
FY2014			FY2013			
	Japan	Others	Total	Japan	Others	Total
Sales.....	¥2,499,854	¥1,350,500	¥3,850,355	¥2,412,064	¥1,254,794	¥3,666,859

Thousands of U.S. dollars			
FY2014			
	Japan	Others	Total
Sales.....	\$20,802,646	\$11,238,245	\$32,040,900

(g) Information about impairment loss by reportable segment

Millions of yen				
FY2014				
	Steel	Engineering	Trading	Total
Impairment loss.....	¥3,234	¥—	¥8,928	¥12,162

Millions of yen				
FY2013				
	Steel	Engineering	Trading	Total
Impairment loss.....	¥5,666	¥429	¥2,633	¥8,729

Thousands of U.S. dollars				
FY2014				
	Steel	Engineering	Trading	Total
Impairment loss.....	\$26,911	\$—	\$74,294	\$101,206

(h) Information on unamortized balance of goodwill by reportable segment

Millions of yen				
FY2014				
	Steel	Engineering	Trading	Total
Unamortized balance .....	¥189	¥12,196	¥17,009	¥29,395

Millions of yen				
FY2013				
	Steel	Engineering	Trading	Total
Unamortized balance .....	¥352	¥801	¥718	¥1,872

Thousands of U.S. dollars				
FY2014				
	Steel	Engineering	Trading	Total
Unamortized balance .....	\$1,572	\$101,489	\$141,541	\$244,611

(2) Property, plant and equipment

Information about property, plant and equipment has not been disclosed since property, plant, and equipment in Japan constituted more than 90% of property, plant and equipment on the consolidated balance sheets.

(f) Information about major customers

Information about major customer has not been disclosed since there were no external customers who constituted more than 10% of net sales on the consolidated statements of income.

(i) Information about gain on negative goodwill by reportable segment

No gain on negative goodwill was recognized for the years ended March 31, 2015 and 2014.

19. Impairment Loss

The Company classified long-lived assets as idle assets, leased assets, project-oriented assets and business-oriented assets and grouped each of those classified assets into the minimum unit which will generate cash flows independent of other assets or group of assets.

For the year ended March 31, 2015, primarily the book value of the interest in natural resources in Australia was reduced to the recoverable amount due to the decision to withdraw the project because of the deteriorated business environment. The Company recognized loss on impairments of long-lived assets totaling ¥12,162 million (\$101,206

thousand), including ¥8,708 million (\$72,464 thousand) for investments and other assets, ¥1,554 million (\$12,931 thousand) for machinery and equipment, ¥770 million (\$6,407 thousand) for land and ¥1,128 million (\$9,386 thousand) for buildings and structures. The recoverable amount is principally based on the estimated value of disposition.

For the year ended March 31, 2014, primarily the book value of the interest in natural resources in Australia was reduced to the recoverable amount due to the deteriorated business environment. The Company recognized loss on impairments of long-lived assets totaling ¥8,729 million, including ¥4,597 million for investments and other assets, ¥3,485 million for land, ¥411 million for machinery and equipment and ¥234 million for buildings and structures. The recoverable amount is principally measured at its value in use, which was calculated by discounting the future cash flows at a discount rate of 6.4%.

20. Extraordinary Loss

For the years ended March 31, 2015 and 2014, extraordinary loss consisted of the following:

	Millions of yen		Thousands of U.S. dollars
	FY2014	FY2013	FY2014
Gain on sales of property, plant and equipment .....	¥ 4,134	¥ —	\$ 34,401
Gain on sales of investments in securities .....	8,495	—	70,691
Loss on impairment of property, plant and equipment .....	(12,162)	(8,729)	(101,206)
Loss on valuation of investments in capital .....	(4,776)	—	(39,743)
Loss on liquidation of affiliates .....	—	(4,437)	—

21. Net Income per Share

Diluted net income per share is not shown due to no dilutive stocks for the years ended March 31, 2015 and 2014.

(Year ended March 31, 2015)	Millions of yen	Thousands of shares	Yen	U.S. dollars
	Net income	Weighted average shares	Net income per share	
Net income available to common shareholders.....	¥139,357	576,806	¥241.60	\$2.01

(Year ended March 31, 2014)	Millions of yen	Thousands of shares	Yen
	Net income	Weighted average shares	Net income per share
Net income available to common shareholders.....	¥102,382	577,015	¥177.44



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### Independent Auditor's Report

The Board of Directors  
JFE Holdings, Inc.

We have audited the accompanying consolidated financial statements of JFE Holdings, Inc. and its consolidated subsidiaries, which comprise the consolidated balance sheet as at March 31, 2015, and the consolidated statements of income, comprehensive income, changes in net assets, and cash flows for the year then ended and a summary of significant accounting policies and other explanatory information, all expressed in Japanese yen.

#### *Management's Responsibility for the Consolidated Financial Statements*

Management is responsible for the preparation and fair presentation of these consolidated financial statements in accordance with accounting principles generally accepted in Japan, and for designing and operating such internal control as management determines is necessary to enable the preparation and fair presentation of the consolidated financial statements that are free from material misstatement, whether due to fraud or error.

#### *Auditor's Responsibility*

Our responsibility is to express an opinion on these consolidated financial statements based on our audit. We conducted our audit in accordance with auditing standards generally accepted in Japan. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the consolidated financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the consolidated financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the consolidated financial statements, whether due to fraud or error. The purpose of an audit of the consolidated financial statements is not to express an opinion on the effectiveness of the entity's internal control, but in making these risk assessments the auditor considers internal controls relevant to the entity's preparation and fair presentation of the consolidated financial statements in order to design audit procedures that are appropriate in the circumstances. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of accounting estimates made by management, as well as evaluating the overall presentation of the consolidated financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

#### *Opinion*

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the consolidated financial position of JFE Holdings, Inc. and its consolidated subsidiaries as at March 31, 2015, and their consolidated financial performance and cash flows for the year then ended in conformity with accounting principles generally accepted in Japan.

#### *Convenience Translation*

We have reviewed the translation of these consolidated financial statements into U.S. dollars, presented for the convenience of readers, and, in our opinion, the accompanying consolidated financial statements have been properly translated on the basis described in Note 1.

*Ernst & Young Shinnihon LLC*

June 25, 2015



**JFE Holdings, Inc.**

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