JFE Group

CSR REPORT 2015

JFE

CONTENTS

Key

The icons on the right identify information that pertains to a specific JFE operating company.

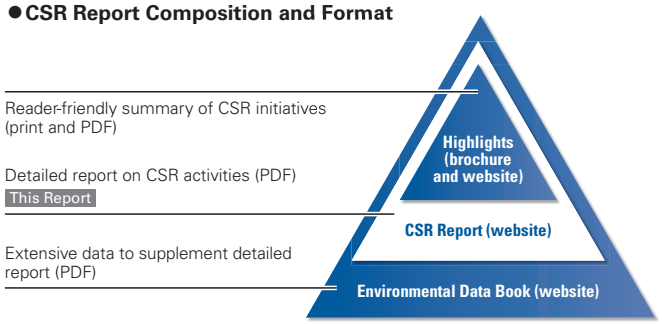
- JFE Steel Corporation
- JFE Engineering Corporation
- JFE Shoji Trade Corporation

Editorial Policy

This report provides stakeholders with information about JFE's CSR activities, and it elicits feedback to support further enhancement of the company's activities and information disclosure. The 2015 report offers:

- an expanded scope of data (e.g., employee data) covering all JFE Group companies, and
- a wider scope of environmental data (energy consumption and associated CO_2 emissions) covering Group companies in Japan that are accountable in compliance with the Energy Saving Act and major subsidiaries overseas.

● CSR Report Composition and Format



● Scope of Report

Reporting Period

FY2014 (April 1, 2014 to March 31, 2015)
Reports on some activities undertaken outside this period are included.

Organizations Covered

The report mainly covers the activities of the holding company JFE Holdings, Inc. and its three operating companies – JFE Steel Corporation, JFE Engineering Corporation and JFE Shoji Trade Corporation, but also includes reports on some activities pertaining to other companies of the JFE Group (396 companies, of which 328 are consolidated subsidiaries and 68 are equity method affiliates).

Qualitative information includes data from the following JFE operating companies (see Environmental Data Book for complete list of companies).

- JFE Steel Group:
  "Environment" section: 31 major domestic and overseas subsidiaries (including two equity-method affiliates)
- JFE Engineering Group:
  "Environment" section: 11 major domestic subsidiaries (including major manufacturing subsidiaries)
- JFE Shoji Trade Group:
  "Environment" section: 32 major domestic and overseas subsidiaries (steel processing companies)
  "Society" section: all 107 subsidiaries

● Reference Guidelines

GRI: G4 Sustainability Reporting Guidelines
Ministry of the Environment (Japan): Environmental Reporting Guidelines 2012
Ministry of the Environment (Japan): Environmental Accounting Guidelines 2005

● Publication Date

September 2015 (previous issue: September 2014; next issue (tentative): September 2016)

● Related Reports

The following information is available at www.jfe-holdings.co.jp/en.

CSR (Society and Environment)
CSR Reports (Highlights Version, CSR Report and Environmental Data Book) provide up-to-date information on JFE's CSR initiatives (PDF format).

Company Profile
Outline of JFE Group, corporate governance, etc.

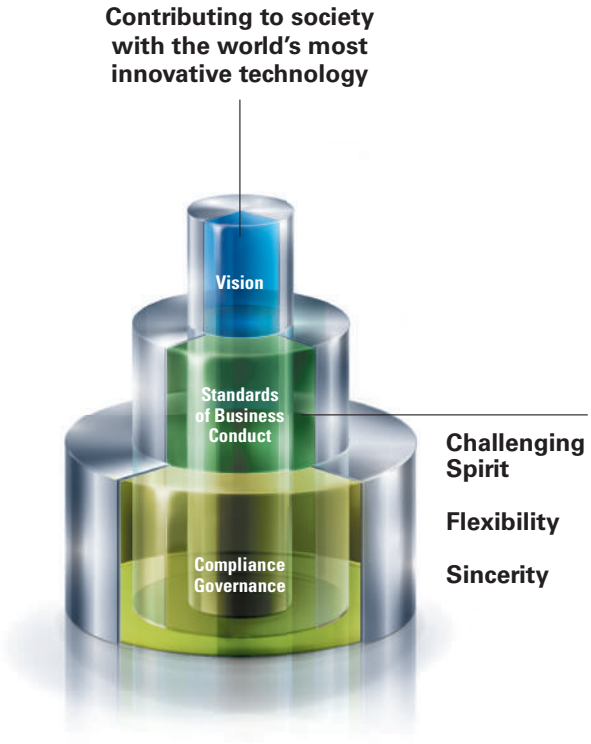
Investor Information
JFE Group business information, financial data, stock and rating information, etc.

JFE GROUPTODAY (PDF)
JFE Group business activities

JFE CSR

JFE puts its corporate value and standards of business conduct into practice to fulfill its mission of contributing to society with the world's most innovative technology. JFE diligently implements initiatives that address highly important issues, including safety, disaster prevention, product quality and human rights, in addition to compliance and environmental protection.

JFE conducts business from the perspective of all stakeholders, including customers, clients, shareholders, investors, community residents and employees, guided by an equitable, fair and transparent system of corporate governance. In the spirit of its corporate values – Challenging Spirit, Flexibility and Sincerity – JFE strives to earn society's trust by undertaking CSR with integrity.



Standards of Business Conduct

All JFE executives and employees are expected to adhere to the below-listed Standards of Business Conduct in all facets of corporate activities. The standards embody the vision of JFE and go hand in hand with JFE's corporate values. Senior executives take the lead in communicating the standards to employees throughout JFE and in creating effective systems and mechanisms to ensure adherence. Suppliers are also asked to observe these standards. Senior executives are directly involved both in planning and implementation, as well as the prevention of violations. They are obliged to disclose information about any violation in a timely and accurate manner both inside and outside JFE, clarify the persons with related authority and accountability, and deal rigorously with any offense.

1. Provide quality products and services
Earn the trust and high evaluation of customers by endeavoring to provide safe, high-quality products and services based on superior technology, and by fully respecting and protecting the privacy of personal and customer information.

2. Be transparent to society
Endeavor to communicate with shareholders and society, and actively disclose corporate information.

3. Work cooperatively with communities
Actively contribute to communities as a good corporate citizen by working together in the spirit of cooperation.

4. Globalize
Endeavor to achieve understanding with people around the world, working from a global perspective and respecting international norms and local cultures and customs.

5. Exist in harmony with the global environment
Proactively contribute to the achievement of better living standards and the creation of societies that exist in harmony with the global environment.

6. Maintain proper relationships with government and related authorities
Build and maintain sound and proper relationships with government and related authorities.

7. Refuse to associate with criminal groups
Refuse to associate with any person or organization that threatens social order or stability, and reject any illegal or improper demand.

8. Respect human rights
Respect all employees and members of the general public as individuals and refrain from any discrimination in corporate activities.

9. Provide rewarding work environments
Provide employees with attractive, safe, and rewarding work environments.

10. Comply with laws and ordinances
Comply with all laws and ordinances, endeavor to compete fairly and freely, refrain from illegal business activities, promote sound business practices, and be faithful and sincere in all activities and dealings.

JFE aims to become a global company supplying world-class technological innovation and services for sustainable societies

President and CEO
JFE Holdings, Inc.

Eiji Hayashida

Contributing to Society through the JFE Group Vision

I am pleased to present this report as the newly appointed president and CEO of JFE Holdings, Inc. JFE has consistently sought to enhance its corporate value for all stakeholders by upholding its corporate vision of contributing to society with world-class innovative technology. In diverse businesses fields, including steelmaking, engineering and trading, JFE applies its innovative world-class technologies, knowledge and experience in solutions that help societies achieve sustainable growth and protect and restore the global environment.

As our Group unites in a collective effort to meet these challenges and achieve its own sustainable growth, we are focusing on two keys: the centripetal force of steering our business in a direction led by our common values, policies and vision, and the centrifugal force of seeking the independent growth of each business in our Group. Under the governance of JFE Holdings, we balance these two forces to enhance our Group value and fulfill our corporate vision.

Fifth Medium-term Business Plan

In April 2015, we announced JFE's fifth medium-term business plan, which establishes strategic operating guidelines for the period from April 1, 2015 to March 31, 2018. Under the plan, we will adapt to the changing business environment by strengthening our technological advantages, diversifying our workforce and improving our comprehensive strengths with the aim of becoming a global company that supplies innovative world-class technologies and services. By steadily executing this plan, JFE looks forward to contributing to sustainable societies.

Solutions to Protect and Restore the Environment

JFE, which has made protection and restoration of the global environment a top priority, addresses environmental problems by applying the innovative world-class technologies it has developed over many years.

In our steel business, we have consistently sought to conserve resources and energy as part of reducing the environmental impact of our steelmaking activities. By developing and deploying energy-saving technologies, we have achieved the highest level of energy efficiency in the global steel industry. Our high-performance steel materials offer reduced environmental impact that results in lower CO_2 emissions connected with their use.

We also conserve resources and energy on a global scale by transferring and promoting our innovative technologies, which is part of our mission as a leading steelmaker. This also creates new opportunities for corporate growth, another reason why we are addressing these issues tirelessly.

Our engineering business provides products and services based on cutting-edge proprietary technologies, thereby contributing significantly to sustainability in fields such as energy supply for industry and consumers and the development of environmental and urban-transport infrastructure.

In our trading business, we support sustainability by providing energy-saving products and by improving the distribution efficiency of our global network spanning 19 countries.

Strengthening Human Resources for Growth

Human resources provide the driving force that enables JFE to continue growing and contributing to society. Securing and cultivating human resources is a key issue, which is why we have established the JFE Group Basic Policy for Human Resource Management to guide our activities. Every Group company develops concrete measures based on this policy.

Promoting diversity is an important issue for our Group, so we strive to create work environments in which individuals can fully demonstrate their abilities and thrive, regardless of nationality or gender. In recognition of these efforts, JFE has been selected as a Nadeshiko Brand* company for two consecutive years, in 2014 and 2015, under a joint program in which the Ministry of Economy, Trade and Industry and the Tokyo Stock Exchange, Inc. commend listed companies for promoting women's careers.

A rapid generational change is occurring at our steelworks and manufacturing sites, which has placed critical importance on the need to pass on knowledge and technical skills. In response, we are developing a training system to facilitate the transfer of knowledge and skills to future generations and thereby ensure our preservation of high-level on-site capabilities.

Maintaining Public Trust

JFE adheres to the principles of fair, equitable and transparent management. We are working steadfastly toward becoming an excellent 21st-century company, guided by our standards of business conduct based on a challenging spirit, flexibility and sincerity, and by upholding our vision of contributing to society with world-class innovative technology. We are committed to forging lasting relationships of trust to prosper alongside our customers, shareholders, employees and local communities.

* Nadeshiko Brand: Companies listed on the First Section of the Tokyo Stock Exchange are recognized publically for promoting opportunities for women to pursue career development. In FY2014, 40 companies were selected.

Ensuring the Sustainability of Societies and the Earth

Steelmaking, engineering and trading are JFE's core businesses. Steel, a material with infinite possibilities, lies at the center of JFE. We also offer diverse proprietary technologies in areas including energy and resource recycling. JFE Steel leverages innovative world-class technology for sustainable societies worldwide.

Steel Business

- JFE Steel Corporation
- Head Office: Chiyoda-ku, Tokyo
- Sales (consolidated): ¥2,873.8 billion
- Employees (consolidated): 43,680

High-performance products that respond to customer needs

JFE Steel, one of the world's leading integrated steel producers, operates a highly competitive production system consisting of two major steelworks, one each in eastern and western Japan. The company's value-added products meet diverse customer needs and reflect JFE Steel's sophisticated technologies and development capabilities.

Contributions to Sustainability

- Development of high-performance steel materials and energy-conserving products
- Development and global deployment of energy-saving technologies for manufacturing
- Promotion of steel scrap recycling

Trading Business

- JFE Shoji Trade Corporation
- Head Offices: Chiyoda-ku, Tokyo and Kita-ku, Osaka
- Sales (consolidated): ¥1,934.4 billion
- Employees (consolidated): 6,667

Creating Value as JFE's Core Trading Company

JFE Shoji Trade engages in trading in Japan and the import and export of products centering on steel materials, as well as steel raw materials, non-ferrous metals, chemicals, fuels, materials and machinery, and marine vessels. The company also operates businesses in the food and electronics fields.

Contributions to Sustainability

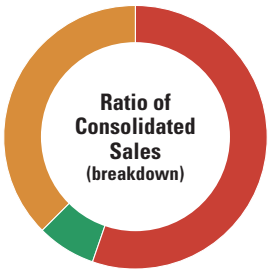
- Introduction of products for reduced environmental loads and energy consumption
- Expanded use of energy-saving transport
- Steel scrap recycling

Maximizing Corporate Value

JFE Holdings sets Group strategies and procures funding as the holding company of JFE. It also is responsible for disclosing information to the public as a listed company. Each operating company, having developed its own systems suited to its respective industry, strives to enhance corporate value by strengthening its competitiveness and profitability in the pursuit of sustainable growth.

Corporate Profile (as of March 31, 2015)

Company Name	JFE Holdings, Inc.
Head Office	2-2-3 Uchisaiwaicho, Chiyoda-ku, Tokyo 100-0011, Japan
Established	September 27, 2002
Capital	¥147.1 billion
Employees (consolidated)	58,856
URL	www.jfe-holdings.co.jp/en



¥3,850.3billion

- Steel Business 74.6% (¥2,873.8 billion)
- Engineering Business 9.5% (¥367.3 billion)
- Trading Business 50.2% (¥1,934.4 billion)

Adjustments for intra-group transactions: –34.3% (¥1,325.3 billion). These include internal sales or transfers between segments totaling ¥1,016.0 billion for the steel business, ¥8.4 billion for the engineering business and ¥301.0 billion for the trading business.

Engineering Business

- JFE Engineering Corporation
- Head Offices: Chiyoda-ku, Tokyo and Yokohama, Kanagawa
- Sales (consolidated): ¥367.3 billion
- Employees (consolidated): 8,472

Innovative Technologies for Energy and the Environment

JFE Engineering's technologies enhance the effective use of resources for clean energy in the core businesses of urban infrastructure and energy. JFE Engineering also develops infrastructure by utilizing its expertise in industrial machinery and steel structures, such as bridges.

Contributions to Sustainability

- Facilitating the use of renewable energies
- Expansion of waste recycling
- Establishing of waste-to-energy plants and infrastructure

Fifth Medium-term Business Plan

Becoming a Global Company Supplying Innovative World-class Technologies and Services

JFE's fifth medium-term business plan establishes strategic operating guidelines for the period from April 1, 2015 to March 31, 2018. JFE aims to become an excellent 21st-century group of companies by quickly and accurately responding to diverse social needs and economic changes. Key themes include improving Japan's resilience to natural disasters, preparing for the Tokyo 2020 Olympic and Paralympic Games in Japan, and meeting growing overseas demand for infrastructure and technologies for energy savings and environmental protection, particularly in emerging countries.

FY2015 ~ FY2017

Fifth Medium-term Business Plan

JFE is adapting to changes in its business environment by strengthening its technological advantages, diversifying its workforce and improving its comprehensive strengths. By strengthening its profit base in Japan and improving the profitability of its overseas businesses, JFE expects to achieve sustainable growth and improve its corporate value with the aim of becoming a global company supplying innovative world-class technologies and services.

2015

FY2012 ~ FY2014

Major Results of Fourth Medium-term Management Plan

1. **Steelmaking Business**
   Promoted development of domestic infrastructure from the medium- to long-term perspective
   Expanded overseas projects, including in Thailand and Indonesia

2. **Engineering Business**
   Increased orders in fields related to the environment and power generation
   Acquired environment-related companies for overseas business expansion

3. **Trading Business**
   Expanded overseas bases in North America and beyond

4. **Group-wide**
   Promoted diversity, and secured and nurtured competent human resources
   Selected as "Nadeshiko Brand" for two consecutive years

NADESHIKO BRAND 2015

2012

Our Goals

Corporate Vision

JFE will contribute to society with the world's most innovative technology.

Support sustainable societies while also achieving sustainable corporate growth

	Group-wide Measures	Individual Initiatives of Operating Companies
1	**Strengthen domestic profit base** **Further upgrade facilities**	(S) Upgrade facilities to raise energy efficiency (Investment in Japan: 650 billion yen over three years) (E) Diversify energy resources and provide total, proposal-based services
2	**Enhance corporate value through technological advantages** **Take on the challenge of developing advanced technologies**	(S) Develop next-generation process technologies and new products from a medium- to long-term perspective (Enhance technological development: increase R&D expenditures by 10% and researchers by 7%) (E) Develop new products that meet customer and market needs
3	**Increase overseas business profitability** **Expand overseas investment: 200 billion yen over three years**	(S) Production of environment-friendly products overseas (E) Global development of environment-friendly products centered on Southeast Asia (T) Enhance efficiency through local production and local consumption overseas
4	**Secure and nurture diverse human resources** **Create workplaces where employees can demonstrate their full potential**	**Group-wide** • Implement Basic Policy on Human Resource Management • Diversify human resources, pass on technical skills and expertise, etc.
5	**Establish corporate structure for sustainable growth** **Implement measures to promote the medium-term management plan and realize the corporate vision**	**Group-wide** • Strengthen corporate governance and communication with stakeholders • Strengthen environment-conscious operations and reduce environmental impact through world-class technologies

Financial Performance Targets

Financial position: Equivalent of A-grade ratings by international credit rating agencies
Capital efficiency: Return on equity of over 10%

1 Prevent Global Warming

2 Expand Resource Recycling

JFE's Response

Addressing Environmental Issues with Innovative

JFE is applying innovative world-class technologies to reduce the environmental load of its business activities, as well as addressing environmental issues through its unique products and services.

1 Prevent Global Warming

Society's Expectations Reduce CO_2 emissions from operations

JFE's Response Develop and commercialize cutting-edge energy-saving technologies and the world's most efficient steelmaking processes

- (S) Since oil shock in 1973 Achieved **37%** reduction in energy consumption

Society's Expectations Provide high-performance, high-efficiency products that reduce CO_2 emissions for final-product users

JFE's Response Develop and provide high-performance steel materials that reduce weight while ensuring strength, and products that offer highly efficient power generation from natural energy sources

- (S) Delivered high-performance steel to reduce CO_2 emissions by **26 million tonnes**[*1]
- (E) Generated **700 MW**[*2] of electric power from renewable energy

2 Expand Resource Recycling

Society's Expectations Provide resource-recycling solutions

JFE's Response Develop technologies for recycling waste into raw materials for steelmaking and power generation

- (S) Recycled plastic waste into **120,000 tonnes** of raw materials per year
- (E) Generated **300 MW**[*3] of electricity from biomass fuel
- (T) **First Japanese trading company** to set up palm kernel shell cargo yard
- (E) Operation of waste power generation plants in **66 locations**[*3]

*1 CO_2 reduction worldwide, based on five major high-performance steel materials produced by Japanese steelmakers (Japan Iron and Steel Federation estimates)
*2 As of June 2015
*3 As of August 2015

3

Preserve Biodiversity

World-class Technology

3 Preserve Biodiversity

Society's Expectations Provide products and services that help preserve marine ecosystems

JFE's Response Develop and provide products that help preserve and restore marine environments

- S Supplied **600,000 tonnes** of iron-steel slag for five marine-restoration projects
- E Installed ballast-water treatment systems in over **700 vessels**

Resources are being depleted by the mass consumption of fossil fuels such as petroleum, while greenhouse gas emissions are further exacerbating global warming, and a strong causal link has been associated with abnormal weather and rising sea levels. At the same time, stricter international regulations have been implemented in response to pollution in marine environments and the global movements of vessels that harm marine ecosystems by releasing ballast water containing non-native species.

JFE's environmental philosophy puts top priority on protecting and enhancing the global environment to keep JFE in harmony with the environment, ultimately for the prosperity of society. The company addresses environmental issues by harnessing its world-leading technologies, products and services for steelmaking, engineering and trading.

Currently

Environmentally friendly
operations, products, services and solutions

Going forward

Innovative steelmaking technologies and products offering even higher performance

1 Preventing Global Warming

Society's Expectations for JFE

◉Reduce CO_2 emissions from operations

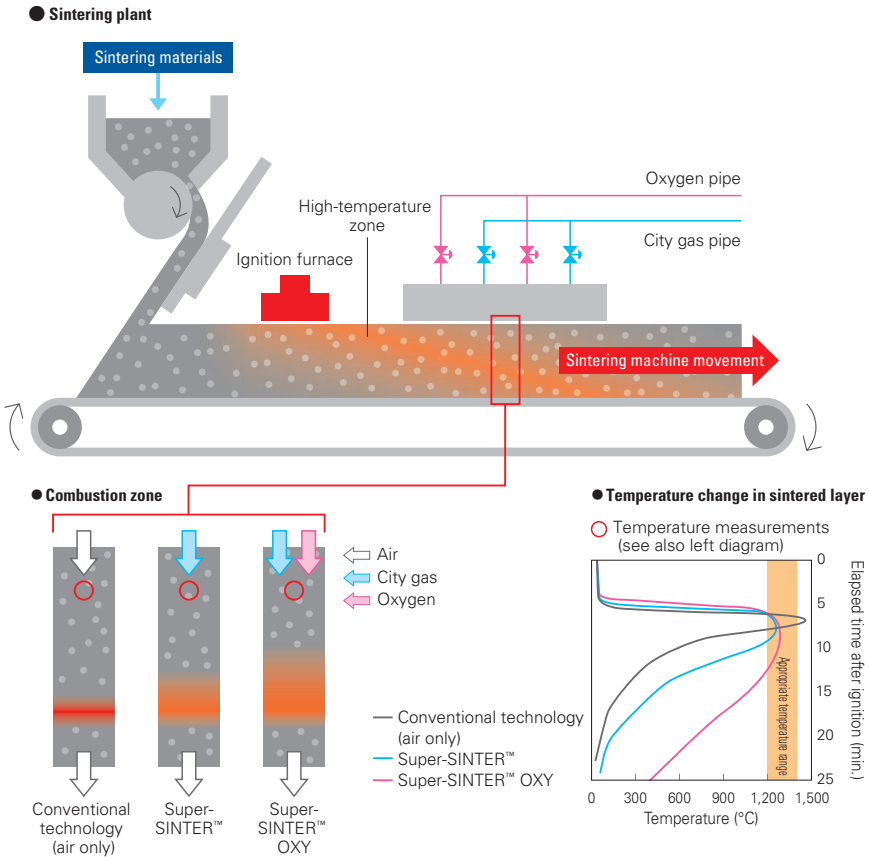
Response

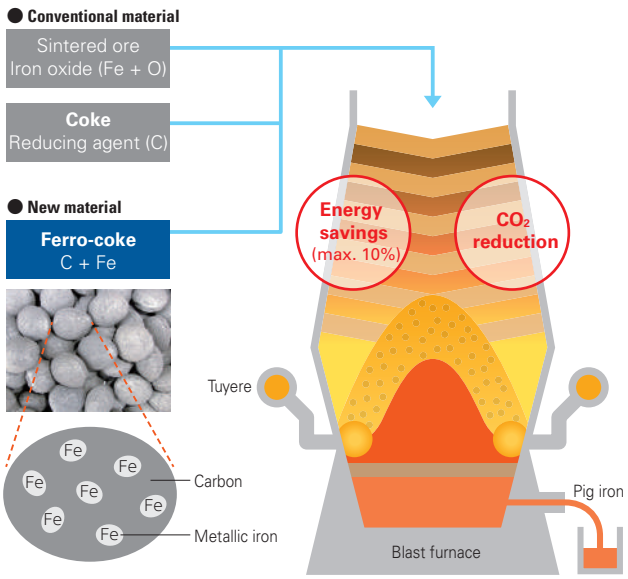
Hydrogenous Gas to Reduce CO_2 Emissions and Enhance Quality

Super-SINTER™ and Super-SINTER™ OXY

Super-SINTER™ uses natural gas and other hydrogenous gases to replace part of the coke breeze in the ore sintering process to greatly enhance energy efficiency and improve sintered ore quality. Super-SINTER™ has been installed at all JFE Steel sintering plants.

JFE Steel also developed Super-SINTER™ OXY, a combined fuel-injection technology that uses oxygen and hydrogenous gas. The process is in use at two sintering machines of the company's East Japan Works. By dramatically improving productivity for high-quality sintered ore, JFE Steel has lowered the coke rate of its blast furnaces and thereby reduced CO_2 emissions.





Innovative Blast Furnace Material for Reducing CO_2 Reduction

Ferro-coke

Ferro-coke is a blast furnace-charging carbonous material dispersed with metallic iron and made by carbonizing briquetted low-grade coal and iron ore. The metallic iron accelerates the reduction reaction rate in the blast furnace, making the reduction of iron oxide possible with less reducing agent, which leads to significantly lower CO_2 emissions and improved energy savings. Long duration production tests using a pilot plant and demonstration tests using a commercial blast furnace have verified that the process actually lowers reducing agent ratio and coke ratio as projected.

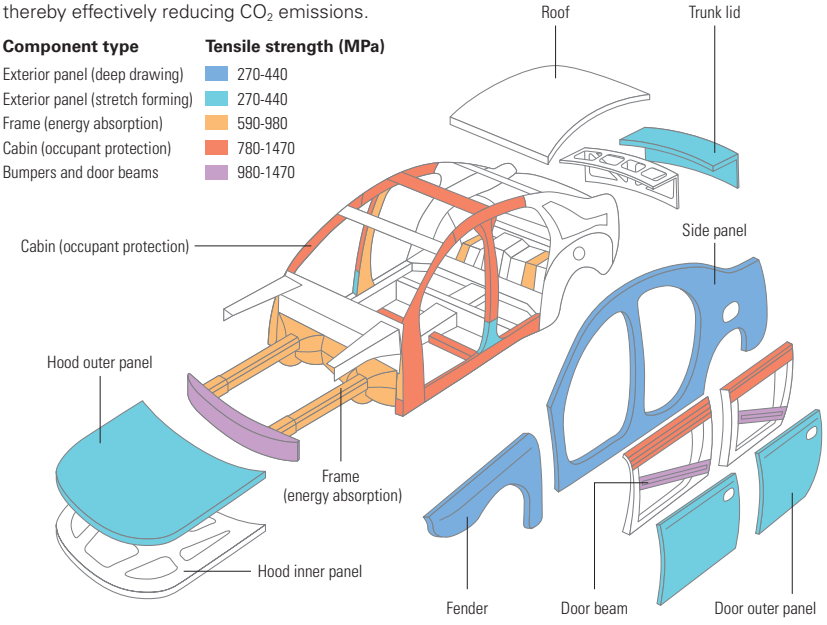
Society's Expectations for JFE

◉Provide high-performance, high-efficiency products that reduce CO_2 emissions for final-product users

Response

Using HITEN with the right performance specification for each component resolves tradeoff between reducing weight and maintaining strength, thereby effectively reducing CO_2 emissions.

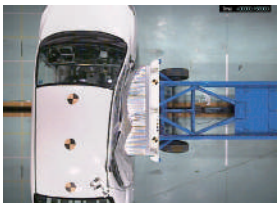
Component type	Tensile strength (MPa)
Exterior panel (deep drawing)	270-440
Exterior panel (stretch forming)	270-440
Frame (energy absorption)	590-980
Cabin (occupant protection)	780-1470
Bumpers and door beams	980-1470



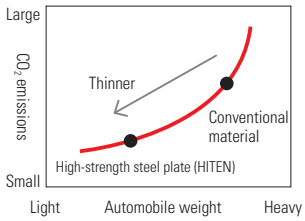
CO_2 Reduction through High-performance Steel Materials

Lighter Automobiles

Raising the tensile strength of steel plates for automobiles enables car weights to be lowered while maintaining collision safety. The result is less CO_2 emissions from driving. JFE Steel is helping to reduce automotive body weights with products including UNI HITEN™ for exterior body panels and cold-rolled, galvanized HITEN with high formability for vehicle frames.



Thin-walled HITEN offers collision energy absorption equivalent to conventional materials



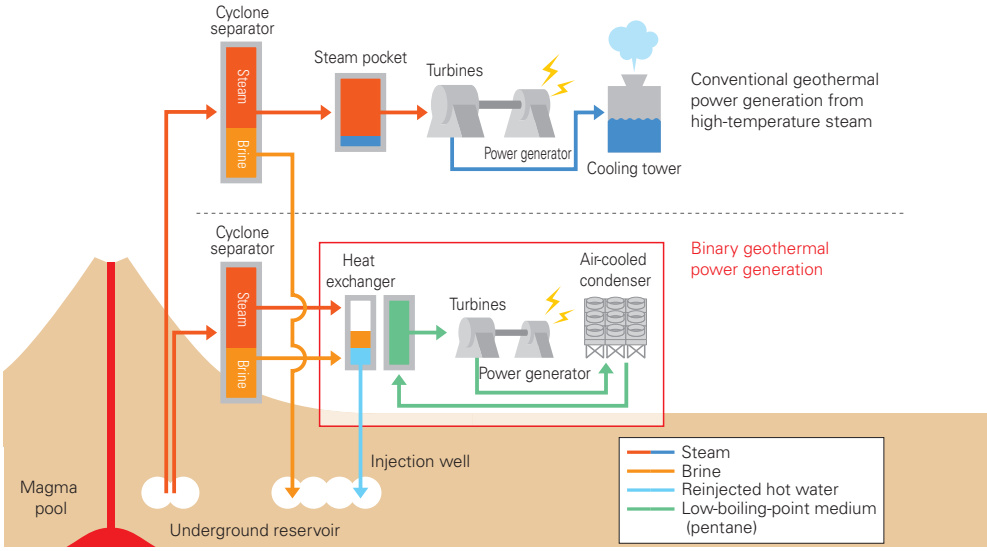
Zero-waste System

Geothermal Binary Power Generation

Geothermal power generation does not use fossil fuels. Moreover, it is capable of providing a stable supply of electricity regardless of the season or weather conditions. JFE's highly efficient system wastes neither low-temperature vapor nor brine, and uses turbines driven by motive fluid. It is also an environment-friendly system that does not release white smoke into the atmosphere, but reinjects 100% geothermal fluid back to reservoir.

Since constructing Japan's first geothermal power plant in Matsukawa, Iwate Prefecture, JFE has supplied steam production equipment over 50 years.

A plant in Ibusuki, Kagoshima Prefecture, began operating in October 2014, and construction of another plant in Fukushima is following up in 2015.

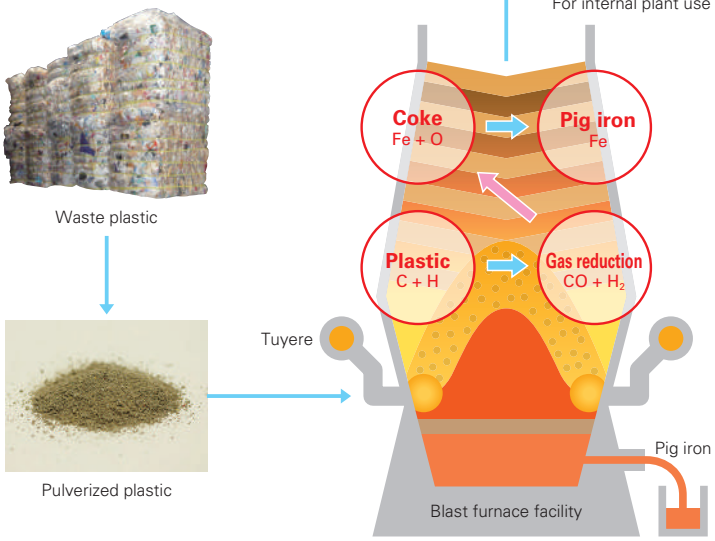


2 Expanding Resource Recycling

Society's Expectations for JFE

◉Provide resource-recycling solutions

Response



Saving Resources and Reducing CO_2 Emissions

Injecting Waste Plastic into Blast Furnaces

S JFE Steel became the world's first company to develop and commercialize a total process to recycle waste plastic as a reducing agent and blow it into blast furnaces in 1996. Using less coke to reduce iron ore lowers CO_2 emissions from blast furnaces. In 2007, JFE Steel commercialized pulverization technologies for waste plastic that more efficiently reduce iron ore in the blast furnace, leading to further resource conservation and CO_2 emissions reduction.

Commercial Biomass Power Generation

Green Energy Tsu

E T JFE Engineering is building a biomass power plant, named Green Energy Tsu, that will use carbon-neutral energy sources such as palm kernel shells and wood chips to generate 20 MW of energy, equivalent to the power needs of 43,900 households. Construction is underway on the grounds of the company's Tsu Works in Mie Prefecture, Japan and commercial operation is scheduled to begin in July 2016.

The wood chips are made with unused logs from local forest-thinning operations, which is also helping to vitalize the Mie economy.

JFE Shoji is contributing to the spread of renewable energy by establishing a stable supply system for palm kernel shells in Malaysia.

Rendering of completed plant

Loading palm kernel shells

Most Advanced Power-generation Efficiency

Waste Power Generation

JFE's Hyper Z Series, the cutting edge in stoker incinerator systems, is equipped with the waste power-generation field's most advanced technologies for high-temperature air injection and exhaust gas recirculation. JFE offers industry-leading efficiency to help communities meet their power and recycling needs.

In 2014, JFE developed the JFE Hyper Remote™ monitoring system, which connects the Yokohama headquarters and waste incineration plants operated by the company through a high-speed optical fiber network, enabling engineers at headquarters to remotely monitor the operation status of each plant.

3 Preserving Biodiversity

Society's Expectations for JFE

◉ Provide products and services that help preserve marine ecosystems

Response

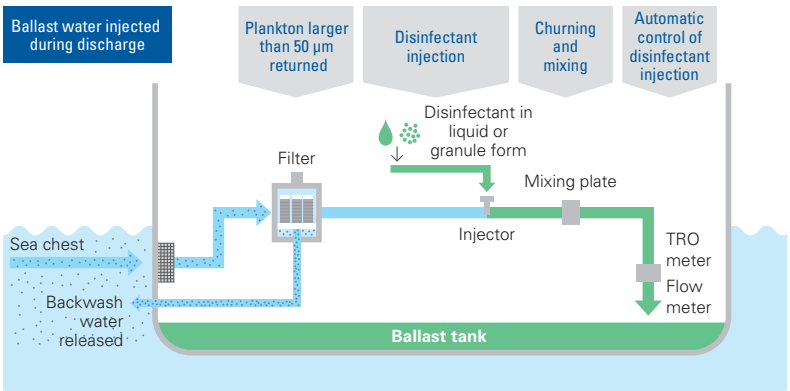
Restoring Marine Environments

Marine Stone™ from iron and steel slag

Marine Stone™ has the useful effect of suppressing hydrogen sulfide that arises from unhealthy seabeds and causes foul odors as well as harm to sea life. Marine Stone™ restores seabed environments and thereby improves these habitats for marine life. In addition, it can be used to create artificial reefs and provide bases for seaweed beds.

Marine Stone™

Seaweed growing on Marine Stone™



Preserving Ecosystems with Purified Ballast Water

JFE Ballast Ace™ Seawater Treatment System

JFE Ballast Ace™ is a water treatment system that removes marine organisms and disinfects seawater in the ballast tanks of ships. JFE Ballast Ace™ meets the requirements of the Enforcement of the International Ballast Water Control Convention, which calls for the installation of ballast water treatment devices in ships. JFE Ballast Ace™ systems have been installed in more than 700 ships as of June 2015.

Securing and Nurturing Diverse Human

To survive global competition in a rapidly changing business environment that continues to grow in complexity and diversity, JFE is hiring diverse personnel and developing globally capable human resources, as well as seamlessly handing down accumulated technical knowledge and skills to younger employees.

1 Enhancing Human Resource Development

JFE ensures that its knowledge and technology are passed on to future generations, and it is developing globally minded personnel who can demonstrate their talents worldwide.

Handing Down Technical Expertise

The age distribution of the JFE workforce is changing considerably as large numbers of baby-boomer employees retire and new personnel are hired. This situation has given rise to a pressing need to pass down technical knowledge and skills. Accordingly, each operating company is actively pursuing initiatives to ensure JFE's continued technological leadership, which lies at the heart of its competitiveness.

S JFE Steel introduced its Technical Expert Program in FY2013, under which veteran employees with excellent skills are assigned as dedicated trainers for each key process at the company's works. The Experts provide on-site guidance and training to strengthen technical capabilities, including the handling of non-routine, low-frequency tasks. About 160 Experts are currently deployed.

E To supplement existing job-specific training by veteran employees, JFE Engineering is introducing IT technologies such as direct-view cameras for welding and 3D design software.

Resources

Human Resource Management

To realize the corporate vision of contributing to society with the world's most innovative technology, JFE established its Basic Policy on Human Resource Management in April 2015. Along with the Fifth Medium-term Management Plan, the policy guides the activities of the entire JFE Group. Under the policy, every Group company develops specific measures tailored to its respective circumstances.

JFE Group's Basic Policy on Human Resource Management

1. Respect human rights and facilitate fair management of human resources
2. Foster a corporate culture that nurtures people and promotes satisfying workplaces
3. Diversify human resources
4. Recruit and steadily nurture excellent human resources

Developing Global Human Resources

Developing globally capable human resources is an integral component of the JFE Group's overseas expansion. In addition to hiring and developing non-Japanese for career-track positions in Japan and more local hires for overseas offices, JFE is enhancing programs for Japanese employees to gain overseas study and training. The company is also developing younger employees through practical experience by dispatching them on overseas assignments.

S JFE Steel is supporting its global expansion by offering technical personnel more opportunities to spend time overseas, including encouraging them to attend international academic conferences and enroll in language programs abroad. Since FY2014, 34 new recruits in administrative positions have been dispatched overseas to gain global business experience by visiting customers and providing sales assistance.

E As JFE Engineering grows its international business, it has been nurturing globally capable human resources. Younger employees are being assigned to overseas projects and dispatched to overseas subsidiaries. For local personnel at overseas subsidiaries, the company regularly organizes training at its head office in Japan to cultivate a corporate culture in which business is conducted smoothly across different cultures.

T JFE Trade is bolstering efforts to cultivate personnel who can perform at high levels both in Japan and abroad as the company vigorously develops its overseas business. Through overseas assignments and language courses, many employees are acquiring global business experience early in their careers. Management training at the Tokyo head office for overseas personnel is also helping to developing human resources.

2 Promoting Workforce Diversity

JFE, as part of its emphasis on workforce diversity, has developed strategies to maximize the individual potential of employees coming from varied lifestyles and family backgrounds.

Supporting Women in their Professional Development

JFE is implementing a broad range of initiatives to support female employees, such as increased hiring, enhanced childcare support programs that significantly exceed statutory requirements, and training and education organized by the Diversity Promotion Section. In recognition of its activities, JFE was named a Nadeshiko Brand company for the second consecutive year in March 2015. Under this project, organized by the Ministry of Economy, Trade and Industry and the Tokyo Stock Exchange, Inc., listed companies are recognized for actively supporting working women. JFE's initiatives were also introduced in the FY2015 White Paper on Manufacturing Industries (Monodzukuri), published by the Japanese government.

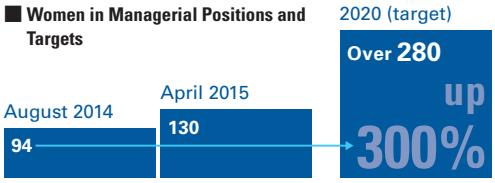
NADESHIKO BRAND 2014
NADESHIKO BRAND 2015

Web FY2015 White Paper on Manufacturing Industries (Monodzukuri) (in Japanese only) ➡
www.meti.go.jp/report/whitepaper/mono/2015/honbun_pdf

Managerial Positions for Women

To ensure steady progress in promoting women's careers, JFE set a target to triple the number of women in managerial positions by 2020. As of the end of August 2014, when the target was set, there were 94 female managers, or 1.8% of all managerial positions, at JFE Holdings, JFE Steel, JFE Engineering and JFE Shoji. By April 2015, the figure had risen by 40% to 130, or 2.5%. JFE will continue striving to achieve its target by 2020.

■ Women in Managerial Positions and Targets



Expanded Diversity Promotion

To boost the recruitment of women and non-Japanese employees, JFE Steel launched its Diversity Promotion Section in 2012 to organize training and educational activities, such as rank-based training and women's exchange meetings. JFE Engineering and JFE Shoji set up Diversity Promotion Sections in 2015 to expand these activities to other operating companies. JFE plans to expand these efforts by moving beyond simply exemplary cases to considering common initiatives for the Group.

Work Environments for Employees after Childbirth and Childcare

Sensitivity to Childcare Needs

In accord with the purpose of Japan's Equal Employment Opportunity Act for Men and Women, JFE treats men and women equally in terms of evaluation, pay and other systems. Programs for childcare support to enable employees to continue working comfortably after childbirth and childcare significantly exceed statutory requirements, such as childcare leave and shorter working hours, a company-operated childcare facility and childcare subsidies.

Preschool at JFE Children's Forest

- Childcare leave that can be extended until a child is 3 years old (S)
- Shorter working hours when a child is in elementary school (S)(E)
- Company-operated childcare facility (E)
- Childcare subsidy program (S)(T)
- Reemployment program for employees who left to care for children or another family member (S)(T)
- Information sharing for employees on childcare leave (T)

Sharing information about preparing to return to work

Web Promoting Diversity (in Japanese only) ➡
http://www.jfe-holdings.co.jp/environment/society.html

3 Securing Diverse Human Resources

To ensure sustainable growth, JFE steadfastly recruits from a diverse pool of applicants and actively hires women, foreign nationals and mid-career personnel. It also recruits year round.

Recruitment Plans and Results

Fifth Medium-term Management Plan
(FY2015–FY2017)

Between **1,200** and **1,300** persons

FY2015 Results

1,190 persons

- **Ratio of women in positions with prospects for promotion: 10% (46 out of 442)**
  Of the above, ratio of those in white-collar positions: 21% (26 out of 122)
- Ratio of foreign nationals in positions with prospects for promotion: 4% (15 out of 442)
- Ratio of mid-career and year-round recruits: 35% (407 out of 1,190)

  Of the above, ratio of recruits in positions with prospects for promotion: 33% (145 out of 442)

  Of the above, ratio of mid-career recruits in on-site positions at steelworks: 36% (262 out of 735)

S JFE Steel aims to have female workers account for 10% of new hires for non-clerical positions (FY2012: 19, FY2013: 22, FY2014: 24, FY2015: 48). The company also is striving to create a better working environment for women by building additional facilities, such as shower rooms and lavatories.

E JFE Engineering is seeking personnel with diverse cultures and values. The company is recruiting mid-career personnel as well as new graduates, with an increasing number of the former enjoying prospects for promotion every year. The number has risen from 40 in FY2013 to 97 in FY2014 and 128 in FY2015. It is also working to localize overseas bases more deeply by hiring local personnel.

T JFE Shoji is diversifying its workforce by introducing programs for recruiting new graduates from overseas universities and hiring of recent graduates who have decided for various reasons to leave the first company they joined after university. Both programs take place in October, traditionally a non-hiring period in Japan. It is also focusing on hiring mid-career personnel for positions with prospects for promotion.

4 Changing Work Styles

JFE is committed to managing working hours within appropriate limits to prevent unpaid overtime. It also has set up mental health counseling services to address issues associated with stress. Motivation and productivity are being enhanced by encouraging increased interaction among employees and improving two-way communication between management and labor. In addition, long working hours are being discouraged and measures to balance work and life are being promoted.

S JFE Steel is diversifying work styles by introducing discretionary working-hour programs for specialized operations in R&D departments. Flexible working hours are being adopted at steelworks, in addition to the head office and branch offices. Operations are being restructured by delegating significant authority for capital investment to individual steelworks and deploying IT tools, such as teleconferencing and desktop conferencing systems, aiming to speed up decision making and raise operational efficiency.

E JFE Engineering is nurturing a corporate culture of "coming early and leaving early" by designating 8 am to 4:45 pm as the standard working hours, and in principle prohibiting work after 8 pm. "SHAPE UP" activities are raising operational efficiency through systemization to reduce work with low added value by 20%. Work-life balance is being promoted with work schedules in which employees and their supervisors coordinate holidays in advance, and by designating days on which employees are encouraged to take paid leave or leave work on time.

T JFE Shoji has a Change of Work Time initiative to enhance employee health, promote work-life balance and improve productivity. In addition to the existing practice of designating Wednesdays as a day to leave work on time, the company has prohibited work after 10 pm since April 2015. The initiative has resulted in a significant reduction of overtime.

After-work club activity

Corporate Governance

Corporate Governance Policy

JFE is a holding company comprising three operating companies — JFE Steel, JFE Engineering and JFE Shoji Trade. As the core of JFE's integrated governance system, JFE Holdings guides Group-wide strategy, risk management and public accountability. Each operating company has developed its own system suited to its respective industry, ensuring the best course of action for competitiveness and profitability. The holding company and operating companies separately and collectively strive to maximize corporate value for shareholders and other stakeholders.

Management

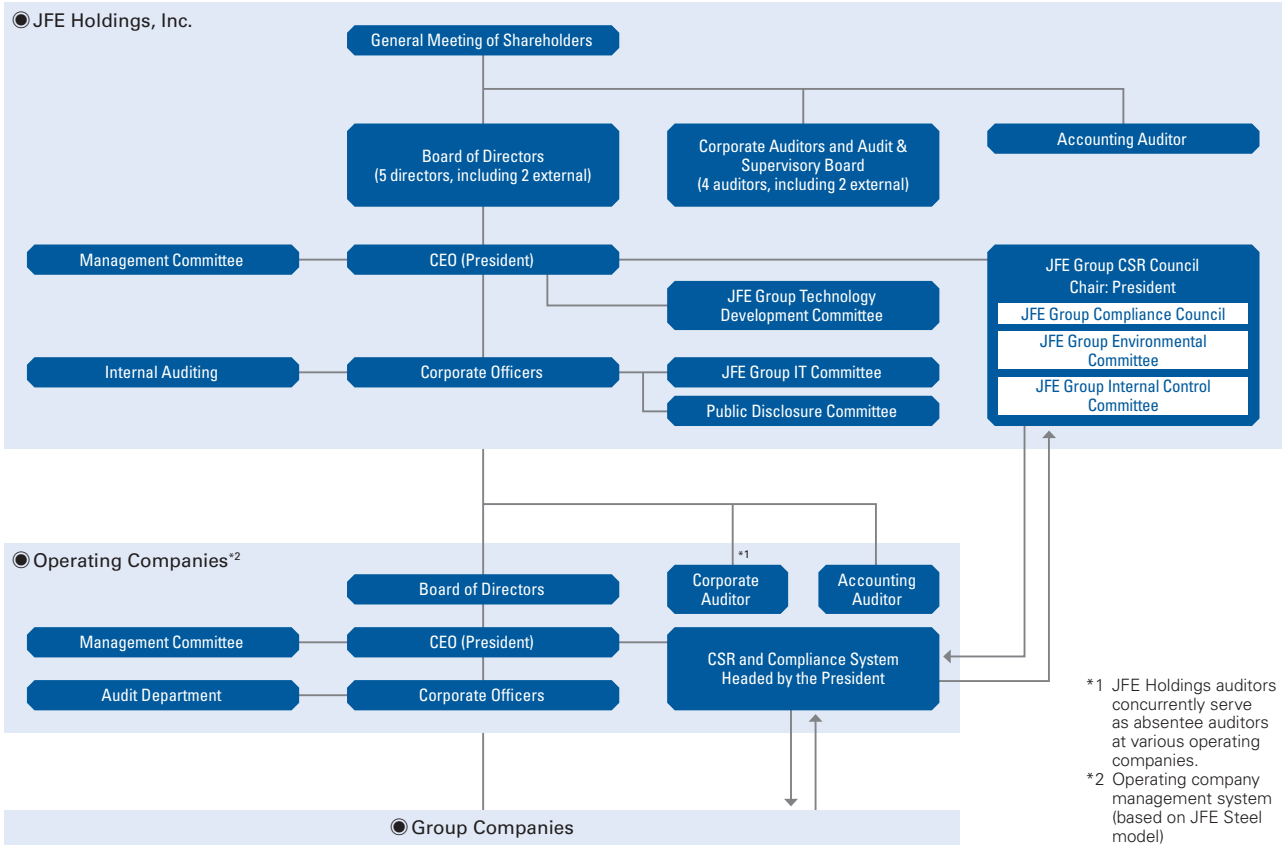
● Governance System

JFE Holdings and its operating companies all have auditors that are held in double check by the Board of Directors, which supervises operational execution, and the corporate auditors, who conduct the audits. Also, the corporate officer system is employed to separate decision making and execution for clarified authority and responsibility, as well as accelerated execution.

JFE Holdings' Board of Directors comprises five directors, including two external directors (both independent officers). The board seeks to maintain and improve management efficiency while making decisions on statutory issues, formulating important management policies and strategies, and supervising the execution of operations. An Audit & Supervisory Board comprising four auditors, including two external auditors (both independent officers), monitors and enhances the soundness of management.

■ Corporate Governance System

Arrows indicate lines of authority and reporting
Shaded areas indicate executive organizations



*1 JFE Holdings auditors concurrently serve as absentee auditors at various operating companies.
*2 Operating company management system (based on JFE Steel model)

JFE's governance system has been strengthened by reinforcing the fairness, objectivity and transparency of management with the aim of continuously increasing corporate value and profit for shareholders. Two external directors were added in 2007 and the term of directors was shortened from two years to one for greater versatility in developing an optimal management structure and greater clarity of responsibilities.

■ JFE Holdings External Directors and Auditors (as of July 1, 2015)

Position	Name	Major Concurrent Position
Member of the Board	Masafumi Maeda	Executive Vice President, University of Tokyo
Member of the Board	Masao Yoshida	Chairman, Furukawa Electric Co., Ltd.
Corporate Auditor	Hiroyuki Itami	Director of the School of Innovation Studies, Tokyo University of Science
Corporate Auditor	Shigeo Ohyagi	Chairman of the Board, Teijin Ltd.

● Key Decision Making

JFE companies are responsible for business decisions in accordance with their respective rules and procedures, whereas JFE Holdings makes decisions about Group-wide matters. Each operating company determines matters concerning the company and its affiliates through a deliberative process, after which the Board of Directors renders its decisions. JFE Holdings uses this same procedure for relevant matters important to the company, as well as key matters concerning operating companies or other Group businesses.

■ Structure of Management Committee

Company	Chairperson	Attendees
JFE Holdings	President	Corporate officers, president of JFE Steel, president of JFE Engineering, president of JFE Shoji Trade and corporate auditors
JFE Steel JFE Engineering JFE Shoji Trade	President	Directors, major corporate officers and corporate auditors

● Optimized Business Systems

Businesses within JFE utilize the best systems to optimize their products and operations, working to achieve unity between strategies and earnings.

■ Corporate Structures of Operating Companies

Company	System
JFE Steel	By center and sector
JFE Engineering	By business division
JFE Shoji Trade	By sales division

● Group-wide Management Bodies

Technology development, IT issues and CSR initiatives shared across the Group are deliberated by Group-wide management bodies.

Group Committees

- JFE Group Technology Development Committee
- JFE Group IT Committee
- Public Disclosure Committee
- JFE Group CSR Council

Internal Controls

JFE's internal control system, which includes risk management, is governed by the Basic Policy for Building Internal Control Systems. Rules based on this policy govern organizational and operational matters, information storage and management, countermeasures against criminal groups, and meetings of bodies such as the Board of Directors, Management Committee and JFE Group CSR Council. A Corporate Ethics Hotline has also been established. To enhance corporate value, the basic policy for internal control was partially revised in FY2014 to make necessary improvements.

Web Basic Policy for Building Internal Control System (in Japanese only) ➡
http://www.jfe-holdings.co.jp/company/h-gaiyo/naibutousei.pdf

● Strengthening Internal Controls

Internal Audits

JFE Holdings, its principal operating companies and key Group companies had internal audit organizations comprising 175 people as of April 1, 2015. The organizations share information to enhance overall auditing within the Group.

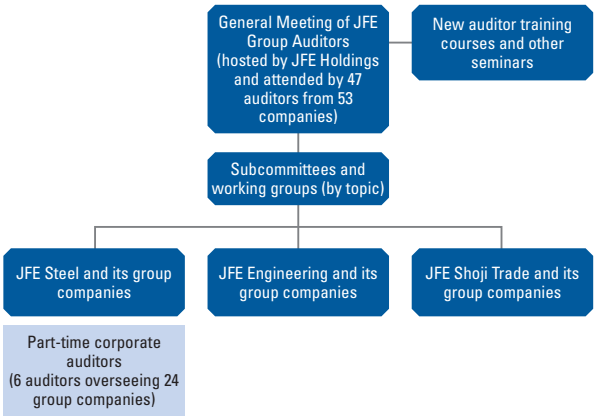
Internal audit managers of principal operating companies serve concurrently as internal audit managers of JFE Holdings for stronger ties within the Group.

Audits by Corporate Auditors

Corporate auditors attend meetings of the Board of Directors and the Management Committee as well as other important meetings. They audit the manner in which directors execute their responsibilities by conducting hearings on operational status from directors and corporate officers and by receiving operational reports from subsidiaries. In addition to undergoing statutory audits, JFE companies take the following initiatives to ensure the effectiveness of internal auditing by corporate auditors and to strengthen coordination among corporate auditors.

- A total of 41 full-time auditors have been appointed to 32 companies, including JFE Holdings. Operating company personnel are dispatched to Group companies as part-time external corporate auditors. Each absentee auditor serves three or four subsidiaries to raise the quality of the audits by their corporate auditors and enhance Group governance. Six absentee auditors served 24 companies in total.
- The JFE Board of Auditors includes both full-time auditors of each Group company and absentee auditors. Subcommittees and working groups created to address specific issues meet autonomously throughout the year to share information, research issues and enhance understanding (see diagram). The results of their activities are presented at the General Meeting of JFE Group Auditors and are reflected in the activities of individual corporate auditors.

■ Structure of JFE Group Board of Auditors



Cooperation between Corporate and Accounting Auditors

The corporate auditors hold scheduled and unscheduled meetings (ten in FY2014) with the external accounting auditor (Ernst & Young ShinNihon) in which the latter presents its audit plan, actual work and detailed results.

The corporate auditors also receive detailed explanations regarding the accounting auditor's quality management system to confirm its validity. The corporate auditors explain their own audit plans and other matters to the external accounting auditor, and the two sides share opinions on related matters.

Cooperation between Corporate Auditors and Internal Auditing Department

The corporate auditors hold scheduled and unscheduled meetings (four in FY2014) with the internal auditing department in which the latter presents its internal audit plan, work status and detailed results. During the meetings the corporate auditors also share opinions with the department.

Operating Company Governance

To strengthen governance, JFE Holdings managers attend each operating company's General Meeting of Shareholders and Management Planning Briefing, receive reports on their business activities, discuss managerial policies and engage in other forms of shareholder oversight as representatives of the holding company.

JFE CSR System

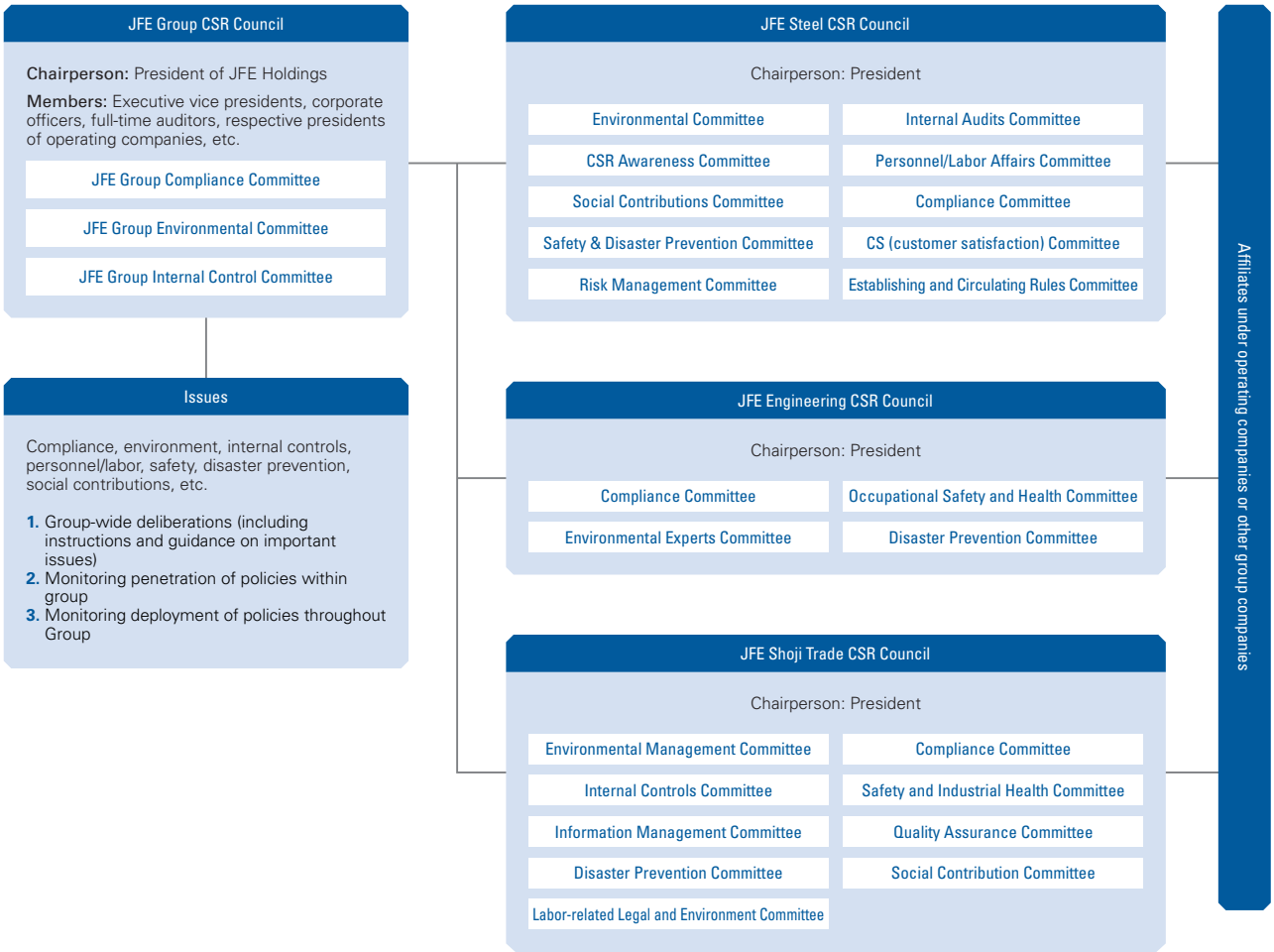
JFE, aiming to contribute to the betterment of society as a responsible member, has made the implementation and ongoing strengthening of corporate social responsibility (CSR) central to its business. The JFE Group CSR Council, which was established by JFE Holdings in October 2005 and convenes quarterly, chaired by the company president, supervises JFE CSR activities and related issues such as compliance, the environment, human resources, safety, disaster prevention, social contributions, and countermeasures against criminal groups. Related Group-wide bodies, including the JFE Group Compliance Committee, JFE Group Environmental Committee and JFE Group Internal Control Committee, report to the Council.

● CSR Audit

To ensure that CSR activities are conducted properly, JFE systematically conducts internal audits of environmental management, Antimonopoly Law compliance, expense management, overseas office management, tax law compliance, safety management and disaster prevention.

If an audit reveals a problem, the internal audit departments of JFE Holdings and its related operating companies share information to support the implementation of correct measures in CSR activities throughout JFE.

■ CSR Promotion Structure



Compliance

Basic Policy

Compliance lies at the foundation of JFE. Compliance with laws and ethics is vital to maintaining integrity and soundness in business because it helps to ensure that all members of the organization deepen their knowledge and awareness of compliance and act accordingly on a daily basis. To that end, JFE is strengthening related systems and implementing measures for thorough compliance.

Compliance System

JFE has a Standards of Business Conduct to help employees implement corporate activities based on the Corporate Vision, as well as these Standards, and to cultivate awareness among all JFE Group executives and employees to ensure rigorous adherence to corporate ethics.
JFE also has a Compliance Council. Chaired by the president, it generally convenes on a quarterly basis to deliberate basic policies and key issues, and supervise their implementation. Each operating company also has its own system for promoting and supervising compliance in business through similar committees. In addition, operating companies have introduced a Corporate Ethics Hotline to ensure that important information regarding compliance is directly communicated from their front lines to top management.

Ensuring Thorough Compliance

● Using the Guidebook Effectively

As part of its ongoing effort to raise compliance awareness, JFE has compiled a Compliance Guidebook that is distributed to executives and employees. In response to global business development, an English language version of the guidebook has been created for use by staff members in overseas offices.
The guidebook presents over 100 case studies written in plain language to help employees understand JFE's standards for complying with laws and regulations, as well as internal rules based on social norms. Situations occurring in daily operations that can be unclear or confusing are provided, with each case accompanied by an explanation prepared by the relevant department and reviewed by an attorney for legal compliance. JFE Shoji Trade also has its own version of the Compliance Guidebook, containing explanations of 25 case studies that are unique to the trading business.

● Compliance Training

JFE conducts compliance training on topics such as antimonopoly law, insider trading, security export controls, the Construction Business Act, and the Foreign Corrupt Practices Act. Compliance education includes training for everyone from managers to new hires. In addition, JFE Steel and JFE Shoji Trade provide training through e-learning.

■ Compliance Training Conducted by Each Company

Company	Group Training		E-learning
	Number of Courses	Attendees*	Number of Attendees
JFE Steel	48	2,471	Approx. 4,000
JFE Engineering	67	2,610	—
JFE Shoji Trade	57	380	—

* Aggregate total

● Compliance Rules Awareness Activities

Each year in October, JFE Steel observes its Compliance Month and conducts compliance-awareness activities. Each department in Japan and overseas has sessions in which participants read legal texts, internal regulations and other materials and information placed in the Compliance Guidebook or posted on the company intranet by the Legal Affairs Department. Such efforts foster greater awareness of compliance and encourage employees to consider if their work practices are in compliance. Based on activities conducted during Compliance Month, work practices and company rules are revised as required.

JFE Shoji Trade conducts readings of its internal regulations and other rules on three separate occasions every quarter. It also conducts its own Compliance Month, during which employees participate in readings of the guidebook and discussions to deepen understanding and awareness.

Formulation of Basic Policy on Preventing Bribery

To ensure that global business expansion proceeds appropriately, the JFE Group established the Group Basic Policy on Preventing Bribery of Foreign Public Servants in February 2015. The text has been disseminated throughout the Group in Japan and abroad.

Antimonopoly Law Compliance Initiatives

JFE Steel and JFE Engineering seriously view past violations of the Antimonopoly Law and continue to implement thorough measures for eliminating the possibility of future infringements. The internal audit departments of both companies constantly monitor contact with other companies to avoid Antimonopoly Law violations. They also check to see that initiatives aimed at promoting legal compliance are functioning properly. Audits are regularly conducted at all business locations, including branch offices. In addition to the operating companies, other Group companies also implement related compliance initiatives.

● Key Initiatives

JFE Steel and JFE Engineering have undertaken the following key initiatives:

- Commitments by top management
- Antimonopoly Law training based on specific cases of how violations can seriously impact companies and individuals
- Upgraded regulations to better clarify how violations could lead to disciplinary action
- Strengthened rules on contact with other companies in the same industry

In addition, JFE Steel monitors the activities of external organizations to which its sales department belongs, and JFE Engineering works to ensure that its order-acceptance process is transparent.
JFE Shoji Trade pursues initiatives such as providing training and e-learning on the Antimonopoly Law, conducting surveys on the state of legal compliance and organizational membership, and recording contacts with companies operating in the same markets.

Rejection of Organized Crime

The JFE Group Policies for Addressing Antisocial Forces works to ensure sound company management through uniform organization-wide measures under JFE's compliance system in response to antisocial (organized crime) activities.

JFE has its own Regulations for Addressing Violence Directed at Companies, including a manual on the initial steps that should be taken in responding to violence targeting companies.

Awareness Surveys for Confirmation and Improvement

JFE conducts its Corporate Ethics Awareness Survey to quantitatively assess employees' awareness of ethics, identify possible risks and help employees stay informed about JFE's corporate vision.

Recent surveys indicate that many employees believe compliance awareness and behavior have strengthened at JFE. In particular, awareness of corporate policies and values is thought to have improved greatly, and compliance systems and activities are said to have steadily taken hold among employees.

The results of these awareness surveys are reflected in practical measures aimed at overall improvement of the company, including employee training.

Internal Whistleblowing System

JFE's Corporate Ethics Hotline helps to ensure that important information regarding compliance is communicated from the front lines to top management rapidly and accurately. The hotline is operated under rules and regulations that protect people who report information or seek advice. After the facts of a case are reviewed, the outcome is communicated to the caller. Open to all Group companies, the system serves as a pillar of compliance enhancement in JFE.

■ Cases Handled by Corporate Ethics Hotline

Company	2013	2014
JFE Holdings and operating companies (JFE Steel, JFE Engineering and JFE Shoji Trade)	42 cases	40 cases

Risk Management

Risk Management System

JFE Holdings is responsible for comprehensive risk management in accordance with the Basic Policy for Building Internal Control Systems. The JFE Group Internal Control Committee, which reports to the JFE Group CSR Council, collects pertinent information to support efforts to reduce the frequency and impact of risks. The relevant executive officer works to identify potential risks associated with business activities, ethical and regulatory compliance, and disclosure of financial reports and information. If potential risks are identified, they are confirmed and assessed by the related organization for possible deliberation and deployment of countermeasures as required.

Response to Risks

● Intellectual Property Management

JFE meticulously manages intellectual property across its diverse business activities. To prevent infringing on third-party intellectual property, JFE monitors the latest information on intellectual property related to its business and implements all necessary measures. It regularly provides training on the topic for employees. With regard to intellectual property owned by the Group, efforts are underway to bolster competitiveness by improving collaboration between business and R&D divisions, while also exercising intellectual property rights to protect and build on such achievements.

● Privacy Protection

JFE has formulated the Basic Policies for Protection of Personal Information on the handling of personal information. Under these policies, JFE protects personal information in accordance with internal rules concerning information management, and by informing, educating and training employees on these rules and other applicable laws and ordinances.

● Information Security

JFE established the Information Security Management Regulations to prevent the improper use or leakage of information within the Group. The regulations are regularly revised by drawing on information and examples of incidents from external institutions. Implementation is strengthened by providing guidance and training for employees and by conducting audits based on checklists.

Major Security Initiatives of the JFE Group

Prevention of Improper Use of Information

1. Authentication measures of JFE's integrated security system
2. Personal computer startup authentication using passwords and additional factors (IC cards, etc.)

Prevention of Information Leaks

Measures against Loss or Theft

1. Biometric authentication for server room access
2. Office-access control
3. Use of security wires to protect hardware
4. Hard disk encryption for mobile computers
5. Encryption of removable media

Measures against Information Leaks

1. Limits on use of removable media and maintenance of logs
2. Checking e-mail sent to external parties
3. Retention of all e-mail sent to internal and external parties
4. Limits on use of Web-based e-mail
5. Limits on use of Web-based bulletin boards, etc.
6. Preventing access to the Group network via un-authorized computers

Measures against External Threats

1. Measures to prevent malware
2. Firewall restrictions on outside access
3. Detecting and protecting against suspicious communications

Protecting the Environment

JFE Group CSR REPORT 2015

Environmental Management

Environmental Philosophy and Strategies

JFE has adopted an environmental philosophy and pursues related strategies that actively promote the development of innovative technologies and international cooperation to protect the global environment.

Environmental Philosophy

JFE puts top priority on protecting and enhancing the global environment to maintain its business in harmony with the environment, ultimately for the prosperity of society as a whole.

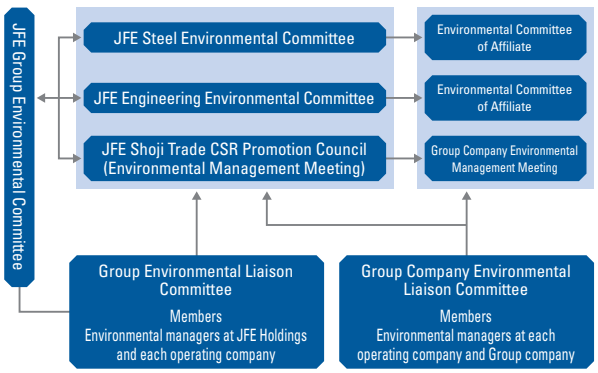
Environmental Strategies

1. Reduce the environmental impact of all JFE businesses
2. Contribute through technologies and products
3. Conserve resources and energy
4. Communicate with society
5. Facilitate international cooperation

JFE Group Framework for Environmental Management

The JFE Group Environmental Committee, chaired by the president of JFE Holdings and operating under the JFE Group CSR Council, manages environmental issues by setting objectives for environmental protection, monitoring progress and working to improve environmental performance. Specialized committees set up by each operating company and affiliate implement specific corporate activities.

■Environmental Management System



Environmental Management System

Acquisition of ISO 14001 certification is an important part of each JFE company's voluntary environmental program. All JFE Steel and JFE Engineering production sites and major JFE Shoji Trade business offices in Japan and abroad have received certification, encompassing 73% of 36,297 employees at 79 companies covered in this report.

S JFE Steel has the Environment Management Department at its head office and in each business office, as well as the Environmental Committee chaired by the president and the Environment Management Committee in each local office. All JFE Steel production sites have obtained ISO 14001 certification, as have 16 of 33 major subsidiaries, for all operations or those centered on production.

E JFE Engineering has maintained its ISO 14001 certification since initially being certified in 1999. Its environmental management system in Japan encompasses production sites in Tsurumi and Tsu, construction sites, Yokohama head office and branch offices in Osaka and Nagoya. Of JFE Engineering's 11 major group companies, four have obtained ISO 14001 certification.

T JFE Shoji Trade obtained ISO 14001 certification for its Tokyo head office, Osaka head office and Nagoya branch in 2000. This was followed by the certification of 16 branch and sub-branch offices and 76 business sites of 22 group companies, including seven manufacturing subsidiaries in Japan, enabling environmental management throughout the JFE Shoji Trade group. Overseas, 11 manufacturing subsidiaries have also obtained ISO 14001 certification.

Environmental Auditing

In addition to auditing by ISO 14001 certification organizations, certified operating companies are also audited internally by specialized auditors trained by external organizations.

S Once a year, the Audit Department and the Environment, Disaster Prevention and Recycling Department at JFE Steel's head office conduct an environmental audit at each operational site. Companies are grouped on the basis of the results of risk assessments that take sites and other aspects into account. Also, extensive audits using a self-check sheet are conducted every one to five years. A total of 189 business sites of JFE Steel group companies require auditing, of which 26 were audited in FY2014.

Environmental audit

E JFE Engineering places top priority on compliance with environmental laws and regulations. It conducts environmental inspections of all construction sites to confirm legal compliance in daily operations. In addition, each year about 50 sites are selected from among Japanese manufacturing sites in Tsurumi and Tsu, construction sites in Japan and group company sites for auditing by the Safety and Environment Department regarding their compliance with environmental laws and regulations.

T At JFE Shoji Trade, the Environmental Management Team of the head office's Audit Department conducts an environmental audit of all group companies in Japan, generally on a three-year cycle. The audits primarily focus on confirming legal compliance related to noise and vibrations at manufacturing affiliates and for waste at sales affiliates.

Environmental Education

JFE actively provides education to enhance its corporate culture of environmental protection in which all employees participate. Education at operating companies includes training for new recruits and newly promoted employees, and for environmental preservation activities by position and job.

S JFE Steel encourages employees to obtain qualifications as pollution control managers. In FY2014, 71 persons were qualified, bringing the total since 2005 to 1,235 people. In FY2011, a new training program was launched for environmental managers in group companies. The program was held three times in FY2014. In addition, the JFE Steel group's Environmental Liaison Committee trains employees in compliance with environmental laws once a year and in disseminating regulatory revisions twice a year. Training to brush up the waste-management skills of on-site personnel takes place four times a year.

E JFE Engineering provides education on general environmental issues to raise employee awareness. It also conducts environment-related training for specific operations and organizes three types of training according to employee tasks and responsibilities, placing a particular focus on enhancing the understanding of environmental laws and regulations. Employees of group companies also attend environmental education courses aimed at ensuring compliance and raising awareness of environmental protection initiatives throughout the JFE Engineering group.

T JFE Shoji Trade has created its own checklist on compliance with environmental laws, which is distributed to all group companies as part of environmental education. Each company performs a self-check to ensure understanding and rigorous compliance. In addition, under ISO 14001, the company annually provides training on general environmental issues for all employees and training for internal audit staffers. It also offers information on regulatory revisions and laws and regulations to employees responsible for environmental management at JFE companies.

Environmental Accounting

● Basic Approach

JFE is saving energy and reducing environmental loads by making its production facilities more efficient and by introducing more environmentally friendly equipment. These investments, which are booked as environmental costs, cover equipment, facilities and related expenditure for environmental protection or load reduction.

● Environmental Investment and Expenses

Environmental capital investment totaled ¥20.3 billion and expenses amounted to ¥126.6 billion in FY2014. In terms of capital expenditure, ¥9.3 billion was invested in energy savings and global-warming countermeasures, followed by ¥6.1 billion for air-pollution countermeasures and ¥1.8 billion for industrial water recycling. Expenses for environmental activities included ¥37.9 billion for global-warming countermeasures, ¥37.3 billion for air-pollution countermeasures and ¥18.5 billion for industrial water recycling. Environmental R&D expenses came to ¥12.2 billion and environmental capital investment as a percentage of overall capital investment was roughly 28%.

● Capital Investment

To save energy and reduce environmental loads stemming from production, JFE actively invests in environmental technologies for plants and equipment. Cumulative investment in energy savings, totaling ¥452.8 billion since 1990, has enabled JFE to achieve energy efficiencies that are among the highest in the world. In total, JFE has invested ¥613.4 billion in environmental protection since 1973.

● Results of Environmental Activities

Environmental protection costs include efforts to lower unit-based CO_2 emissions to prevent global warming and measures to reduce final disposal waste and conserve natural resources through recycling. Other benefits include reducing discharges of airborne and waterborne substances with pollution loads and compliance with statutory regulations concerning exhaust gas emissions and discharged water. The monetary value of energy savings realized through environmental capital investments and expenses in FY2014 is estimated at about ¥1.8 billion.

■ Breakdown of Environmental Costs

Main Items		FY2013		FY2014	
		Investment (million yen)	Cost (million yen)	Investment (million yen)	Cost (million yen)
Management	Monitoring and measurement of impact, EMS expenses and education	100	2,400	10	2,400
Global warming countermeasures	Energy saving and efficient use of energy	8,400	39,200	9,300	37,900
Conservation of natural resources	Recycling industrial water	800	17,600	1,800	18,500
	Recycling and waste management of internally generated materials, etc.	100	4,500	10	5,400
Environmental protection	Air pollution countermeasures	12,300	33,600	6,100	37,300
	Water pollution countermeasures	1,900	9,900	1,500	9,500
	Prevention of soil contamination, noise, vibration and subsidence	10	1,400	70	1,100
Other	Charges, etc.	–	1,400	–	1,400
R&D	Technologies for protecting the environment, saving energy and preventing global warming	4,400	13,100	1,500	12,200
Societal activities	Support for nature conservation and forestation activities, information disclosure, exhibitions and public relations	–	700	–	900
Total		**28,000**	**123,800**	**20,300**	**126,600**

Note: Data covers all investment activities of JFE Steel Corporation and R&D activities of JFE Engineering Corporation.

Value Chain Initiatives

Basic Approach

Under the concept of life cycle assessment, JFE strives to reduce environmental loads throughout its supply chains. Also, operating companies work with business partners to reduce their use of materials that have environmental loads.

Promoting Green Procurement

JFE procurement policies help to conserve resources and protect the environment by ensuring adherence to all laws and regulations, as well as procurement principles stated in the Charter of Corporate Behavior developed by the Japan Business Federation. Going forward, JFE expects to accelerate efforts related to supply chains.

Environmental Risks and Opportunities

Preventing Global Warming

The steel business accounts for 99.8% of JFE's CO_2 emissions, so reducing emissions from steelmaking processes is a major goal. Along with helping Japanese steelmaking processes to achieve the world's highest levels of energy efficiency, JFE has played a key role in reducing CO_2 emissions worldwide through international cooperation. JFE also helps to reduce emissions by offering proprietary high-performance steel materials that save energy, and it develops engineering technologies for renewable energy sources. Stricter regulations on global CO_2 emissions could place certain restrictions on JFE activities centered on steel, but new regulations also present opportunities for growth and heightened competitiveness in increasingly low-carbon societies. JFE is committed to achieving greater energy savings by continuously developing innovative technologies.

Prevention of Pollution

JFE steadfastly complies with pollution regulations through investment in environmental protection. Its transfer and widespread application of proprietary technologies, mainly in developing countries, are contributing to pollution prevention on a global scale. To avoid any impact on earnings due to regulatory sanctions resulting from noncompliance, JFE is steadily strengthening related internal controls and education.

Resource Recycling

Economic growth in emerging countries is intensifying the needs to conserve nonrenewable resources and prevent pollution. Addressing these issues requires a gradual decoupling of resource use and economic growth on a global scale. JFE is striving to raise its rates of recycling byproducts from steelmaking and reducing waste at construction sites. The company is also utilizing its steelworks infrastructure to develop recycling businesses and export iron scrap as a recyclable resource. Going forward, JFE will continue contributing to sustainable societies by providing further solutions for resource recycling.

Products and Services

Tighter regulations and energy conservation in low-carbon societies may significantly alter JFE's business environment, but the development of products and services that can compete in these greener markets presents major opportunities. JFE possesses proprietary products and services for reducing environmental impact and restoring the environment, such as high-performance steel materials that help save energy, engineering technology for renewable energy sources and steel slag products that can help restore marine environments for biodiversity preservation. JFE products and services contribute to sustainable societies by disseminating the world's most advanced energy-saving and environmental technologies across the globe. Through continued technology development, JFE will share advances that meet the world's highest standards for environmental protection.

Main Environmental Targets and Results

		FY2014 Targets
Management	JFE Steel	● Continue to improve environmental management systems, including in Group companies
		● Voluntary activities for environmental preservation
	JFE Engineering	● Enhancement of Group-wide compliance
	JFE Shoji Trade	● Enhancement of Group-wide compliance
Global Warming Prevention	JFE Steel	● Continue global-warming measures under the Low-Carbon Society Action Plan ● Low-Carbon Society Action Plan targets (according to the Japan Iron and Steel Federation) ● Reduce CO_2 emissions by five million tonnes in 2020 compared to business as usual
	JFE Engineering	● Reduce CO_2 emissions and other environmental loads through products and services: Establish targets for the R&D, planning and design sections of each division and implement environmentally friendly initiatives including prevention of global warming
		● CO_2 emissions from business activities Reduce unit energy consumption by an average of 1% for 5 years in accordance with the Energy Saving Act (equivalent to or exceeding the voluntary action plan targets of the Japan Society of Industrial Machinery Manufacturers)
	JFE Shoji Trade	● Reduce electricity consumption
		● Reduce copy paper usage
Pollution Prevention	JFE Steel	● Cut dioxins emissions to less than 5.5 g-TEQ per year on average between FY2012 and FY2016 under a new reduction plan in Japan
Resource Recycling	JFE Steel	● Reduce dust and sludge and promote recycling
	JFE Engineering	Set targets for each division relevant to the scope of work at construction sites. Targets are to be set based on the following minimum values: ● Recycle at least 99.5% of rubble ● Recycle at least 95.0% of sludge ● Recycle at least 85.0% of industrial wastes (excluding rubble and sludge)

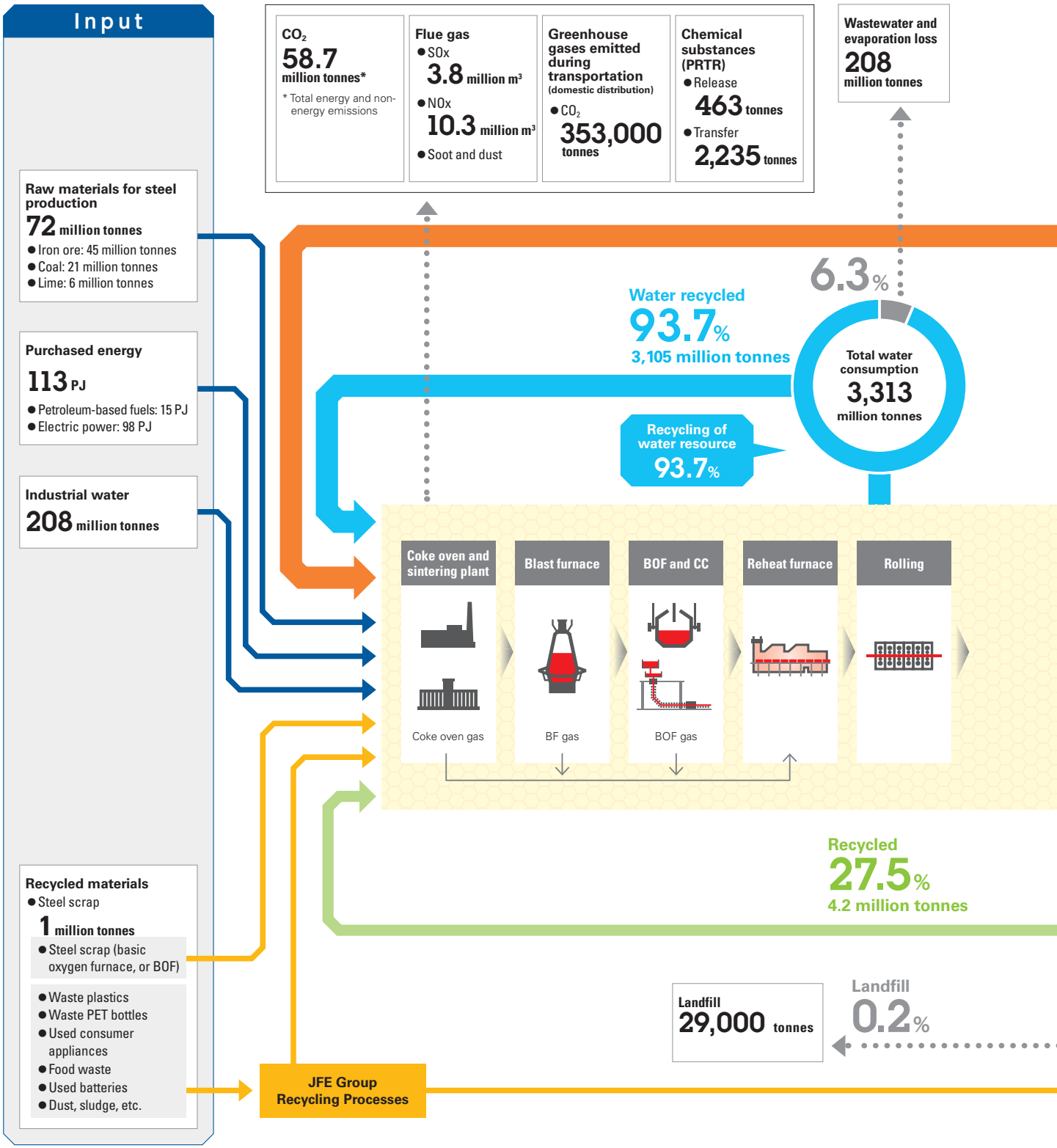
○: Target exceeded △: Target partially achieved ×: Target not achieved

	FY2014 Results	Evaluation	FY2015 Targets	Pages
	● Group Liaison Committee met twice to discuss compliance with environmental laws and regulations ● Uniformly confirmed and followed up on legal compliance	○	● Continue to improve environmental management systems, including in Group companies	27
	● Conducted environmental management training for new managers (three times for 73 participants) ● Conducted environmental auditing at all of JFE Steel's manufacturing sites and 26 offices of Group companies	○	● Voluntary activities for environmental preservation	28
	● Conducted environmental inspections at all construction sites ● Conducted a Group-wide environmental compliance audit	○	● Conduct environmental inspections at all construction sites ● Enhancement of Group-wide compliance	28
	● Self-confirmed legal compliance ● Conducted an environmental audit of Group companies	○	● Continue to self-confirm legal compliance	28
	● Implemented the Eco-Processes, Eco-Solutions, Eco-Products ("Three Ecos") initiative and COURSE 50 program for developing innovative steelmaking processes	○	● Continue global-warming measures under the Low-Carbon Society Action Plan ● Low-Carbon Society Action Plan targets (according to the Japan Iron and Steel Federation) ● Reduce CO_2 emissions by five million tonnes in 2020 compared to business as usual	35-38
	● Achieved 59 targets established Company-wide	○	● Reduce CO_2 emissions and other environmental loads through products and services, including through R&D, planning and design targets in each division	39, 45-46
	● CO_2 emissions increased an average 0.7% per year from FY2010 to FY2014	△	—	39
	● Reduced electricity consumption by 50% compared to FY2001	○	● Maintain measures for reducing electricity consumption	39
	● Reduced copy paper usage by 6.0% compared to FY2001	○	● Maintain measures for reducing copy paper usage	39
	● Achieved emissions below 5.6 g-TEQ per year (5-year average)	○	● Cut dioxins emissions to less than 5.5 g-TEQ per year on average between FY2012 and FY2016 under a new reduction plan in Japan	–
	● Kurashiki: Reduced volume of waste by turning oil-containing sludge into a valuable resource Reduction: FY2013: 800 tonnes → FY2014: 2,100 tonnes	○	● Reduce dust and sludge and promote recycling efforts ● Kurashiki: Reduce volume of waste from 2,100 tonnes in FY2014 to 3,000 tonnes in FY2015	43
	Achieved all targets for 7 divisions involved in construction work (total for construction work at all divisions) ● Recycled 99.6% of rubble ● Recycled 100.0% of sludge ● Recycled 93.3% of industrial wastes (excluding rubble and sludge) ● Total volume of industrial waste: 109,072 tonnes	○	Set targets for each division relevant to the nature of work at construction sites. Targets are to be set based on the following minimum values: ● Recycle at least 99.5% of rubble ● Recycle at least 95.0% of sludge ● Recycle at least 85.0% of industrial wastes (excluding rubble and sludge)	43

Materials Flow

JFE Steel is striving to reduce environmental loads while using resources more effectively in its steelmaking processes. The company recycles 93.7% of the water it uses for production and uses 99.8% of the byproducts, such as iron-steel slag. Also, 100% of the byproduct gas generated during production is reused as fuel for reheating slabs, generating power for internal use and supplying power to the public.

JFE Steel



Supply Emissions

Output

Consumed by JFE Steel **65.7%**

Supplied to society **34.3%**

Recovered energy for recycling
- Byproduct gas
- Waste heat recovery steam
- Power generation by blast furnace (BF) top-gas-pressure recovery turbine (TRT)

Effective use of recovered energy **100%**

Energy supply
34.3%
- Power
- Fuel gas
- Steam

Shipments

Steel product
28.4 million tonnes
(crude steel base)

Other products
- Chemicals
- Oxygen
- Nitrogen
- Hydrogen
- Argon

Effective use of byproducts **99.8%**

Byproducts
15.2 million tonnes
Slag: 12.2 million tonnes
Dust: 2.3 million tonnes
Sludge: 600,000 tonnes
Other: 100,000 tonnes

Supplied **72.3%**

Marine & land civil engineering materials
11.0 million tonnes
- Materials for cement
- Roadbed materials
- Port & harbor construction materials
- Fertilizer

Recycled products
- NF Board™
- PET flakes
- Palettes
- Recycled resin

Community, Environment, and Society

JFE Engineering (Head Office and Works)

Input

Steel	54,809 tonnes
Energy	
• Electric power purchased	28.6 GWh
• Class A heavy oil	294.2 kl
• Kerosene	46.9 kl
• Light oil	206.2 kl
• Gasoline	12.2 kl
• City gas	482,802 Nm³
• LPG	129.6 tonnes
Water	95,818 tonnes

JFE Engineering

- Tsurumi Works
- Tsu Works

Output and Emissions

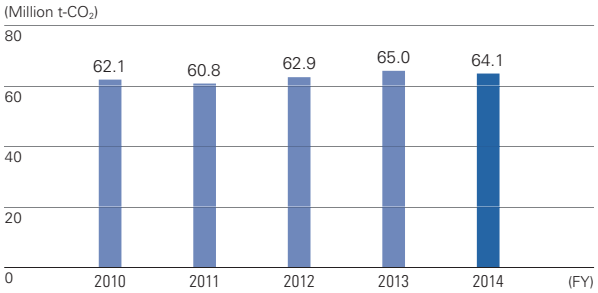
Products	41,963 tonnes
Air pollutants	
• CO_2	20,321 tonnes
• NOx	70 ppm
• Soot and dust	0.005 g/Nm³
Waste generated	1,199.2 tonnes
Wastewater	156,724 tonnes
Others (PRTR)	123.9 tonnes

Global Warming Prevention

CO_2 Emissions by JFE Group

JFE's CO_2 emissions are mainly generated by its steel business. Each operating company, however, sets targets to save energy and further reduce CO_2 emissions.

■ CO_2 Emissions of JFE Group



Scope: Data cover 79 companies, including JFE Steel and 31 major domestic and overseas affiliates, 2 companies accounted for by the equity method, JFE Engineering and 11 major domestic affiliates, and JFE Shoji Trade and 32 major domestic and overseas affiliates.
Note: The scope is expanded and corrected retroactively for past fiscal years to ensure uniformity.

■ CO_2 Emissions, by Operating Company (FY2014)

JFE Steel	JFE Engineering	JFE Shoji Trade
64,021,000t-CO_2	72,000t-CO_2	30,000t-CO_2
99.84%	0.11%	0.05%

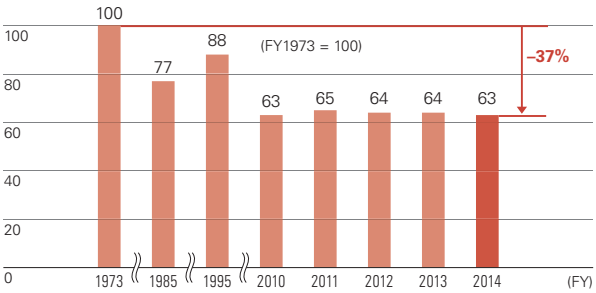
Energy Savings and CO_2 Reduction in Steelmaking

JFE Steel strives to save energy and reduce CO_2 in its steelmaking processes, including by carrying out plans set forth by the Japan Iron and Steel Federation.

● Initiatives to Save Energy and Reduce CO_2

JFE Steel had been proactively promoting CO_2 reduction and energy savings, including the introduction of energy-saving equipment, before the Japan Iron and Steel Federation introduced its voluntary action plan.

■ Unit Energy Consumption at JFE Steel



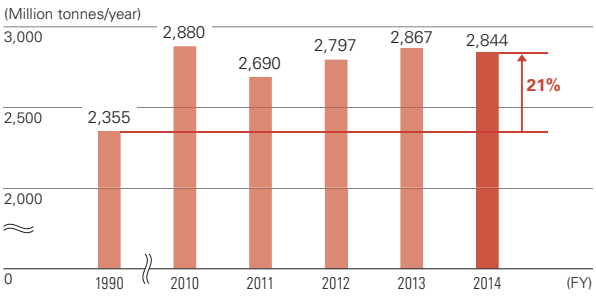
● Energy Savings and CO_2 Emissions in FY2014

Energy consumption and CO_2 emissions in steelmaking are greatly influenced by production volume. To accurately assess the effects of improvements due to operational technologies and capital investments, JFE Steel is working to reduce its basic units (energy consumption and CO_2 emissions per unit of production) and related energy-conservation activities.

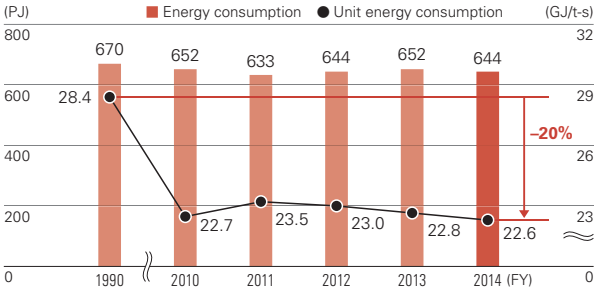
JFE Steel's FY2014 crude steel production was 28.44 million tonnes, up 21% from the FY1990 level. Due to the results of ongoing energy-saving activities, however, energy consumption was down 4% and CO_2 emissions were down 3% from FY1990 levels.

The company's energy consumption per unit for FY2014 was 20% below the FY1990 level at 22.6 GJ/t-steel, while CO_2 emissions per unit were down 19% to 2.00 t-CO_2/t-steel, proving the success of JFE Steel's energy-conservation activities in recent years, including its capital investments for energy conservation and the development of technologies such as Super-SINTER™ OXY production technology for materials used in steelmaking.

■ Production of Crude Steel of JFE Steel

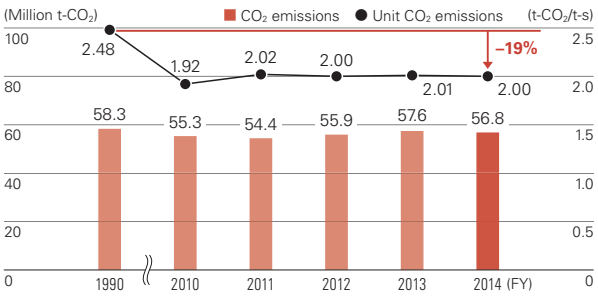


■ Energy Consumption and Unit Energy Consumption of JFE Steel



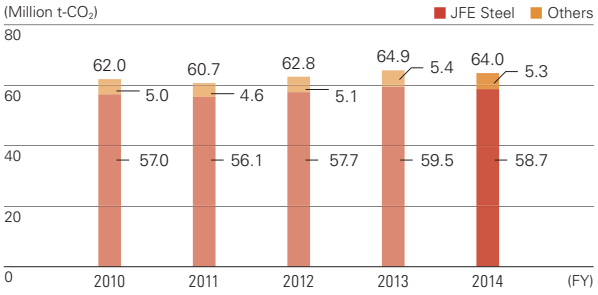
Note: Data for certain fiscal years have been recalculated retroactively for improved accuracy.

■ Energy-derived CO_2 Emissions and Unit CO_2 Emissions of JFE Steel



Notes: The CO_2 coefficient for purchased electricity uses voluntary action target values from The Japan Iron and Steel Federation. However, the FY2013 value is used for FY2014 as well.
Data for certain fiscal years have been recalculated retroactively for improved accuracy.

■ CO_2 Emissions of JFE Steel Group

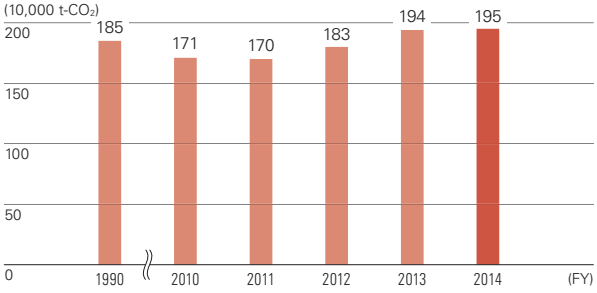


Note: Data cover JFE Steel (energy-derived and non-energy-derived emissions), 27 domestic consolidated affiliates (energy-derived emissions), 4 overseas consolidated affiliates and 2 companies accounted for by the equity method (energy-derived emissions).
The scope is expanded and corrected retroactively for past fiscal years to ensure uniformity.

● Non-energy-derived CO_2 Emissions

Lime and dolomite, which are used as auxiliary materials in blast furnaces and converters, emit CO_2 when broken down. Non-energy-derived CO_2 emissions in FY2014 totaled 1.95 million t-CO_2.

■ Non-energy-derived CO_2 Emissions of JFE Steel



CO_2 Reduction in the Value Chain

JFE Steel initiatives to reduce CO_2 emissions include lowering the environmental impact of distribution, providing high-performance steel materials that save energy in final products and international cooperation in energy conservation and environmental technologies.

● Energy Saving in Transportation

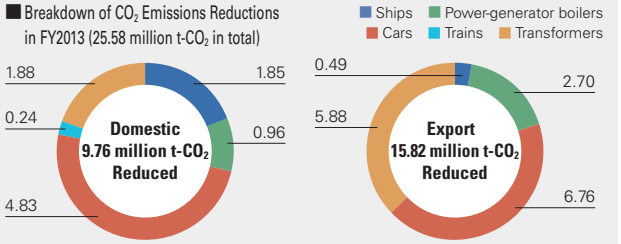
To reduce the environmental load of transporting steel, JFE Steel is actively shifting its transport modes to ships and rail. The modal shift rate* for FY2014 was 94.6%.

* Percentage of the transportation volume (minimum 500 km) by rail or ship

Reduced CO_2 Emissions through High-performance Steel Materials

The Japan Iron and Steel Federation, of which JFE Steel is a member, estimates the contribution of high-performance steel materials to the reduction of CO_2 emissions (using provisional calculations by The Institute of Energy Economics, Japan). According to their estimates, major high-performance steel materials (five grades, of which 3.68 million tonnes were used in Japan and 3.84 tonnes were exported, for a total of 7.52 million tonnes) helped to reduce CO_2 emissions by 25.58 million tonnes in FY2013 compared to the FY1990 level.

■ Breakdown of CO_2 Emissions Reductions in FY2013 (25.58 million t-CO_2 in total)



Source: The Institute of Energy Economics, Japan

Initiatives by the Japanese Steel Industry

●Low-carbon Society Implementation Plan

The Japan Iron and Steel Federation (JISF) is promoting its Low-Carbon Society Implementation Plan, which focuses on four pillars: "Three Ecos" initiatives and the development of innovative steelmaking processes. The foundation has set targets for reducing CO_2 emissions by FY2020 and by FY2030 in Phase 1 and 2, respectively. JFE Steel is actively implementing initiatives to help achieve the plan's targets.

●Assessment of Low-carbon Society Implementation Plan Results

In FY2013, emissions by the Japanese steel industry increased 0.63 million t-CO_2 compared with the BAU emissions benchmark. Although certain reductions were achieved as planned by efforts such as improving the efficiency of coke ovens and generation facilities, total emissions increased largely due to changing production structure in response to increased demand for high-performance steel.

Eco-Processes

The Japanese steel industry is continuously striving for improved energy efficiency by taking full advantage of cutting-edge technologies, with the aim of cutting estimated CO_2 emissions for respective production volumes (BAU emissions*). Its goals include reducing emissions by 5 million tonnes in FY2020 and 9 million tonnes in FY2030 compared with the BAU benchmark.

Eco-Solutions

The Japanese steel industry is helping to reduce CO_2 worldwide, particularly in developing countries, through the transfer and application of world-leading energy-saving Eco-Process technologies. Eco-Solutions are forecast to reduce CO_2 emissions by about 70 million tonnes in FY2020 and 80 million tonnes in FY2030.

Eco-Products

The Japanese steel industry also helps to reduce CO_2 emissions at the final product stage by providing high-performance steel materials essential to developing low-carbon societies. By FY2020, the use of major high-performance sheet materials is forecast to cut CO_2 emissions by approximately 34.0 million tonnes in FY2020 and 42.0 million tonnes in FY2030.

Innovative Steelmaking Process Development (COURSE 50)

The Japanese steel industry intends to achieve a CO_2 emissions reduction of about 30% through hydrogen reduction, along with capture, separation and recovery of CO_2 from blast furnace gases. The first facility is expected to come online by 2030, followed by other plants by 2050.

Innovative Steelmaking Process Development (Ferro Coke)

The Japanese steel industry intends to develop ferro coke that accelerates and lowers the temperatures of the reduction reaction in a blast furnace as well as its operation process, toward conserving energy and expanding the use of low-rank materials.

* Business As Usual emissions: Estimated level of emissions in the absence of any special measures

Initiatives under the Low-carbon Society Implementation Plan

S ●Ferro-Coke (see page 11)

Ferro-coke is a blast furnace-charging carbonous material dispersed with metallic iron and made by carbonizing briquetted low-grade coal and iron ore. The metallic iron accelerates the reduction reaction rate in the blast furnace, making the reduction of iron oxide possible with less reducing agent, which leads to significantly lower CO_2 emissions and improved energy savings. Long-duration production tests using a pilot plant at the Keihin District facilities of JFE Steel's East Japan Works and demonstration tests using the No. 6 blast furnace at the Chiba District facilities have verified that the process actually lowers the ratios of reducing agents and cokes as projected. Core technologies for the production of ferro-coke have been established in the current pilot stage, with ongoing development targeting eventual practical application.

Pilot plant facility

● COURSE 50

The objective of COURSE 50 is a 30% reduction of CO_2 emissions from steelworks by developing innovative process technologies that involve hydrogen reduction in iron ore and the separation and recovery of CO_2 from blast furnace gases. As a core participant in this initiative, JFE Steel is collaborating with other companies to develop a technology for accelerating the hydrogen reduction of iron ore. It also is conducting verification tests for the commercial application of CO_2 separation technology at its PSA (Pressure Swing Adsorption) process bench plant in the Fukuyama District.

The technology will be tested in 2016 and 2017 using a test furnace with a capacity of 10 m^3, one of the largest in the world. The furnace is currently under construction at the Kimitsu Works of Nippon Steel & Sumitomo Metal Corporation. JFE Steel will participate in this proof of principle study.

PSA process bench plant

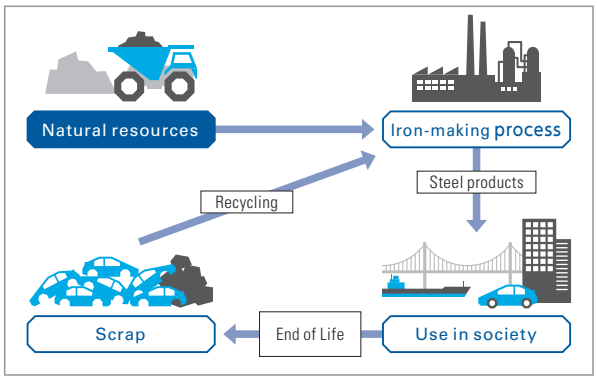
● Energy-saving Equipment (see page 11)

JFE Steel is actively introducing energy-saving equipment. Super-SINTER™, a breakthrough sintered ore production process, has already been introduced in all districts, and the company is now developing Super-SINTER™ OXY, an advanced variation. Related initiatives include energy-conservation investments and coke-oven refreshing at power plants.

● Life Cycle Assessment (LCA)

LCA is a method for quantifying and assessing the environmental impact of products over their life cycles, from resource mining and material production to production, use and final disposal. For example, this method shows that we can reduce CO_2 emissions over the life cycle of an automobile by changing materials from common steel to high-tensile steel resulting in lighter weight. Closed-loop recycling is possible for steel materials that are recycled and reused at the end of the life cycles for automobiles, buildings and so on. The Worldsteel* has established a method for calculating CO_2 emissions over the entire life cycle of steel production, excluding the usage phase. Meanwhile, the Japan Iron and Steel Foundation (JISF) is working to establish a world standard for LCI calculation methodology for steel products.

■ Steel Materials Life Cycle



● Global Activities to Fight Global Warming

ISO 14404 is an international standard proposed by the Japan Iron and Steel Foundation (JISF) to the International Organization for Standardization as a method for global-uniform calculating CO_2 intensity from iron and steel production to assess the energy efficiency of steel works. The Japanese steel industry is fighting global warming through international public-private collaborations. This includes ISO 14404-based assessment of steelworks in developing countries and recommending specific technologies best suited to respective countries.

JFE Steel is fighting global warming through participation in international activities, such as the Japan-India Public and Private Collaborative Meeting, the Japan-ASEAN Steel Initiative, the GSEP Steel Working Group and the Japan-China Steel Industries Exchange. JFE Steel is also helping to reduce CO_2 emissions through participation in the worldsteel Climate Action Program, which uses ISO 14404 as the standard for measurement and calculation.

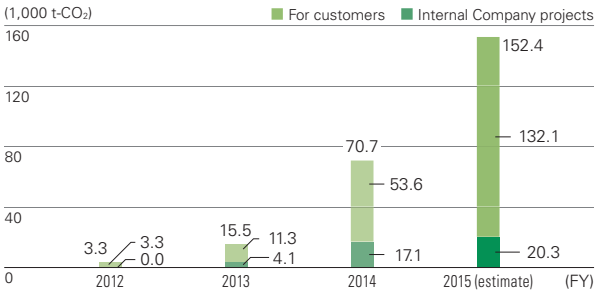
* The World Steel Association, or worldsteel, has a membership comprising approximately 170 steel manufacturers and steel-related organizations.

Climate Action Member Certificate

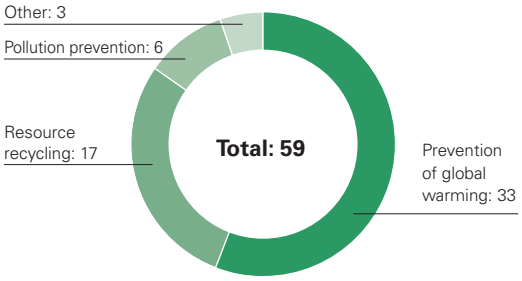
CO_2 Reduction Initiatives

JFE Engineering helps customers reduce their CO_2 emissions by providing them with technologies for solar, geothermal and biomass power generation and waste-to-energy technologies such as geothermal air conditioning. To reduce the environmental impact of constructing and operating plants, the R&D, planning and design departments set targets, and 59 of such 64 targets were met in FY2014. The head office, branch offices and works also strive to reduce CO_2 emissions. Activities include introducing energy-saving equipment such as LED lighting, encouraging cool biz practices such as wearing light, comfortable clothing in the summer, and setting official days when employees are encouraged to take paid holidays.

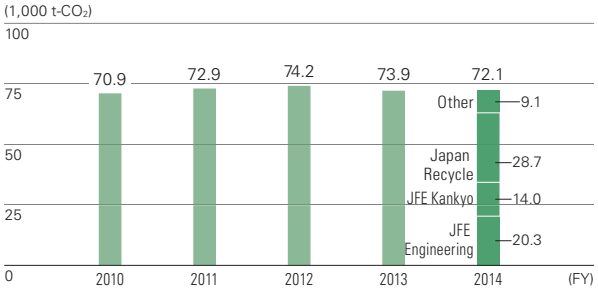
■ Construction of Solar Power Plants



■ Reduction of Environmental Loads (FY2014)



■ CO_2 Emissions of JFE Engineering Group

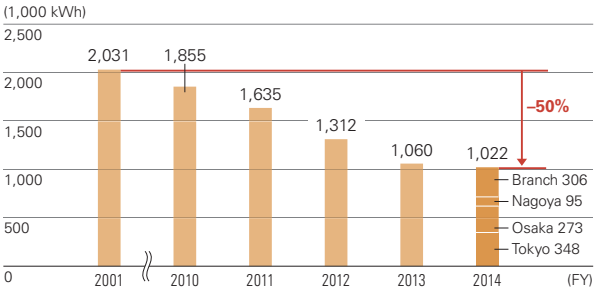


Notes: The graph shows energy-derived CO_2 emissions for JFE Engineering and 11 domestic consolidated affiliates.
Data for certain fiscal years have been recalculated retroactively for improved accuracy.

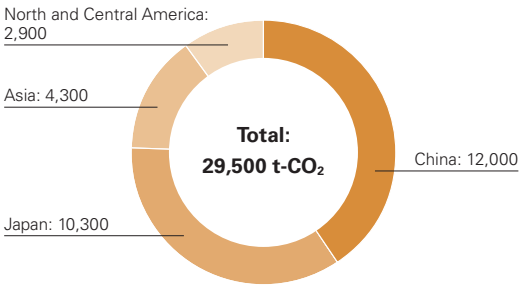
JFE Shoji Trade domestic offices, all of which acquired ISO 14001 certification as of 2000, promote the reduced use of energy and paper, as well as the strict management of waste separation. Energy consumption has been lowered significantly by observing days when employees are encouraged to leave work on time, the installation of pinpoint lighting, turning off lights during lunchtime and the relocation of the Tokyo head office to a more energy-saving building. In FY2014, 1.022 million kWh of energy was consumed, a 50% reduction compared to FY2001.

In addition, the company has introduced video conferencing systems in nearly 60 offices worldwide to reduce printed reference materials and employees' business trips at home and abroad to further reduce environmental loads.

■ Electric Power Consumption by JFE Shoji Trade



■ CO_2 Emissions of JFE Shoji Trade Group



Note: The graph shows CO_2 emissions from electric power consumption by 32 companies, including JFE Shoji Trade and domestic and overseas consolidated subsidiaries (steel-processing companies).

Protecting the Environment

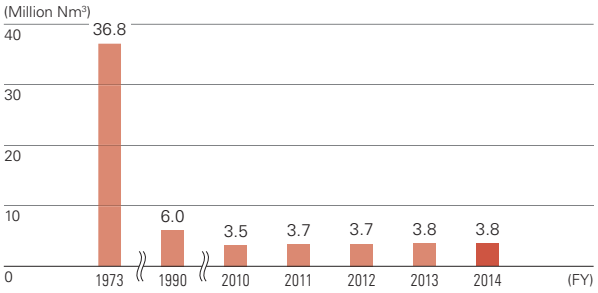
Controlling Air Emissions

S

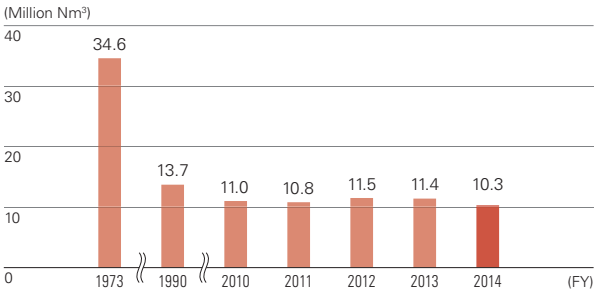
● Reducing Sulfur Oxide and Nitrogen Oxide Emissions

JFE Steel is increasingly controlling emissions by installing low-NOx burners in reheat furnaces, switching to low-sulfur fuels and deploying desulfurization and denitration devices in sintering plants, all major sources of SOx or NOx emissions.

■ SOx Emissions



■ NOx Emissions



● Suppressing Dust Dispersion

JFE Steel suppresses dust dispersion through measures including the installation of sprinklers and windbreak fences in raw material yards and enhancement of on-premise cleaning, dust collectors and other dust collection methods.

Dust screen (boundary between commercial area and East Japan Works Chiba District facilities)

E

To ensure compliance with the Air Pollution Control Law and local regulations on soot and smoke-emitting facilities, JFE Engineering regularly measures and strictly controls nitrogen oxide emissions, etc., at its Tsurumi and Tsu works.

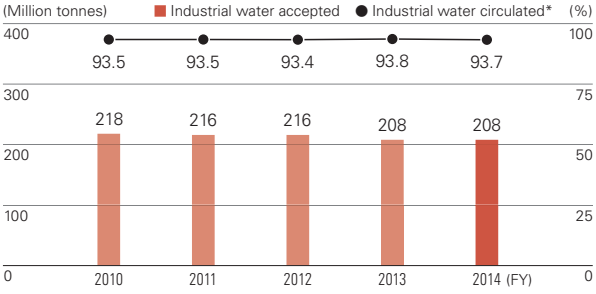
Efficient Use of Water and Prevention of Contamination

S

● Cyclic Use of Water

A large amount of water is used during the steelmaking process to cool facilities and process products. JFE Steel, which actively recycles large amounts of water used in its steelmaking processes, achieved the high recycling rate of 93.7% in FY2014.

■ Industrial Water Accepted/Circulated



	2010	2011	2012	2013	2014	
Total amount	3,328	3,326	3,290	3,336	3,313	(Million tonnes)
Industrial water accepted	218	216	216	208	208	(Million tonnes)

* Industrial water circulated (%) = (Total amount – industrial water accepted)/ total amount × 100

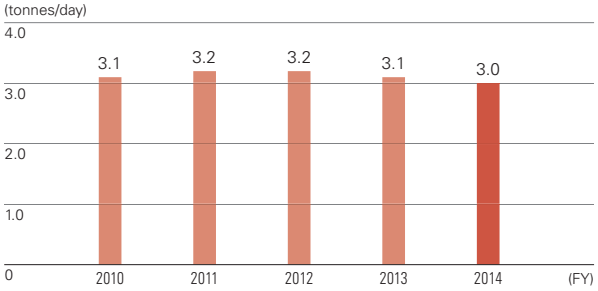
Note: Data for certain fiscal years have been recalculated retroactively for improved accuracy.

● Preventing Water Pollution

JFE Steel strives to reduce its environmental impact on waterways by thoroughly purifying water used in steelmaking processes before release into public waterways or sewers. Chemical oxygen demand (COD), the water-quality index for wastewater, was 3.0 tonnes per day, the same level as in the previous year.

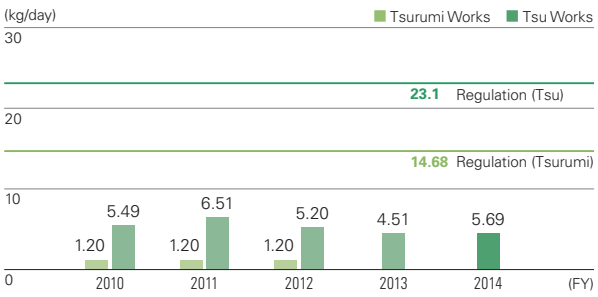
To prevent the release of unsuitable wastewater in the event of a facility failure, JFE Steel maintains a dual-monitoring system that checks water quality at both manufacturing and water-processing facilities, as well as outlets, to ensure prompt action as required at upstream outlets. The company also conducts drills to prepare for the handling of unsuitable water quality caused by facility failures.

■ Changes in Chemical Oxygen Demand (COD)



E Wastewater from each JFE Engineering works is released into public waterways or sewer systems. Water quality is strictly controlled at each outlet to ensure regulatory compliance.

■ Chemical Oxygen Demand (COD) in Wastewater Released Publicly

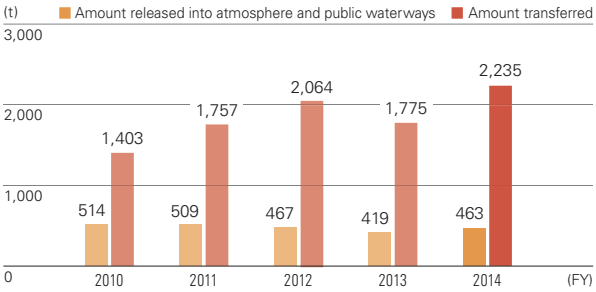


Note: The Tsurumi Works was connected to the public sewer system in FY2013.

Management of Chemical Substances

S JFE Steel also lowers environmental loads by voluntarily reducing the chemical substances it releases. In FY2014, chemical substances released into the atmosphere and public waterways totaled 463 tonnes.

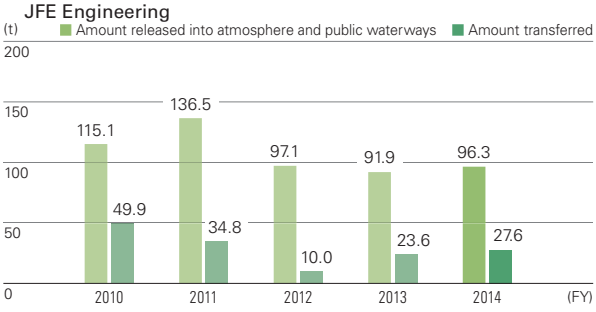
■ Release or Transfer of PRTR-registered Substances at JFE Steel



Note: Data for certain fiscal years have been recalculated retroactively for improved accuracy.

E Chemical substances at JFE Engineering works are generated primarily from painting steel structures, etc., and welding. The company controls the release or transfer of these substances in accordance with the Law concerning Pollutant Release and Transfer Register (PRTR Law).

■ Release and Transfer of PRTR-registered Substances at JFE Engineering



● Proper Management of PCB Waste at JFE

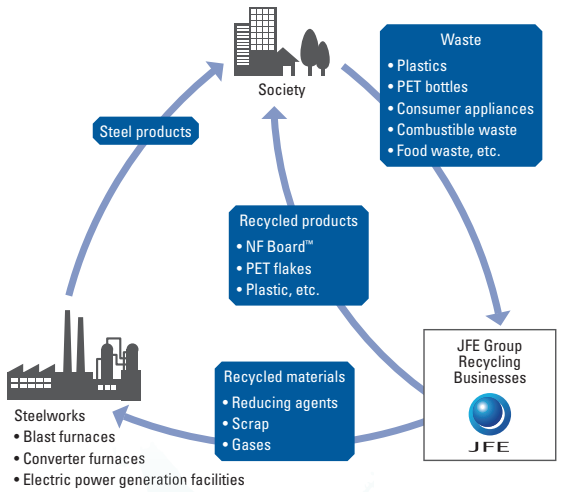
Polychlorinated biphenyl (PCB) waste is properly stored and managed at each business office. Treatment of high-concentration PCB waste is carried out in accordance with plans laid down by the Japan Environmental Storage & Safety Corporation (JESCO). The Yokohama Eco Clean Plant and Mizushima Eco-Works of JFE Environmental Service Corporation treat insulating oil contaminated with slight amounts of PCB to reduce this pollutant.

Resource Recycling

Resource-recycling Solutions

The JFE Group engages in recycling businesses as an offshoot of its steelworks recycling technologies, such as the use of plastics in blast furnaces. In the engineering field, its recycling businesses are related closely to local communities, such as the sorting and storage of waste plastics and the conversion of refuse into solid fuel. JFE also contributes to sustainable societies by offering disposal solutions for various types of waste, including materials, chemicals and thermal recycling, aiming to minimize the amount of final disposal.

■ Resource-recycling Solutions



● JFE Group Recycling Businesses

Sendai
- Plastic packaging waste sorting and baling plant
- Plastic material recycling plant
- Fluorescent tube recycling plant
- Recycled pallet manufacturing plant
- Confidential document disposal plant
- RPF manufacturing plant

Toyama
- Rare metal recovery plant for spent catalysts

Kurashiki (Mizushima)
- Waste gasifying and melting furnace
- Waste wood carbonization plant
- Electric-furnace recycling plant

Fukuyama
- Waste plastic recycling plant
- RPF manufacturing plant
- Fukuyama plastic material recycling plant
- Fluorescent tube recycling plant
- Kiln incinerator
- Leachate-controlled landfill
- Liquid waste neutralization plant
- Refuse-derived fuel (RDF) gasifying power generation plant (commissioned operation)

Yokohama
- Kiln-stoker incinerator
- Kiln-ash melting furnace
- Liquid/sludge waste intermediate treatment plant
- Solid waste recycling plant
- Fluorescent tube recycling plant
- Plastic packaging waste sorting and baling plant
- Dry cell and battery recycling plant

Chiba
- Waste gasifying and melting furnace
- Food waste recycling plant

Kawasaki
- Waste plastic recycling plants (Ogishima & Mizue)
- Waste PET bottle recycling plant
- Can and PET bottle sorting and baling plant
- Kiln-stoker incinerator
- Solid waste recycling plant
- NF Board™ manufacturing plant
- Consumer/office appliance recycling plant

■ Examples of Recycling and Processing (FY2014)

Content	Volume
Containers and packaging plastic bought at auction	100,000 tonnes
Waste plastic reused in steelmaking process	120,000 tonnes
Used fluorescent tubes processed	20 million tubes
Used consumer appliances processed	50,000 units

Boards Made with Recycled Plastic

JFE recycles plastic containers and packaging which is collected from households as recyclable waste. NF Board™ is recognized for its excellent durability, high workability and usability equivalent to virgin material. It has many uses, including the inner walls of livestock barns, large bulletin boards, steel product (coil) protection boards and concrete forming molds. NF Board™ was accredited by Kawasaki City as a Low CO_2 Kawasaki Brand '09 product.


Inner wall of a livestock barn

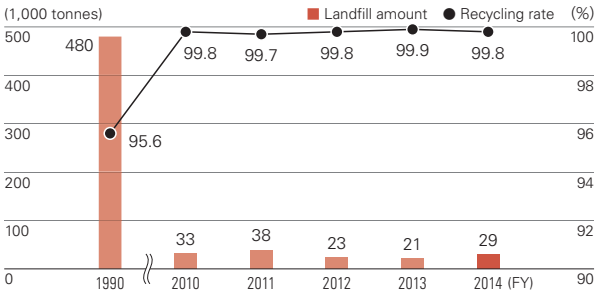
Resource Recycling

Each operating company of JFE carries out resource recycling suited to its particular business, such as recycling byproducts from manufacturing processes, reducing waste at construction sites and promoting the 3Rs in offices. JFE continues to seek increasingly efficient resource uses in both the production and product/service phases of its businesses, including the recycling of steel scrap, biomass fuel production and waste-to-energy initiatives.

S ● Reducing and Reusing Byproducts

JFE Steel controls the occurrence and emission of iron and steelmaking slag (steelmaking byproduct), iron dust from blast furnaces and converters, sludge from water treatment facilities and other byproducts. Dust and sludge with high iron content are recycled as raw materials for steelmaking. All iron and steelmaking slag is recycled for reuse in cement and other construction materials, and potential uses as an environmental remediation material are being examined. As a result of such efforts, JFE achieved a 99.8% recycling rate for slag, dust and sludge in FY2014.

■ Generation of Byproducts and Recycling Rates



● Efficient Use of Byproducts (Example)

Marine Rocks™ are made by mixing steel slag and blast furnace slag powder and then solidifying the mixture through hydration reaction. Shaped like natural rocks and performing as well as concrete construction material, Marine Rocks™ are recycled products with a low environmental load. In large quantities, they can be used to construct harbor seawalls, etc.

One-tonne Marine Rocks™

● Recycling

E Each department of JFE Engineering establishes recycling rate targets and encourages recycling. The construction department, which separates waste at construction sites and employs disposal companies with high recycling rates, had a recycling rate for industrial waste of 99.4% in FY2014.

Office departments work to improve their recycling rates by displaying easy-to-understand rules for waste separation, supported by recycling patrols in each work and branch office.

The city of Yokohama has recognized the Yokohama head office (former Tsurumi Works) as a Workplace with Excellent 3R Activities for three consecutive years beginning in FY2012 to recognize its waste reduction, reuse and recycling activities.

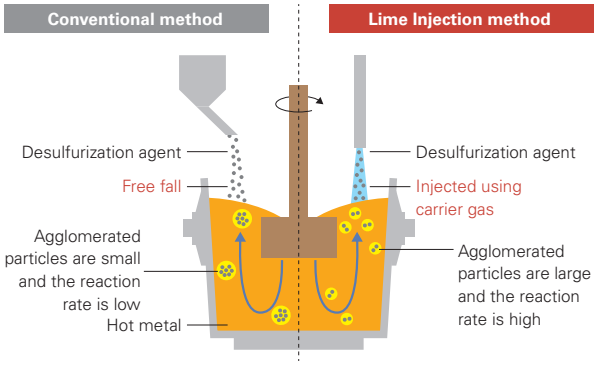
T Each office of JFE Shoji Trade reduces and recycles waste including by strictly separating paper for recycling. The company's recycling business handles steel and aluminum scrap, with steel scrap exported to Asian countries for off-shore trading. While steel scrap exported from Japan is mainly transported by bulk carrier, a container loading system introduced by JFE Shoji Trade enables timely shipments of small-lot cargo, which is supporting the development of recycling societies across Asia.

Eco-friendly Products and Technologies

S

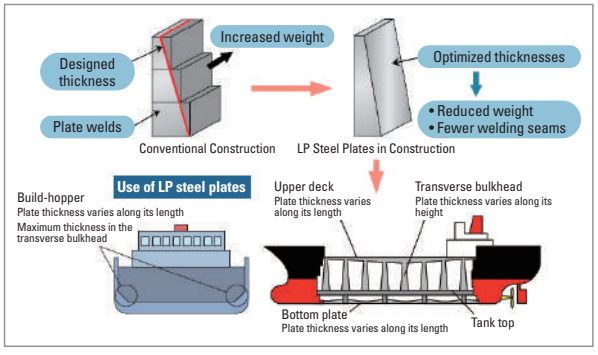
Hot Metal Desulfurization Technology

In response to the increasing demand for the sulfur concentration in steel materials to be lowered, JFE has developed a lime-injection method and a slag hot-recycling method for hot metal desulfurization. Both technologies improve the efficiency of reaction between the lime-based desulfurization agent and sulfur in hot metal, thereby helping to reduce the desulfurization agent, desulfurization slag and iron-making energy consumption.



LP Steel Plate™

Forces acting on ships and bridges vary depending on where the forces are applied. For example, water pressure on a ship decreases from the bottom of the hull toward the top, so plates used for the upper portions of transverse bulkheads can be thinner. LP Steel Plates™ offer longitudinally varied thicknesses to reduce the weights of ships and bridges, and thereby their environmental burdens and production costs. In recognition of its high-quality, high-efficiency production technology and widespread use, LP Steel Plate™ was awarded the 44th (2012) Ichimura Industrial Award Contribution Prize and accredited as a Low CO_2 Kawasaki Brand '14 by the city of Kawasaki.

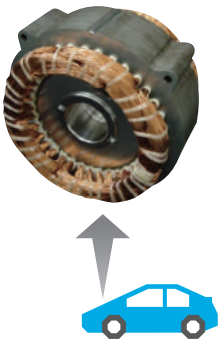


High Tensile-strength Steel Plates (UNI-HITEN™)

High tensile strength steel sheets are being increasingly used for automotive panel parts. UNI-HITEN™ has a tensile strength of 440 megapascals, significantly higher than the 340-megapascal rating of conventional automotive panels. It also offers better resistance against permanent deformation and excellent appearance. Increased strength reduces steel volume used in the production stage and lowers car weight for improved fuel efficiency in the final-use stage. The product was awarded the 2014 Otani Art Museum Prize for its outstanding quality.

JNP™ Series Electrical Steel Sheet

Hybrid vehicles and electric vehicles directly contribute to the reduction of CO_2 emissions. JNP™ Series non-oriented electrical steel sheet is used for electric motors that drive these vehicles, contributing to their increased power and improved efficiency. JNP™ was awarded the 2011 Technological Development Prize from The Japan Institute of Metals.



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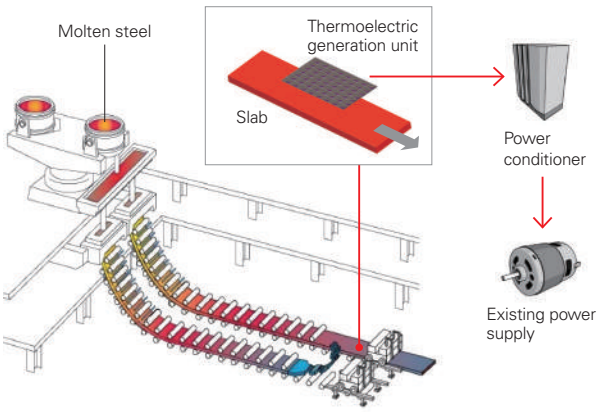
●Verification of Thermoelectric Generation Technology using Waste Heat

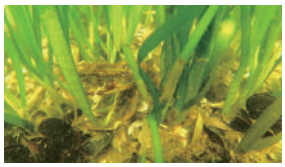
Thermoelectric generation from heat using the Seebeck effect converts the temperature difference between different metals or semiconductors into electric voltage. This is a clean generation of power free of CO_2 emissions. As a means for effectively utilizing untapped waste heat at ironworks, JFE used a thermoelectric generation system for the continuous cast equipment of its East Japan Works (Keihin District) in March 2013. In a verification test, JFE became the world's first company to achieve 10 kW-level power generation using heat radiated from slab (steel ingots).



●Recovered Biodiversity along Yamashita Park Shore

In a joint research project* with the city of Yokohama using steel slag products (Marine Blocks™, Marine Rocks™ and Marine Stones™) JFE Steel confirmed an increased number of living species, including eelgrass (seaweed), in the sea bordering Yamashita Park. JFE Steel's slag products provided sea organisms with a base for nurture and growth, thereby improving the marine ecosystem.

* Implemented to improve marine ecosystems for the natural cleansing of sea beds and seawater


Eelgrass and crab


Sea cucumber and sea squirts

E

●Constructing Photovoltaic Power Plants across Japan

The introduction of a renewable energy feed-in tariff program in Japan has accelerated the spread of photovoltaic power generation throughout the nation. JFE had received about 100 EPC (engineering, procurement and construction) orders totaling more than 480 MW by the end of FY2014, in addition to conducting power generation on its own at eight places, which amounted to 40 MW. The photo shows a photovoltaic power plant with installed capacity of 26 MW. The plant, constructed on a former golf course, started operating in March 2015.

●Supporting Disaster Waste Disposal

JFE Engineering has been working on the reconstruction of areas affected by the Great East Japan Earthquake since its immediate aftermath in 2011. We are now incinerating and reducing the volume of disaster waste in four areas of Fukushima Prefecture.


Project: Waste treatment (reduction) in Minami Soma, commissioned by Fukushima Office for Environmental Restoration, Tohoku Regional Environmental Office, and Ministry of the Environment

Eco Paint Peeling Method

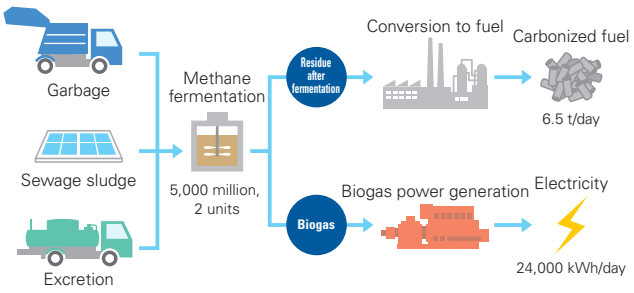
JFE Engineering is supporting the upgrade of infrastructure with a repainting method that enhances work efficiency and reduces environmental impact. Eco Paint Peeling (EPP) is an innovative paint removal method that uses a film-stripping agent that is simply applied to a surface to quickly delaminate the paint. The method, safe and environmentally friendly, uses a single-component water-based peeling agent that does not contain thinners or other organic solvents. The peeling process does not damage the underlying metal structure and can be completed within 6 to 24 hours after application, thus raising efficiency and lowering work time.

Several hours after applying the agent

Peeling process

Large-scale Biomass Energy Complex

A biomass energy complex under construction in Toyohashi will be used to collect sewage sludge, excretion (septic tank sludge) and garbage for methane fermentation to produce biogas for power generation. This first such project in Japan will achieve highly effective use of waste energy to reduce needs for facility construction, maintenance and administrative expenditures. The plant will also process residue methane fermentation to extract all possible energy from the biomass resources.



T

Biomass Fuels

Power generation using biotic resources (biomass fuel) as a carbon-neutral renewable energy is an effective use of resources. The introduction of a renewable energy feed-in tariff program in Japan in July 2012 has boosted the demand for biomass fuels for power generation. JFE Shoji Trade has been investigating the possibility of using palm kernel shells (PKS), a residual product of palm oil extraction, as biomass fuel. In 2010, it became the first Japanese trading company to establish a cargo yard for PKS, paving the way for a commercial project. In October 2013, JFE Shoji Trade established a company in Malaysia to operate the cargo yard and increased the supply of PKS. The company is also working to assure PKS quality management, including the stabilization of moisture content by improving storage facilities and the removal of foreign substances using shifters and magnetic separators. In response to rising demand, the company will help ensure stable supplies by providing technical advice on establishing partnership yards in Malaysia and Indonesia.

PKS cargo yard

Loading PKS

Environmental Communication

Promoting Environment-related Communication

The JFE Group gives utmost priority to communication with all stakeholders, including in matters relating to the environment.

Disclosing Environmental Data of Operational Sites

The East Japan Works of JFE Steel discloses real-time environmental data on air and water quality. Visitors can review this information in the first-floor lobby of the Visitor Center in the Chiba District, and in the Amenity Hall and first-floor lobby of the Keihin Building in the Keihin District.

Disclosure and Exchange of Information

● Ecobeing Environmental Website

JFE cooperates with the "ecobeing" environmental website, which is intended to broaden awareness of eco-activities. In FY2014 the website focused on the theme "Redesigning Tokyo" and other topics concerning the future of cities. In FY2015, the site will take up forest development in Japan under the theme "Thinking About Forests."

Web ecobeing (Japanese only) ➡
www.ecobeing.net

● Participating in Eco-Products 2014 Environmental Exhibition

JFE took part in Eco-Products 2014, one of Japan's largest environmental exhibitions, which was held in December 2014. The company's exhibit was organized under the theme "For the Earth and Our Daily Lives—Making Eco at the JFE Group." JFE's environmentally conscious initiatives were introduced and eco-tours for children encouraged Japan's future generation to think about ecology.

● Sponsoring "Midori no Komichi" Environmental Diary

The JFE Group sponsors the "Midori no Komichi" (Green Trail) environmental diary project hosted by Green Cross Japan with the hope that children will become more aware of environmental issues by keeping a diary of their activities and thoughts, with ecology as a theme.

Web "Midori no Komichi" Environmental Diary ➡
www.midorinokomichi.net

● "Kikkories" Volunteer Group

"The Forest of Beauties" is a grove of beech trees in Tokamachi, Niigata Prefecture that is about 90 years old. When local residents launched a project to preserve the beauty of this cherished grove, staffers at JFE Engineering's office in the city established the "Kikkories" volunteer group to help fund preservation activities by selling woodwork products that they had created.

● Firefly Watching Event in Educational Environmental Zone

The Chita Works contributes to the preservation of biodiversity by maintaining an educational environmental zone on its premises that includes a stream and biotope. As part of this initiative, An Evening with Fireflies event was held in June 2015 to share the preserved ecosystem with local residents. During the two-day event, the second of its kind, about 240 people enjoyed a romantic evening watching the emergence of fireflies that had been released by local children in the spring. Through the events, participants have come to appreciate that the Chita Works maintains grounds that are clean enough to support fireflies, which require pristine habitats.

Contributing to Society's Development

JFE Group CSR Report 2015

Customers and Clients

JFE Standards of Business Conduct (excerpt)

1. Provide quality products and services

Earn the trust and high evaluation of customers by endeavoring to provide safe, high-quality products and services based on superior technology, and by fully respecting and protecting the privacy of personal and customer information.

JFE Group's Quality Initiatives

The JFE Group manages quality by ensuring compliance with quality standards set by each operating company. All manufacturing sites that require ISO 9001 certification of their quality management have been duly certified.

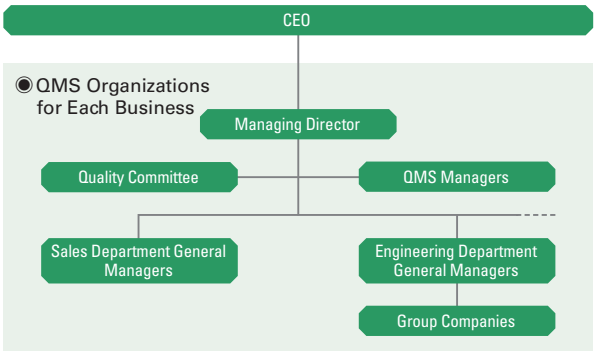
Quality Assurance System of Each Operating Company

JFE Steel has acquired ISO 9001 and all other quality assurance certifications required for steel products, including the JIS mark and approvals from ship classification bodies. In response to globalization needs and customer demand, the company has established a system to receive certification under national standards specific to countries where the company has business.

JFE Steel is developing advanced manufacturing technologies to meet customer needs for more sophisticated specifications and higher quality, and it also deploys cutting-edge sensors and testing equipment to provide quality assurance. The company will continue strengthening its quality assurance structures to provide products that all customers can use with confidence, and thereby enhance trust in the JFE brand.

JFE Engineering has developed a system for quality management, including quality assurance spanning all work processes. Also, FAQ manuals covering product features are provided to customers to help meet their rigorous demands for quality.

■ Quality Management Organization



JFE Shoji Trade places great emphasis on customer satisfaction, including through quality management and assurance. Preventing human error in manual procedures is a key priority at processing centers in Japan and abroad, as demonstrated by the following measures:

- Barcode collation for entire processes to ensure accurate identification throughout in-factory distribution;
- Automatic collation through radio transmission of value measurements during processing.

Such measures have also facilitated the creation of useful databases for quality control.

Responsible Export Practices

JFE Steel promotes international peace and security by working against the spread of weapons of mass destruction and excess accumulation of conventional weapons. The company carries out inspections to confirm the final destinations, customers and applications of its exported products, and ensures that export procedures are carried out properly. In addition, its Legal Affairs Department conducts internal briefings to disseminate knowledge of export-related laws and regulations, such as the Foreign Exchange and Foreign Trade Act.

JFE Shoji Trade also ensures compliance in its export activities through education related to export security controls and other measures targeting business units involved in trading.

Improving Customer Satisfaction

● Competitive IT Strategy Company Stock Selection

In 2015, the Ministry of Economy, Trade and Industry and the Tokyo Stock Exchange chose JFE Holdings for inclusion in the Competitive IT Strategy Company Stock Selection, recognizing the company's efforts to use IT for business reform and competitiveness strengthening. JFE is committed to standardizing its operations and building IT infrastructure for globally common processes, ultimately to respond promptly to customer requests.

攻めのIT経営銘柄
Competitive IT Strategy Company

S

● Evolution of Operational Systems

JFE Steel is continuing to refine and develop its J-Smile system, which is designed to strengthen information management and operational systems for enhanced usage of corporate resources and increased customer satisfaction. J-Smile has strengthened the company's response to customer needs in areas such as lead-time, delivery dates, quality assurance and product development. Also, existing systems at steelworks have been upgraded for effective operational control and management.

Also, JFE Steel has launched an order tracking and inventory system, Smile Port, to provide customers with timely information on inventory and shipping status. The system offers easy Internet access to information, which has led to strengthened relationships with customers.

● Collaboration with Customers on Product Development

JFE Steel has facilities for conducting research and development with customers. These include the Customers' Solutions Lab (CSL) for auto industry customers and the Steel Structural Materials Solutions Center (THiNK SMART) for customers involved with infrastructure. In October 2014, the company opened its Customer Center Fukuyama (CCF) in the Fukuyama District of its West Japan Works. The facilities are equipped for widely varying research and experimentation, plus conference rooms and space for exhibiting research results. Under this framework, a number of successes have been achieved in helping customers to resolve technological issues through testing and discussion.

Customer Center Fukuyama

● Unified Customer Care

JFE Steel regularly conducts customer questionnaires and interviews to draft strategies for greater customer satisfaction. Business strategies are communicated effectively to sales departments, centers, business planning departments, steelworks and research laboratories to facilitate unified customer care and proposals that leverage the collective strengths of the JFE Group.

● Sales Personnel Who Excel in Customer Relations

The Sales Department holds training sessions for sales managers from headquarters, branch offices and foreign offices to discuss how best to work with customers and create better relationships with them. The meetings focus on how to overcome challenges and reach resolutions, including best practices for enhanced customer relationships. The participants are expected to apply such ideas when considering how to strengthen the capabilities of their respective sales offices. To enhance customer-response capabilities, JFE Steel conducts training courses to foster technical discussions with customers and to strengthen feedback on product development, the development of proposals for improving logistics and distribution, and analysis of financial indicators and costs.

E

● Company Assessments Based on Customer Evaluations

JFE Engineering uses customer surveys, interviews and construction evaluation forms to assess the company's construction management, product quality, advanced technologies and innovation. Each division analyzes this information and uses it for quality improvements, new product development and overall strengthening of after-sales service, ultimately for maximized customer satisfaction.

T ● **Meeting Customer Needs**

JFE Shoji Trade, aiming to fully satisfy customer needs, is accumulating expertise and knowledge about steel products in specific industries. To do this, the company is creating an automotive steel headquarters, integrating its steel bar and wire rod businesses, and providing finely tuned services. In addition, the company is building an IT system to facilitate more timely responses to input from global customers.

Fair Competition and Trade

Compliant purchasing and procurement activities are critical to becoming a good business partner and developing understanding and trust with suppliers. Each JFE operating company clearly defines its purchasing and procurement policies and discloses them to suppliers to encourage them to maintain the same high standards.

S ● **Basic Philosophy on Procurement**

JFE Steel upholds its Basic Policy on Procurement to conduct purchasing activities with fairness and sincerity, and on the basis of understanding and trust as a good business partner for all suppliers.

Web Purchasing and Procurement Policies (Japanese only) ➡
www.jfe-steel.co.jp/company/purchase_policy

● **Supplier Support for CSR**

JFE Steel requests suppliers to cooperate with the company's efforts to prioritize environmental protection, safety, disaster prevention, compliance and other matters that fundamentally impact the business. Ultimately, JFE Steel believes such efforts increase stakeholder satisfaction and lead to strengthened corporate value.

JFE Steel's Requests to Suppliers Regarding CSR Initiatives

1. Develop a system for promoting CSR
2. Comply with laws, regulations and social norms, and information management
3. Observe human rights and occupational health and safety
4. Respect the global environment
5. Provide safe and competitive products and services

● **Win-win Relationships with Customers**

JFE Steel establishes win-win relationships with clients by leveraging their knowhow and ideas for improving materials, design, shapes, specifications and production methods. The company carries out value-analysis activities that allow clients to propose how to reduce costs, improve the functions of materials, and upgrade quality, safety and work efficiency. The company then strives to implement such ideas wherever possible.

E ● **Fair and Sincere Procurement**

JFE Engineering's planning, design, procurement and construction businesses are fully accountable. Procurements are a key factor in ensuring safe, high-quality products and services for customers. JFE Engineering conducts fair and honest procurements by cultivating relationships of trust with suppliers based on the following:

1. Fair opportunities
2. Fair assessment of quality and pricing
3. Legal compliance

T ● **Ensuring a Safe, Fair Supply Global Chain**

JFE Shoji Trade carries out responsible procurements throughout its global supply chain. This includes working in concert with suppliers for strengthened procurement initiatives that enable the company to respond to customers' growing demands for responsible procurements. JFE Shoji Trade releases data on the environmental impact of each customer in its supply chain and provides information on substances used in the products it sells.

Shareholders and Investors

JFE Standards of Business Conduct (excerpt)

2. Be transparent to society
Endeavor to communicate with shareholders and society, including by actively disclosing corporate information.

Returns to Shareholders

JFE Holdings makes return on shareholder investment one of its top business priorities. Profits are basically returned in the form of dividends. The actual payout ratio for FY2012–FY2014 was 25.1%, which was higher than the 25% ratio (consolidated) envisioned in the Fourth Medium-term Business Plan.

The company intends to raise the payout ratio to 25%–30% under its Fifth Medium-term Business Plan based on improved financial standing, revenue and cash flow resulting from investments in the Group's growth to strengthen the domestic revenue base and increase income from overseas businesses.

Proactive Information Disclosure

JFE actively communicates with investors by holding investors' meetings when announcing financial results, medium-term business plans or other important information. The president explains the announced results and answers questions, as well as provides small-group briefing sessions and conducts individual interviews with institutional investors and securities analysts. In addition, managers regularly visit investors in Japan and overseas, including institutional investors in North America and Europe.

For individual investors, briefings are held at the branch offices of securities firms around Japan. The company also distributes e-mails regarding IR information. Important press releases and Notices of Calling are provided in English for overseas investors.

JFE Holdings strives for fair disclosure based on established internal policy.

Web Disclosure Policy (Japanese only) ➡
www.jfe-holdings.co.jp/investor/disclosure-policy.html

Enhancing Communication with Shareholders

JFE Holdings created the Investor Relations and Corporate Communications Department in April 2015 to facilitate more interactive communication with diverse stakeholders. The company holds constructive dialogues with shareholders and feeds useful information from these encounters back to management.

Viewing its general meetings of shareholders as a chance for dialogue with shareholders, the company sends invitations at the earliest possible date in an effort to maximize attendance and avoids days on which the shareholder meetings of other companies are concentrated. For shareholders who cannot attend, the company allows online voting in addition to providing the normal proxy form. This year, invitations were also posted on the company website at the earliest possible date.

Plant tours and company briefing sessions are held to improve shareholders' understanding of JFE. In FY2014, workplaces in six districts at JFE Steel, JFE Engineering and Japan Marine United held 24 such events for about 2,000 shareholders. In FY2015, these activities will be expanded to include Japan Marine United Maizuru Shipyard to attract even more shareholders, including those in the Kansai region of central Japan.

■ Major IR Activities in FY2013

Activity	Total Audience
Individual interviews with institutional investors and securities analysts	Approx. 500
Briefings for private investors at securities firms	1,805 in 20 briefings

Web Information for Shareholders and Investors ➡
Japanese: www.jfe-holdings.co.jp/investor
English: www.jfe-holdings.co.jp/en/investor

Local Communities

JFE Standards of Business Conduct (excerpt)

3. Work cooperatively with communities
Actively contribute to communities as a good corporate citizen by working together in a spirit of cooperation.

JFE 21st Century Foundation

Founded in 1990, the JFE 21st Century Foundation is steadily expanding operations in fulfillment of its mission to promote common good as a nonprofit organization.

Web JFE 21st Century Foundation ➡
www.jfe-21st-cf.or.jp/eng

● Support for Technology Research

The foundation has supported technology research at universities since FY1991. In FY2014, it fielded 167 grant requests and provided a total of 50 million yen in the form of two-million-yen grants to 13 projects involving iron and steel technologies and 12 projects concerning environmental technologies, including global warming countermeasures.

● Support for Asian History Studies

The foundation began awarding grants in support of Asian history studies at Japanese universities in FY2005. During FY2014, 65 applications were received and 10 grants worth 1.5 million yen each, or 15.0 million yen in total, were awarded.

■ Cumulative Number and Value of Grants

Grant Field	Number	Value
Technology Research	505	1,017.8 million yen
Asian History Studies	80	120.0 million yen

● Support for Host Communities of Steelmaking Facilities

Since FY1991, the foundation has been sponsoring JFE 21st Century Foundation prizes for contests in the writing of essays and poems, including tanka and haiku poetry. The contests are conducted by the Japan Overseas Educational Services for Japanese elementary and middle school students attending schools overseas. Copies of Chikyu ni Manabu (Learn from the Earth) Vol. 35, a collection of the winning entries in FY2014, were presented to 466 elementary schools, 215 middle schools, 84 public libraries and 10 education committees.

Events in FY2014 (Location)

- Jo Chihun Cup Go Competition (Chiba)
- Chiba Prefectural Youth Go Competition (Funabashi)
- International Music Day Concert and Chiba Citizens' Music Festival (Chiba)
- MUZA Lunch & Night Concert (Kawasaki)
- Community Festival (Kawasaki)
- How Far Does a Dragonfly Fly? Forum (Kawasaki)
- Handa Community Industrial Festival (Handa)
- Mie Prefecture High Schools' Robot Tournament (Tsu)
- Kurashiki Music Festival (Kurashiki)
- Kurashiki Shogi Tournament (Kurashiki)
- Fukuyama Rose Festival (Fukuyama)
- The World of Matsuri (Fukuyama)
- Educational support (Ghana)


Kurashiki Music Festival


The World of Matsuri

Local Contribution Activities

●Host Communities

Every year JFE opens up its manufacturing facilities to residents in local host communities for demonstrations, tours and other events. In addition, on-site recreational facilities are made available for community sports activities such as soccer, baseball, volleyball, basketball and other JFE-sponsored events. Coaching sessions are offered by company baseball and track teams, which compete in Japan's top-level corporate leagues. Such activities promote sports and health, as well as stronger relationships with host communities.

■On-site Events in FY2014

Region	Event	Date	Attendance
East Japan Works, Chiba	JFE Chiba Festival	October 26	40,000
East Japan Works, Keihin	Keihin Community Festival	May 25	45,000
West Japan Works, Kurashiki	JFE West Japan Festival in Kurashiki	November 3	70,000
West Japan Works, Fukuyama	JFE West Japan Festival in Fukuyama	May 11	70,000
Chita Works	Handa Community Industrial Festival	November 8	20,000
Tsu Works	Tsu Autumn Festival	October 25	7,000

JFE West Japan Festival in Kurashiki

JFE West Japan Festival in Fukuyama

Keihin Community Festival

●Tours at Steelworks and Chita Works

Every year JFE Steel invites over 100,000 guests, mostly elementary and junior high school students from host communities, to tour steel production sites at the Chita Works and other steelworks in Eastern and Western Japan. In addition, when communities hold festivals or events, the company organizes plant tours for the public, which have been well received by participants.

●Education at Elementary Schools

The East Japan Works of JFE Steel conducts plant tours and classes for students at nearby elementary schools. Additionally, company employees visit schools to explain steelmaking processes, steelworks features, environmental initiatives and other topics to deepen understanding of the steel industry. In the current fiscal year, the plants are reaching out to more elementary schools and developing programs for specific interests.

Course at Miyazaki Elementary School (Chiba City)

●Manufacturing Classroom

The Chita Works of JFE Steel organizes classes on making accessories out of cast parts, which it couples with plant tours to allow local children to experience the fascination and excitement of manufacturing. The activity, launched in FY2003 in collaboration with the local board of education, has expanded to include classes at local elementary schools and community centers. About 7,100 residents have participated to date. Since FY2014, classes have also been organized during summer vacation. The program has been further augmented with presentations on the history of steel and the industry's place in the world.

Children experiencing the fascination of manufacturing

Support for External Organizations

● UN World Food Programme

The Japan Association for the UN World Food Programme is an NPO-accredited supporter of the UN World Food Programme (WFP), an organization that is focused on eliminating hunger and poverty. The association conducts activities to expand the circle of WFP support in Japan, including by collecting donations. JFE supports these activities.

● Training Foreign Medical Professionals

Toranomon Hospital in Tokyo, with assistance from private corporations including JFE, manages the Japanese Council for Medical Training to provide training opportunities for foreign doctors. The program invites doctors from developing countries, primarily in Asia, to study in Japan and then return home to promote enhanced medical standards. It also fosters stronger relationships between Japan and these countries.

● Japanese Foundation for Cancer Research

Since its establishment in 1908, the Japanese Foundation for Cancer Research has upheld its basic philosophy of contributing to the improvement of human welfare by overcoming cancer. The foundation, which JFE supports, has played a leading role in research and treatment, as well as human resource development in Japan.

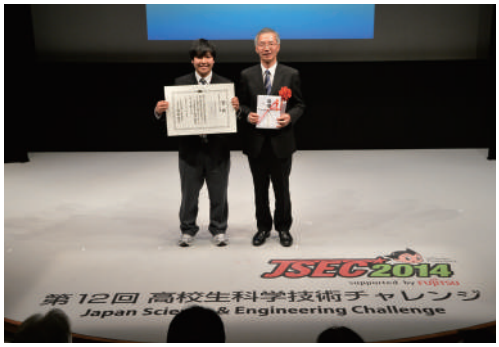
Support for Youth Development

● Japanese Language Speech Contest

The All-China Japanese Speech Contest for students in China has been held since 2006 to further Japan-China relations through language and communication. JFE supports the contest as a way to promote stronger international exchange.

S ● High School Essay Contest

The Japan Science & Engineering Challenge (JSEC) is a national science-paper contest for high school and technical college students. The contest was launched in 2003 under the sponsorship of the *Asahi Shimbun* newspaper. JFE Steel, which in 2006 began providing support to help nurture future scientists and engineers, continues to work with the JSEC to raise the standards of science and technology in Japan.



JFE Steel Award recipient Makoto Tsuchida, a high school student

S E ● FY2014 Internship Achievements

JFE hosted 190 student interns from across Japan in FY2014. JFE Engineering also received 36 students, including interns from overseas, to help them gain practical experience at company workplaces, such as design and construction sites, for periods of two to six weeks.

T ● Supporting Elementary Schools in Ghana and Nigeria

Since FY2011, JFE Shoji Trade and its subsidiary Kawasho Foods Corporation have supported elementary schools in the West African countries of Ghana and Nigeria. In FY2014, 830 sets of desks and chairs, 28,000 notebooks and 12,500 cans of food were donated. Going forward, JFE will continue to support educational development in these nations.

Employees

JFE Standards of Business Conduct (excerpt)

8. Respect human rights
Respect all employees and members of the public as individuals and refrain from any discrimination in corporate activities.

9. Provide rewarding work environments
Provide employees with attractive, safe and rewarding work environments.

Respecting Human Rights

JFE, viewing respect for human rights as both a corporate social responsibility and a foundation of its business, works to raise awareness of human rights among all employees. Specific examples include appointment of employees to oversee human rights education at each JFE company, implementation of human rights training courses, guaranteed employment opportunities and promotion of fair human resource management.

Harassment of a sexual or power nature, or on any other basis, is prevented through measures including company regulations, training, workplace posters and hotlines staffed by men and women at each business location. During the annual Human Rights Week, leaflets with messages from senior management are distributed and employees are encouraged to submit slogans.

Poster promoting hotlines

Securing and Developing Human Resources

In response to the massive generational change due to baby boomer retirements, JFE is placing a strong emphasis on securing and nurturing outstanding personnel.

S ● Skill Transfer by Technical Experts

As JFE Steel expands its exports and other overseas business, it has been investing increasingly in the development of globally capable human resources. In addition to providing training and on-site education, the company is expanding opportunities for employees to travel abroad through foreign-language training programs and the dispatch of technical staffers to attend international conferences or language training. In FY2014, JFE Steel began sending all new recruits in administrative positions to overseas offices and local subsidiaries to experience overseas business by visiting customers and providing business support.

At manufacturing sites, about 160 veteran employees are participating in the Technical Expert Program as full-time instructors who provide training in key steelworks processes. Through on-the-job training and classroom lessons, their students become more rounded employees capable of handling irregular or infrequent tasks.

In light of the generational shift in the JFE workforce over the next decade, the company is strengthening recruiting to ensure that necessary skills are passed on. About 1,000 people will be hired every year under the Fifth Medium-term Business Plan. At the same time, JFE is cultivating a more supportive corporate culture and working to ensure that workplaces foster job satisfaction.

E ● Training Opportunities and Internal Recruiting

JFE Engineering provides a broad range of opportunities for personal language study and dispatches younger employees to overseas projects or local subsidiaries for one to three years to enhance their capabilities for global deployment. Seventy employees have participated since 2011. The company has also adopted an internal recruiting system for employees who are especially interested in particular positions, allowing them to challenge themselves and make the most of their capabilities.

T

JFE Shoji Trade regards human resource development as one of its top priorities. Since establishing formal principles and basic policies for this purpose in 2011, it has been implementing diverse measures, such as a planning sheet on which each employee clearly defined their individual training points and goals and a separate program for developing globally capable personnel.

Workforce Diversity

JFE, as part of its emphasis on workforce diversity, has developed strategies to maximize the individual potential of employees coming from varied lifestyles and family backgrounds. JFE participates in the Action Plans to Advance Women's Activities of the Japan Business Federation, which includes disclosing on the federation's website the company's voluntary action plan for promoting women to senior positions.

S Now that JFE Steel is hiring more women and foreign nationals, a dedicated team is recruiting women for technical career-track positions and assigning them to production and research departments. Over 100 female employees are currently in on-site positions at steelworks. To support career development for female and foreign national employees, the company holds training sessions to improve their skills in communicating with supervisors and senior employees. Also, meetings are organized to enable female employees to exchange opinions. In addition, group training is held at the Tokyo head office for international personnel hired overseas, the goal being to further cultivate a sense of unity among employees who transcend national borders and cultural backgrounds.

E JFE Engineering operates a wide range of businesses, so the company seeks to create a workforce representing varied cultural backgrounds and values. Diverse individuals are being hired, such as people from other business sectors and foreign nationals. The head office regularly provides training to about 100 regional employees of overseas subsidiaries to cultivate mutual understanding and transcend differences in culture and customs. The personnel system was revised in 2013 to abolish employee rankings based on operational tasks, thereby broadening career paths for females. In January 2015, the company set up the Diversity Promotion Office, one of many actions the company would like to take to foster more diverse human resources.

T JFE Shoji Trade is diversifying its workforce by hiring more women for career-track positions and foreign nationals and individuals with experience in other business sectors. It is expanding opportunities for females by promoting them to management positions and introducing a system to enable them to convert from clerical to career-track positions. Also, clerical job categories are being expanded and training programs are being enhanced for women in these positions. Management training in Japan is provided for employees hired overseas to promote global human resource development. In April 2015, the Diversity Promotion Office and Diversity Promotion Project Team were set up to develop a more broadly based workforce.

■ Employee Data (consolidated)

Category		JFE Steel	JFE Engineering	JFE Shoji Trade
Employees*		43,680	8,472	6,667
	Male	38,706	7,460	4,803
	Female	4,974	1,012	1,864
Management positions*		9,343	2,615	1,525
	Male	9,021	2,558	1,353
	Female	322	57	172

Scope: consolidated subsidiaries (JFE Steel: 162; JFE Engineering: 59, JFE Shoji Trade: 107)

■ Employee Data (nonconsolidated)

Category		JFE Steel	JFE Engineering	JFE Shoji Trade
Employees*		13,824	3,391	951
	Male	12,879	2,984	626
	Female	945	407	325
Management positions*		2,510	2,072	350
	Male	2,463	2,019	336
	Female	47	53	14
	Ratio of women in management positions (%)	1.9%	2.6%	4.0%
Recruits*		890	242	59
	Male	820	222	40
	Female	70	20	19
	New graduates	622	114	55
	Mid-career	268	128	4
Years employed		21.5	14.3	14.8
	Male	21.4	14.4	14.9
	Female	23.5	13.5	14.6
Job turnover rate (%)		1.0	1.0	2.7
Rehired employees*		1,271	305	21
Average annual leave taken (days per year)		15.4	15.1	10.4
Average overtime (hours per month)		27.1	24.9	30.1
Employees working shorter hours for childcare* (aggregated)		136	25	25

* As of March 31, 2015. Other figures are as of FY2014.

● Employment of Persons with Disabilities

JFE has established three special subsidiaries — JFE Apple East Corporation, JFE Apple West Corporation and Mie Data Craft Co., Ltd. — to promote the employment of persons with disabilities and create enjoyable workplace environments for them. JFE Engineering has been striving to hire more persons with disabilities after the ratio of such employees fell temporarily due to an increase in its total workforce.

■ Employment of Persons with Disabilities (as of June 1 each year) (%)

	FY2011	FY2012	FY2013	FY2014	FY2015
JFE Steel	1.95	2.02	2.06	2.16	2.25
JFE Engineering	1.86	1.88	1.90	1.84	2.00
JFE Shoji Trade	1.71	1.86	1.90	2.30	2.25

Note: Data for past years have been recalculated retroactively for improved accuracy.

● Reemploying Retirees

JFE has established a system for employees to work until the age of 65, largely to ensure that the skills and experience of veteran employees are handed down.

S JFE Steel created a Senior Expert Program to rehire employees who wish to continue working after mandatory retirement at age 60.

E JFE Engineering established a wholly owned subsidiary, JFE Career Navi, to facilitate the continued careers of retirees.

T For enhanced work-life balance, employees of JFE Shoji Trade may choose from a variety of working arrangements, including full-time, shortened work weeks or shortened working hours.

Work-life Balance

JFE, in addition to complying with regulations such as the Child Care and Family Care Leave Act and the Act for Measures to Support the Development of the Next Generation, significantly exceeds statutory requirements with enhanced holiday and leave programs. To address any possible concerns about long working hours, JFE monitors overtime work and implements necessary adjustments through its CSR Council and other organizational entities.

S JFE Steel carefully explains the needs and purposes of work-life balance through internal publications produced separately for managers and other employees. Management and labor jointly review progress in promoting work-life balance, such as the number of holidays and leaves taken by employees.

E JFE Engineering encourages employees to take at least 15 days of paid leave each year by designating every Friday between July 15 and September 15 as days to take paid leave.

T JFE Shoji Trade conducts training and other activities by position level to inform employees about company programs for work-life balance. To reduce extended working hours, the company is raising awareness of the need for operational efficiency through measures such as designating Wednesday as a day to leave work at the official closing time and conducting the J-SLIM program to implement operational reforms.

■ Applicants for Childcare and Nursing Leave (persons)

Category	Company	FY2012	FY2013	FY2014
Childcare leave	JFE Steel	20 (1)	23 (1)	27 (5)
	JFE Engineering	27 (1)	21 (0)	22 (5)
	JFE Shoji Trade	26 (0)	32 (0)	39 (6)
Nursing leave	JFE Steel	5 (2)	5 (1)	8 (2)
	JFE Engineering	5 (5)	2 (2)	1 (1)
	JFE Shoji Trade	1 (0)	0 (0)	1 (1)

Note: Figures in parentheses are males.

■ Examples of JFE Programs for Work-life Balance

Category		Statutory Requirement	Company	Details
Childcare	Childcare leave period	Until child is 1 year old	S	Up to 3 years old
			E	Up to 2.5 years old
			T	Up to 2 years old
	Shortened working hours	Until child is 3 years old	S E	2 hours per day until child finishes elementary school
			T	2 hours per day until child finishes third grade of elementary school
	Childcare subsidies	Not stipulated	S	Partial subsidy for nonregistered nursery schools and daycare facilities for sick children
			E	Company-operated childcare facility offering reduced fees
			T	Partial childcare subsidy for employees returning from childcare leave
	Special leave when spouse gives birth	Not stipulated	S E	5 days of paid leave
			T	2 days of paid leave
Nursing Care	Nursing leave period	Maximum 93 days per person	S E	Maximum total of 2.5 years
			T	Maximum total of 1 year
	Shortened working hours	Maximum 93 days per person	S E	Maximum total of 2.5 years
			T	Maximum total of 1 year
Career Support/ Reemployment Program		Not stipulated	S T	Reemployment of those who left for childbirth, childcare, nursing care or spousal relocation

S: JFE Steel E: JFE Engineering T: JFE Shoji Trade

Employee Health and Safety

Providing for the safety and health of employees is a basic requirement of companies, particularly manufacturers, and is fundamental to the continued existence of any company. JFE, which adheres to the philosophy of "safety first," works to consistently maintain safe working environments and secure workplaces for all employees.

■ Lost-work-time Injuries and Severity (rates)

		FY2010	FY2011	FY2012	FY2013	FY2014
JFE Steel	Lost-work-time injuries	0.21	0.27	0.23	0.06	0.15
	Severity	0.02	0.19	0.48	0.01	0.09
JFE Engineering	Lost-work-time injuries	0.87	0.47	0.17	0.73	0.42
	Severity	0.48	0.89	0.01	0.03	0.40
JFE Shoji Trade Group	Lost-work-time injuries	1.04	0.39	0.52	0.26	0.72
	Severity	0.07	0.02	0.01	0.08	0.06
Manufacturing industry average	Lost-work-time injuries	0.98	1.05	1.00	0.94	1.06
	Severity	0.09	0.08	0.10	0.10	0.09

JFE Steel and JFE Engineering: parent company, business associates and contractors; JFE Shoji Trade: parent and 107 consolidated subsidiaries, business associates and contractors

S JFE Steel, based on its core belief in safety first, as declared by the company president himself, follows three basic strategies: promote the autonomous resolution of issues, strengthen health and safety at business associates and group companies, and promote mental and physical health. By adopting specialized safety knowhow developed by DuPont, JFE Steel is building a new safety culture, changing the focus away from the dependency of people doing only what they are told to do and toward the autonomy of people exercising initiative. Everyone, including workers in the frontline, take action from the perspective of Felt Leadership (respect through action for the well-being of people) in the belief that every accident can be prevented.

E JFE Engineering, striving to eliminate accidents at its approximately 2,000 construction and operating sites (annual total) nationwide and two manufacturing plants, identifies the sources of danger and required safety measures through detailed risk assessments for each operation, as well as consideration of lessons from past accidents. Efforts to enhance working environments and occupational health standards are also helping to ensure the health of employees. In addition, the company promotes activities to maintain physical and mental health.

T All JFE Shoji Trade employees participate in health and safety activities, including the identification and reduction of risks, under the slogan "creating an accident-free workplace through resolve." Safety patrols are conducted regularly at group companies in Japan and abroad. Working groups on safety and technical meetings are organized group-wide. The company creates safe working environments by eliminating unsafe conditions and behavior, especially accidents caused by people being struck by moving or suspended objects, and by thoroughly confirming progress and results of safety activities.

Disaster Prevention

S JFE Steel conducts annual drills for large-scale earthquakes or tsunamis. Based on the results of these drills, disaster preparedness is being strengthened with increased options for emergency communication, supported by system backup mechanisms and contact bases at the time of an earthquake, to help maintain command and control of critical facilities and functions. JFE Steel is also stepping up efforts to make equipment and people alike more disaster resilient.

E All employees at JFE Engineering are issued an Earthquake Disaster Manual that draws on lessons learned from the Great East Japan Earthquake to specify what people should do during a major disaster.

T JFE Shoji Trade, applying experiences from the Great East Japan Earthquake, has created manuals on initial responses and procedures for workplace managers, developed emergency communication methods, provisioned emergency food supplies and established a system for confirming the safety of employees and their families. The company also conducts disaster response exercises and drills.

Health Management

JFE initiatives to maintain and enhance the health of its employees are supported by occupational health and safety staff members to ensure that all employees perform at top capacity by maintaining healthy minds and bodies.

Key Initiatives

- Regular physical examinations
- Physical examination follow-up (counseling and adjustments in assignments, as required)
- Treatment and follow-up by partner hospitals and their networks
- Enhanced mental healthcare (counseling services, education for managers, care for those in need, etc.)

JFE Steel Initiatives (besides above)

- Meetings with physicians specializing in worker health to consider health-management measures
- Hosting conferences where worker-health physicians present case studies
- Operation of health management systems
- Utilization of occupational health management system
- Preventive measures against new strains of influenza
- Measures regarding passive smoking
- Introduction of a stress test program
- Response to mandatory risk assessment of chemical substances, etc.

JFE Engineering Initiatives (besides above)

- New award program for promoting specific health guidance
- Stress tests for all employees and promotion of workplace invigorating activities
- Guidance from worker-health nurses and physicians who visit branch offices and worksites
- Preventive measures against new strains of influenza

JFE Shoji Trade Initiatives (besides above)

- Preventive measures against new strains of influenza
- Weekly reporting and consultation between worker-health physicians and health staff members
- Monthly Health Committee meetings
- Promotion of specific health guidance

Development of Dynamic Work Environments

● Sound Labor-management Relations

S Recognizing that labor-management cooperation is essential for the company to tackle its business challenges appropriately, JFE Steel has established a strong, positive relationship with its labor union, one based on mutual understanding and trust. The company convenes its Labor-Management Business Discussion Committee four times a year to bring the president and other executives together with labor representatives for the purpose of exchanging ideas on business challenges. The two sides also share views on working conditions and workplaces, and hold joint consultations whenever the labor system is revised.

E JFE Engineering strives to ensure sound labor-management relations through its union shop system. In addition to Central Labor-Management Committees, which are regularly convened for group-company presidents and executives to share views with labor representatives, a labor-management committee on work-life balance has been set up to maintain friendly working environments.

T JFE Shoji Trade management and labor regularly exchange opinions and share information. During a Management Committee convened twice a year, the company's president and other executives exchange views with labor representatives.

● Invigorating Workplaces through Small Group Activities

S Throughout JFE Steel, approximately 1,500 small groups carry out J1 Activities* for quality and work improvement. In addition, the JFE Family Result Reporting Conference, which includes participation from domestic and overseas group companies, is organized twice a year, and groups selected through competition are given opportunities to go overseas as an incentive.

* Activities for turning JFE into an excellent company and propelling it into the No. 1 position in the industry are called J1 Activities at JFE Steel and JE1 Activities at JFE Engineering.

E At JFE Engineering, about 160 teams involving 1,400 employees, including those of group companies worldwide, participate in JE1 Activities and present results at a company-wide competition at the end of the fiscal year. The activities, which cover topics including quality, efficiency, safety and costs, contribute significantly to workplace vitality and corporate performance.

T Since October 2008, JFE Shoji Trade has pursued its J-SLIM operational reform program, which includes system examinations and measures to improve management, work environments and line work. In 2014, 15 teams, including JFE Shoji Trade, five domestic companies and two overseas companies, presented their activities during the sixth J-SLIM presentation at the company's Tokyo head office.

Awards and Accolades

External Awards

JFE develops innovative technologies and products to meet the needs of society, and the results of its activities have been widely recognized in Japan and overseas.

	Prizes/Awards	Award-winning Item(s)	Sponsors
JFE Steel	61st Okochi Memorial Technology Prize	Manufacturing method for raw iron that blows gaseous fuel to reduce CO_2 emissions	Okochi Memorial Foundation
	FY2014 Otani Art Museum Award	Uni-Hiten high-strength steel plate for outer panels, combining excellent appearance and fuel efficiency	Otani Art Museum
	12th New Machinery Promotion Award:, Ministry of Economy, Trade and Industry Awards	Robust, uniform cooling equipment for steel plates during rolling process	Japan Society for the Promotion of Machine Industry (JSPMI)
	Commendation for Science and Technology, Development category: FY2014 Minister of Education, Culture, Sports, Science and Technology Awards	Seismic technologies incorporating high-performance steel for building construction	Ministry of Education, Culture, Sports, Science and Technology
	2014 R&D 100 Awards	JFE-TF1 highly heat-resistant stainless steel that helps conserve resources	*R&D Magazine* (U.S.)
	2014 National Commendation for Invention: FY2013 Minister of Education, Culture, Sports, Science and Technology Awards	SUPER-SINTER™, a sintering technology using hydrocarbon gas	Japan Institute of Invention and Innovation
JFE Engineering	NIKKAN KOGYO SHIMBUN Prize: Japan Industrial Water Association	Steel pipe for faults	Japan Industrial Water Association
	Engineering Merit Awards	Viaduct construction project in Shwegonedine, Myanmar	Engineering Advancement Association of Japan
	Engineering Encouragement Special Award	Development of hybrid tide embankment	Engineering Advancement Association of Japan
	Japan Gas Association Technology Award	AtoMS device for adjusting gas heat quantity; Dual torch welding technology for pipelines; and Tokkiless method for polyethylene pipe	Japan Gas Association
	Good Design Award	Cycle Tree (Cycle Station Toride) automated-parking facility for bicycles	Japan Institute of Design Promotion
	Industrial Machinery Achievement Award	Personal award for Executive Yasuo Suzuki	The Japan Society of Industrial Machinery Manufacturers

Okochi Memorial Technology Prize

Otani Art Museum Award

Internal Awards

	Prize/Award	Award-winning Item	Award-winning Departments
JFE Steel	Award for Excellence, JFE Steel President's Awards	Production method for thick, high-strength steel pipe, leading to profitable entry into new high-end market	West Japan Works (Fukuyama District), Welded Pipe Department, and others
	Gold Prize, New Product Development Awards	SP3 Rail with high wear resistance	Steel Research Laboratory, Steel Material Research Department, and others

GRI Content Index

This report contains Standard Disclosures from the GRI G4 Sustainability Reporting Guidelines.

General Standard Disclosures			Report Pages	Environmental Data Book Pages
Strategy and Analysis				
	G4-1	Statement from the most senior decision-maker of the organization (such as CEO, chair, or equivalent senior position) about the relevance of sustainability to the organization and the organization's strategy for addressing sustainability.	3–4	—
	G4-2	Description of key impacts, risks, and opportunities.	3–4, 30	—
Organizational Profile				
	G4-3	Name of the organization.	5–6	—
	G4-4	Primary brands, products, and services.	5–6	—
	G4-5	Location of the organization's headquarters.	5–6	—
	G4-6	Number of countries where the organization operates, and the names of countries where either the organization has significant operations or that are specifically relevant to the sustainability topics covered in the report.	5–6	1
	G4-7	Nature of ownership and legal form.	5–6	—
	G4-8	Markets served (including geographic breakdown, sectors served, and types of customers and beneficiaries).	5–6	—
	G4-9	Scale of reporting organization: • Total number of employees • Total number of operations • Net sales (for private sector organizations) or net revenues (for public sector organizations) • Total capitalization broken down in terms of debt and equity (for private sector organizations) • Quantity of products or services provided	5–6, 57	—
	G4-10	a. Total number of employees by employment contract and gender. b. Total number of permanent employees by employment type and gender. c. Total workforce by employees and supervised workers and by gender. d. Total workforce by region and gender. e. Whether a substantial portion of the organization's work is performed by workers who are legally recognized as self-employed, or by individuals other than employees or supervised workers, including employees and supervised employees of contractors. f. Significant variations in employment numbers (such as seasonal variations in employment in the tourism or agricultural industries).	57–58	—
	G4-11	Percentage of total employees covered by collective bargaining agreements.	60	—
	G4-12	A description of organization's supply chain.	5–6, 51	—
	G4-13	Significant changes during the reporting period regarding the organization's size, structure, ownership, or its supply chain: • Changes in location or operations, including facility openings, closings, and expansions • Changes in the share capital structure and other capital formation, maintenance, and alteration operations (for private sector organizations) • Changes in the location of suppliers, the structure of the supply chain, or in relationships with suppliers, including selection and termination	Not applicable	—
	G4-14	Explanation of whether and how the precautionary approach or principle is addressed by the organization.	24	—
	G4-16	Memberships of associations (such as industry associations) and national or international advocacy organizations in which the organization: • Holds a position on the governance body • Participates in projects or committees • Provides substantive funding beyond routine membership dues • Views membership as strategic	37–38	—
Identified Material Aspects and Boundaries				
	G4-17	Operational structure of the organization. a. All entities included in the organization's consolidated financial statements or equivalent documents. b. Any entity included in the organization's consolidated financial statements or equivalent documents is not covered by the report.	1	1
	G4-18	a. Process for defining the report content and the Aspect Boundaries. b. How the organization has implemented the Reporting Principles for Defining Report Content.	1	1
	G4-22	Explanation of the effect of any restatements of information provided in previous reports, and the reasons for such restatements.	35–40	13
	G4-23	Significant changes from previous reporting periods in the Scope and Aspect Boundaries.	1	1
Report Profile				
	G4-28	Reporting period (such as fiscal or calendar year) for the information provided.	1	1
	G4-29	Date of the most recent previous report (if any).	1	1
	G4-30	Reporting cycle (such as annual, biennial).	1	1
	G4-31	Contact point for questions regarding the report or its contents.	Back cover	Back cover
	G4-32	a. "In accordance" option has been chosen by the organization. b. GRI Content Index for the chosen option (see tables below). c. Reference to the External Assurance Report, if the report has been externally assured. GRI recommends the use of external assurance, but it is not a requirement to be "in accordance" with the Guidelines.	Reference, 62–63	—
Governance				
	G4-34	Governance structure of the organization, including committees of the highest governance body. Identify any committees responsible for decision making on economic, environmental and social impacts.	19–20	—
	G4-35	Process for delegating authority for economic, environmental and social topics from the highest governance body to senior executives and other employees.	22	—
	G4-36	Details on whether the organization has appointed an executive-level position or positions with responsibility for economic, environmental and social topics, and whether post holders report directly to the highest governance body.	22	—
	G4-37	Processes for consultation between stakeholders and the highest governance body on economic, environmental and social topics.	22	—
	G4-38	Composition of the highest governance body and its committees by: • Executive or non-executive • Independence • Tenure on the governance body • Number of each individual's other significant positions and commitments, and the nature of the commitments • Gender • Member of under-represented social groups • Competences relating to economic, environmental and social impacts • Stakeholder representation	Corporate Governance Report, Securities Report	—
	G4-39	Details on whether the Chair of the highest governance body is also an executive officer (and, if so, his or her function within the organization's management and the reasons for this arrangement).	Securities Report	—
	G4-40	Nomination and selection processes for the highest governance body and its committees, and the criteria used for nominating and selecting highest governance body members. • Whether and how diversity is considered • Whether and how independence is considered • Whether and how expertise and experience relating to economic, environmental and social topics are considered • Whether and how stakeholders (including shareholders) are involved	Corporate Governance Report, Securities Report	—
	G4-41	Processes for the highest governance body to ensure conflicts of interest are avoided and managed. • Cross-board membership • Cross-shareholding with suppliers and other stakeholders • Existence of controlling shareholder • Related party disclosures	19–21	—
	G4-42	Highest governance body's and senior executives' roles in the development, approval, and updates of the organization's purpose, value or mission statements, strategies, policies, and goals related to economic, environmental and social impacts.	22	—
	G4-44	a. Processes for evaluation of the highest governance body's performance with respect to governance of economic, environmental and social topics, and whether such evaluation is independent or not, and its frequency, as well as whether such evaluation is a self-assessment. b. Actions taken in response to evaluation of the highest governance body's performance with respect to governance of economic, environmental and social topics, including, as a minimum, changes in membership and organizational practice.	22	—
	G4-46	Highest governance body's role in reviewing the effectiveness of the organization's risk management processes for economic, environmental and social topics.	19–22	—
	G4-47	Frequency of the highest governance body's review of economic, environmental and social impacts, risks and opportunities.	19–22	—
	G4-49	Process for communicating critical concerns to the highest governance body.	19–22, 24	—

General Standard Disclosures			Report Pages	Environmental Data Book Pages
	G4-51	a. Remuneration policies for the highest governance body and senior executives for the below types of remuneration: • Fixed pay and variable pay: – Performance-based pay – Equity-based pay – Bonuses – Deferred or vested shares • Sign-on bonuses or recruitment incentive payments • Termination payments • Clawbacks • Retirement benefits, including the difference between benefit schemes and contribution rates for the highest governance body, senior executives, and all other employees b. Performance criteria in the remuneration policy related to the highest governance body's and senior executives' economic, environmental and social objectives.	Corporate Governance Report, Securities Report	—
	G4-52	Process for determining remuneration, and whether remuneration consultants are involved in determining remuneration, as well as whether they are independent of management. Any other relationships which the remuneration consultants have with the organization.	Corporate Governance Report, Securities Report	—
Ethics and Integrity				
	G4-56	Description of the organization's values, principles, standards and norms of behavior such as codes of conduct and codes of ethics.	2	—
	G4-58	Internal and external mechanisms for reporting concerns about unethical or unlawful behavior, and matters related to organizational integrity, such as escalation through line management, whistleblowing mechanisms and hotlines.	24	—

Specific Standard Disclosures			Report Pages	Environmental Data Book Pages
Disclosures on Management Approach				
	G4-DMA	a. Why the Aspect is material. Report the impacts that make this Aspect material. b. How the organization manages the material Aspect or its impacts. c. Evaluation of the management approach, including: • The mechanisms for evaluating the effectiveness of the management approach • The results of the evaluation of the management approach • Any related adjustments to the management approach	22, 27, 49, 52, 53, 56	3
Economic				
	Economic Performance			
	G4-EC1	Direct economic value generated and distributed.	Securities Report	—
	G4-EC2	Financial implications and other risks and opportunities for the organization's activities due to climate change.	30	—
	G4-EC3	Coverage of the organization's defined benefit plan obligations.	Securities Report	—
	Indirect Economic Impacts			
	G4-EC7	Development and impact of infrastructure investments and services supported.	53–55	—
	G4-EC8	Significant indirect economic impacts, including the extent of impacts.	53	—
Environmental				
	Materials			
	G4-EN1	Materials use by weight or volume.	33–34	9–11, 20, 25
	G4-EN2	Percentage of materials used that are recycled input materials.	33–34, 42–43	—
	Energy			
	G4-EN3	Energy consumption within the organization.	33–34, 35–36, 39	9–11, 20, 25
	G4-EN4	Energy consumption outside of the organization.	33–34	9–10, 13
	G4-EN5	Energy intensity ratio for the organization.	35–36, 39	13
	G4-EN6	Reduction of energy consumption.	35–36, 39	—
	G4-EN7	Reductions in energy requirements of products and services.	36	—
	Water			
	G4-EN8	Total water withdrawal by source.	33–34	9–11, 20
	G4-EN10	Percentage and total volume of water recycled and reused.	33–34, 40	9–10, 12
	Biodiversity			
	G4-EN12	Description of significant impacts of activities, products, and services on biodiversity in protected areas and areas of high biodiversity value outside protected areas.	14, 45	—
	Emissions			
	G4-EN15	Direct greenhouse gas (GHG) emissions (Scope 1).	33–39	9–10, 13, 21
	G4-EN16	Energy indirect greenhouse gas (GHG) emissions (Scope 2).	33–39	9–10, 13, 21, 25
	G4-EN17	Other indirect greenhouse gas (GHG) emissions (Scope 3).	33–34, 36	9–10, 13
	G4-EN18	Greenhouse gas (GHG) emissions intensity.	35–36, 39	13
	G4-EN19	Reduction of greenhouse gas (GHG) emissions.	35–36, 39	—
	G4-EN21	NOx, SOx, and other significant air emissions.	33–34, 40–41	9–10, 14
	Effluents and Waste			
	G4-EN22	Total water discharge by quality and destination.	33–34, 40–41	9–10, 14, 22
	G4-EN23	Total weight of waste by type and disposal method.	33–34, 43	9–10, 12, 14, 23–24
	G4-EN24	Total number and volume of significant spills.	Not applicable	—
	Products and Services			
	G4-EN27	Extent of impact mitigation of environmental impacts of products and services.	9–14, 36, 42–43, 44–46	5–6
	G4-EN28	Percentage of products sold and their packaging materials that are reclaimed by category.	33–34, 40–41	5
	Compliance			
	G4-EN29	Monetary value of significant fines and total number of non-monetary sanctions for non-compliance with environmental laws and regulations.	Not applicable	—
	Transport			
	G4-EN30	Significant environmental impacts of transporting products and other goods and materials used for the organization's operations, and transporting members of the workforce.	33–34, 36	9–10, 13
	Overall			
	G4-EN31	Total environmental protection expenditures and investments by type.	29	4
Social				
Labor Practices and Decent Work				
	Employment			
	G4-LA1	Total number and rates of new employee hires and employee turnover by age group, gender, and region.	57	—
	G4-LA2	Benefits provided to full-time employees that are not provided to temporary or part-time employees, by significant locations of operations.	56–60	—
	G4-LA3	Return to work and retention rates after parental leave, by gender.	58	—
	Occupational Health and Safety			
	G4-LA5	Percentage of total workforce represented in formal joint management worker health and safety committees that help monitor and advise on occupational health and safety programs.	59–60	—
	G4-LA6	Type of injury and rates of injury, occupational diseases, lost days, absenteeism, and total number of work-related fatalities by region and gender.	59	—
	G4-LA8	Health and safety topics covered in formal agreements with trade unions.	59–60	—
	Training and Education			
	G4-LA10	Programs for skills management and lifelong learning that support the continued employability of employees and assist them in managing career endings.	56–58	—
	Diversity and Equal Opportunity			
	G4-LA12	Composition of governance bodies and breakdown of employees per employee category according to gender, age group, minority group membership, and other indicators of diversity.	57–58	—
Human Rights				
	Investment			
	G4-HR2	Total hours of employee training on human rights policies or procedures concerning aspects of human rights that are relevant to operations, including the percentage of employees trained.	56	—
Society				
	Local Communities			
	G4-SO1	Percentage of operations with implemented local community engagement, impact assessments, and development programs.	53–55	—
	G4-SO2	Operations with significant actual and potential negative impacts on local communities.	Not applicable	—
	Anti-Corruption			
	G4-SO4	Communication and training on anti-corruption policies and procedures.	24	—
Product Responsibility				
	Customer Health and Safety			
	G4-PR1	Percentage of significant product and service categories for which health and safety impacts are assessed for improvement.	49	—
	Product and Service Labeling			
	G4-PR4	Total number of incidents of non-compliance with regulations and voluntary codes concerning product and service information and labeling, by type of outcomes.	Not applicable	—
	G4-PR5	Results of surveys measuring customer satisfaction.	50	—
	Marketing Communications			
	G4-PR6	Sale of banned or disputed products.	Not applicable	—

Comparison with Environmental Reporting Guidelines 2012 (Ministry of the Environment, Japan)

Report Parameters and Summary						
Item	CSR Report					Environmental Data Book Pages
	Pages	Content	JFE Steel	JFE Engineering	JFE Shoji Trade	
1. Report Profile						
(1) Report boundary and reporting period	1	Editorial Policy	○	○	○	1
(2) Organizations coverage ratio and reporting period difference	1	Editorial Policy	○	○	○	—
(3) Reporting policies	1	Editorial Policy	○	○	○	—
	62-63	GRI Content Index	○	○	○	—
(4) Policies for selecting a type of report	1	Editorial Policy	○	○	○	—
	Back cover	Contact information	○	○	○	—
2. Chairman's statement/CEO's statement						
	3-4	Message from the CEO	○	○	○	—
3. Summary						
(1) Overview of environmentally focused management	5-6	JFE in Society	○	○	○	2
(2) Overview of KPI trends	—	—				—
(3) Summary of activities to address an individual environmental issue	31-32	Priority Targets and Results	○	○	○	7–8
4. Material Balance						
	33-34	Materials Flow	○	○		9–10

Information and Indicators on How Environmentally Focused Management Including Environmental Management is Working						
Item	CSR Report					Environmental Data Book Pages
	Pages	Content	JFE Steel	JFE Engineering	JFE Shoji Trade	
1. Environmental Policies, Visions and Business Strategies						
(1) Environmental policies	2	Standards of Business Conduct	○	○	○	—
	27	Environmental Philosophy and Strategies	○	○	○	—
(2) Material issues, visions and business strategies	3-4	Message from the CEO	○	○	○	—
	30	Environmental Risks and Opportunities	○	○	○	—
2. Organizational Systems and Governance						
(1) Organizational systems for environmentally focused management	27-28	Environmental Management	○	○	○	3
	65-66	Third-party Comments	○	○	○	—
(2) Environmental risk management system	27-28	Environmental Management	○	○	○	—
(3) Compliance with environmental regulations	28	Environmental Auditing	○	○	○	—
	40-41	Protecting the Environment	○	○		—
3. Responsiveness of Stakeholder Issues						
(1) Responsiveness to stakeholder issues	27	Environmental Philosophy and Strategies	○	○	○	—
	30	Environmental Risks and Opportunities	○	○	○	—
(2) Philanthropy related to the environment	37-39	Initiatives by the Japanese Steel Industry	○			—
	47	Environmental Communication	○	○	○	—
4. Environmental Initiatives in the Value Chain						
(1) Strategies and environmental policies in the value chain	30	Value Chain Initiatives	○	○	○	—
	30	Environmental Risks and Opportunities	○	○	○	—
	36	CO_2 Reduction in Value Chain	○	○		13
(2) Green purchasing and procurement	30	Value Chain Initiatives	○	○	○	—
(3) Products and services designed for mitigating environmental impacts	9-14	Addressing Environmental Issues with Innovative World-class Technology	○	○	○	—
	36	CO_2 Reduction in Value Chain	○			13
	42-43	Resource Recycling	○	○	○	5–6
	44-46	Eco-friendly Products and Technologies	○	○	○	—
(4) New environmental technologies and research and development	9-14	Addressing Environmental Issues with Innovative World-class Technology	○	○	○	—
	29	Environmental Accounting	○	○		4
	37-38	Initiatives by the Japanese Steel Industry	○			—
	44-46	Eco-friendly Products and Technologies	○	○	○	—
(5) Environmentally sound transportation	36	CO_2 Reduction in Value Chain	○			13
(6) Resource exploitations and real estate development/investment with less environmental impacts	—	—				—
(7) Waste management and recycling	31-32	Priority Targets and Results	○	○	○	7–8
	42-43	Resource Recycling	○	○	○	12, 14, 23–24

Information and Indicators on Environmental Impacts of Business Activities and Environmental Initiatives Undertaken to Mitigate Them						
Item	CSR Report					Environmental Data Book Pages
	Pages	Content	JFE Steel	JFE Engineering	JFE Shoji Trade	
1. Resources Used and Energy Consumption						
(1) Total energy consumption and initiatives to reduce it	11	Addressing Environmental Issues with Innovative World-class Technology	○	○		—
	31-32	Priority Targets and Results	○	○	○	7–8
	33-34	Materials Flow	○	○		9–10, 20
	35-36	Energy Savings and CO_2 Reduction in Steelmaking	○			11–13
	39	CO_2 Reduction Initiatives			○	25
(2) Total materials used and initiatives to reduce them	13	Addressing Environmental Issues with Innovative World-class Technology	○	○		—
	31-32	Priority Targets and Results			○	7–8
	33-34	Materials Flow	○	○		9–10, 11, 20
(3) Water withdrawal and initiatives to reduce it	33-34	Materials Flow	○	○		9–10, 11, 20
	40	Cyclic Use of Water	○			12
2. Recycled input resources (within the organizational boundary)						
	13	Addressing Environmental Issues with Innovative World-class Technology	○	○		—
	31-32	Priority Targets and Results	○	○	○	7–8
	33-34	Materials Flow	○			9–12
	40	Cyclic Use of Water	○			12
	43	Resource Recycling	○	○	○	5–6
3. Products and Services and Environmental Impacts Arising from Production						
(1) Total products manufactured or goods sold	33-34	Materials Flow	○	○		9–10, 11, 20
(2) Greenhouse gas emissions and initiatives to reduce them	11	Addressing Environmental Issues with Innovative World-class Technology	○	○		—
	31-32	Priority Targets and Results	○	○	○	7–8
	33-34	Materials Flow	○	○		9–10
	35-39	Global Warming Prevention	○	○	○	4, 12–13, 21, 25
(3) Total water discharge and initiatives to reduce it	33-34	Materials Flow	○	○		7–8
	40	Efficient Use of Water and Prevention of Contamination	○			11–12, 14, 22
(4) Effluents and nuisance, and initiatives to reduce them	33-34	Materials Flow	○	○		7–8
	40-41	Controlling Air Emissions	○	○		14
(5) Release and transfer of chemical substances and initiatives to reduce them	33-34	Materials Flow	○	○		7–8
	40-41	Management of Chemical Substances	○			14–19, 22–23
(6) Total weight of waste generated, waste disposed by land filling or incineration and initiatives to reduce them	31-32	Priority Targets and Results	○	○		7–8
	33-34	Materials Flow	○	○		9–10, 11–12, 14
	42-43	Resource Recycling	○	○	○	5–6, 23–24
(7) Significant spills of hazardous substances and measures taken for preventing them	41	Management of Chemical Substances	○	○		—
4. Conservation of Biological Diversity and the Sustainable Use of its Components						
	14	Addressing Environmental Issues with Innovative World-class Technology	○			—
	45	Eco-friendly Products and Technologies	○			—
	47	Disclosure and Exchange of Information	○	○		—

Information and Indicators on the Economic and Social Contexts of Environmentally Focused Management						
Item	CSR Report					Environmental Data Book Pages
	Pages	Content	JFE Steel	JFE Engineering	JFE Shoji Trade	
1. Economic Contexts of Environmentally Focused Management						
(1) Economic contexts in an enterprise	29	Environmental Accounting	○	○		4
	30	Environmental Risks and Opportunities	○	○	○	—
(2) Economic contexts in society	30	Environmental Risks and Opportunities	○	○	○	—
2. Social contexts of environmentally focused management						
	15-16	Securing and Nurturing Diverse Human Resources	○	○	○	—
	19-25	Management	○	○	○	—
	48-60	Contributing to Society's Development	○	○	○	—

Miscellaneous Contents to Be Disclosed						
Item	CSR Report					Environmental Data Book Pages
	Pages	Content	JFE Steel	JFE Engineering	JFE Shoji Trade	
1. Events after the Reporting Period						
(1) Events after the reporting period	—					—
(2) Extraordinary events	—					—
2. Assurance and Other Measures to Enhance Reliability of Environmental Information						
	—					—

Third-party Comments

Yoshinao Kozuma
Professor
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1. Fifth Medium-term Business Plan

Something that merits special commendation in this fiscal year's report is that the five group-wide measures set forth in the Fifth Medium-term Business Plan incorporate a growth strategy that is strongly committed to sustainable societies. This clarifies JFE's intention to transition its business model for integration of its CSR policy and business activities. This will include strengthened energy- and resource-saving in production, environmental load reduction based on environment-friendly products, the global transfer and dissemination of advanced production technologies, and products and services suitable for infrastructure development.

2. Expanded Reporting Scope

The reporting scope has continued to expand. For this fiscal year, the numbers of employees and managers are reported on a consolidated basis, and the CO_2 emissions of the three operating companies and their different businesses are disclosed separately. Also reported are trends in CO_2 emissions by the JFE Group. I hope that JFE will further expand its consolidated reporting of other KPIs.

3. Progress in Diversity Promotion

Significant improvement can be seen in JFE's diversification. In 2015, JFE established its Group Basic Policy for Human Resource Management, which established diversification as a guiding principle, indicating the direction in which the Group is heading. Previously, JFE Steel was the only operating company to have a Diversity Promotion Section, but similar units were created by JEF Engineering and JEF Shoji Trade in 2015. Also established was the numerical goal of tripling the number of female managers by 2020. Another key achievement is that all the three operating companies reported child and/or family care leaves taken by male employees. Diversity has become a Group-wide matter with significant promise for the future, as exemplified by JFE's recognition as a "Nadeshiko Brand" for two consecutive years.

4. Challenges Going Forward

Each of the three operating companies has established a system for disclosing employee information, so the next challenge will be to disclose information for individual group companies in Japan. Given that each operating company has many group companies, time will be required to establish channels for collecting data, for which JFE is expected to develop a well-planned system.

GRI G4, which applies to this year's report, requires additional information disclosure. Above all, sharing the process of materiality assessment for selecting information to be disclosed is a basic requirement that should be addressed as soon as possible. Incorporating CSR management throughout the value chain is another growing international trend. Further efforts to increase the accuracy of the existing information would be welcomed, for which a good start may be the disclosure of Scope 3[*1] items of the CDP[*2] questionnaire survey.

*1 The 15-category Scope 3 refers to related greenhouse gas emissions by any vendor or purchaser in a supply chain, from upstream activities associated with products and services procured by a company to downstream activities, such as the disposal of products sold by a company.
*2 CDP (formerly, the Carbon Disclosure Project) is an international NPO working to reduce greenhouse gas emissions and mitigate the risks of climate change. CDP distributes questionnaires to companies around the world and reports its analysis and evaluation of the results to institutional investors.

Third-party Comments

Toshihiko Fujii
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1. Significance of CSR Reports

The diversification of society has a dual meaning for enterprises. One is the diversification of people's values and attributes, and the other is the expanded fields of new-business opportunity in international society, which is actually an aggregation of diverse societies.

How can sustainable growth be achieved in the midst of internal and external diversification? A CSR report is one way to answer to this question.

2. Efforts to Address Environmental Challenges

First, I want to cite Feature 1, which reports on efforts to address environmental challenges. These are very topical and intriguing. Super-SINTER™, Ferro-coke and Marine Stone™ clearly demonstrate an earnest commitment to respond to environmental issues. The corporate mission of "contributing to society with the world's most innovative technology" is firmly put into practice.

However, I expect the JFE Group to go one step further. How the public views what should constitute future society — the ultimate question — continues to diversify. It would be in JFE's interest to spell out more clearly the kind of society it wishes to help create, which would make this report even more convincing.

3. Efforts to Secure and Develop Human Resources

The next topic is human resources, which is taken up in Feature 2. I appreciate JFE's ongoing implementation of measures to secure and develop diverse human resources. Diversification is a centrifugal force for a company and requires a corresponding centripetal force to mobilize the capacities of diverse human resources. Generating this centripetal force may require a more forceful presentation of JFE's common vision.

But my impression is that the report attaches too much weight to efforts in Japan. I hope that the next report will cover efforts and policies to strengthen JFE's globally capable human resources.

4. Toward a True Global Enterprise

My final comment concerns globalization. The JFE Group Standards of Business Conduct states: "Endeavor to achieve mutual understanding with people around the world, working from a global perspective and with respect to international norms, and also local cultures and customs." The CSR Report is an important means to this end. Achieving mutual understanding requires more than simply stating your strengths. Naturally, some issues require further improvement, and some that impact the environment or society have not yet been tackled, so disagreements with stakeholders may need to be addressed. These unresolved issues must be candidly stated "to achieve mutual understanding with people around the world."

The book *Kaizen*, which gained global popularity at the peak of Japan's competitive strength, cited the ability to recognize problems as a source of strength for Japanese companies. "Kaizen" is impossible without recognizing problems. The CSR reports of Japanese companies will gain a new competitive edge in a diversified world when they clearly express the problems that companies are encountering.

JFE

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This illustration, created by a JFE Steel employee, depicts workers and humanlike cars, cans, utensils and other familiar objects made of steel holding hands to express their friendliness toward society and the environment.