Contributing to Societal Development

JFE Group CSR Report 2018
Contributing to Societal Development

Customers

JFE Standards of Business Conduct (Excerpt)

(1) Provide quality products and services
Earn the trust and regard 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. Also, leverage our superior technologies for the sustainable growth of the Group and society.

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.

Strengthening Quality Assurance System

Customer demand for higher quality is stronger than ever. To meet this demand, JFE Steel has established a quality assurance system with advanced sensors for process monitoring, in addition to its ongoing efforts to develop new products and advanced manufacturing technologies.

The company’s quality assurance system is being continually improved based on the Guidelines for Enhancing Quality Assurance Systems, issued by the Japan Iron and Steel Foundation (JISF). Moreover, in an effort to enhance reliability in its product testing, the company has introduced high-precision equipment and is actively working on reducing human intervention in testing by automating various testing components, including reporting.

JFE Steel has received all quality assurance certifications required for steel products, including the JIS mark and approvals from ship classification bodies, regarding its quality management system based on ISO 9001. In response to customer demand, the company has also received certification under the national standards of relevant foreign countries.

Products and services that we design, procure, manufacture or construct must comply with all required rules and regulations, and quality must satisfy the needs of our customers. Under this corporate policy, JFE Engineering continually strives to improve the quality of its products and services.

For example, specialists conduct inspections at each phase of a plant construction project, including the design, construction and test-run phases. Immediately prior to final delivery to the customer, a witness inspection is conducted so that the customer can be directly assured of its quality with their own eyes.

In addition, JFE Engineering has published quality-management manuals based on the specific characteristics of each product and obtained ISO 9001 certification for each product category.

To further strengthen its quality assurance system, JFE Engineering is raising employee awareness through training while also developing a system for immediately transferring and electronically storing test results in order to prevent data manipulation.

JFE Shoji Trade is constantly striving to enhance its quality assurance through strict quality management.

Its processing centers in Japan and abroad are systematizing and automating operations to replace manual procedures and hence eliminate human errors.

In addition, employee awareness initiatives help to prevent human error at every stage, including receiving orders, issuing work orders and shipping. The company continues to strengthen quality education for employees, including by introducing internal and external case studies of non-conformance.

Furthermore, JFE Shoji Trade recognizes that product processing is the key to assuring and improving quality and has therefore implemented a quality audit, in which all relevant Group companies in and outside of Japan are specifically audited on quality at least once a year. It is a mechanism for the company to confirm the quality of each processing center and provide advice.

Ensuring Stable Supply

As in its Sixth Medium-term Business Plan, JFE Steel is carrying forward its effort to enhance its manufacturing capabilities. While strengthening its manufacturing base, the company is also focused on maximizing the performance and increasing the capabilities of the West Japan Works. The strategic investments that exceed the Fifth Medium-term Business Plan, upgrades and ongoing maintenance will be implemented for stable facility operations and production, allowing the company to continue providing high-quality products to customers.
JFE Engineering is licensed to conduct specific business in various types of construction and is required to assign managing engineers at construction sites to oversee the management of construction technology. A sufficient number of these licensed specialists is essential for the timely execution of construction projects. However, due to the declining birthrate, a growing population of elderly and a generational shift, securing these licensed specialists, especially younger ones, is a major business challenge. The company is always striving to obtain sufficient resources through mid-career hiring of licensed personnel and encouraging employees to acquire qualifications by granting expenses.

Recognizing that processing and distribution operations represent the key for ensuring stable supply, JFE Shoji Trade is committed to investment in strengthening these operations.

**Improving Customer Satisfaction**

- **First Successful Application of AI in Domestic Industry to Shorten Recovery Time of Steel Production Facilities**
  To ensure stable supply to customers, JFE Steel has adopted preventive measures against failures at its steel production facilities and responds quickly whenever a failure occurs.
  In 2017 the company developed and introduced at some facilities a system combining AI and its independent database, which stores data such as issue resolution manuals and past trouble-shooting logs of experienced employees. Even employees with little experience are able to retrieve the necessary information in order to deal with failures, and the system has a proven track record in shortening recovery time. The company is now introducing it at all of its facilities.
  JFE Steel will continue to leverage the latest technologies to improve the quality of its services.

- **Testing and Research Centers for Collaboration with Customers on Product Development**
  JFE Steel collaborates with customers in research and development. The Customers’ Solutions Lab (CSL) for auto industry customers and the Steel Structural Materials Solutions Center (THiNK SMART) for infrastructure-related customers are located in eastern Japan, while the Customer Center Fukuyama (CCF), which develops materials and conducts applied technology research, is in western Japan. Using these facilities to strengthen early vendor involvement (EVI) * enables the company to develop products that reflect an accurate understanding of customer needs, cutting-edge evaluation techniques and innovative production processes.

*Customer participation in product development is from an early stage to facilitate innovative new methods, functions, processes and evaluations for new steel materials.

- **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, sectors, business divisions, steelworks and research laboratories to facilitate unified customer care and proposals that leverage the collective strengths of the JFE Group.

- **Training Sales Personnel to Excel in Customer Relations**
  To strengthen customer-oriented sales efforts, the Sales Department holds training sessions by position and job, according to their work experience, targeting sales personnel from the headquarters and branch offices (i.e., newly appointed sales employees, mid-rank sales employees and office heads). The department also provides group training in Japan for regional employees of overseas offices to enhance job performance. Training goals include developing abilities in areas such as engaging in technical conversations, picking up clues from customer relations and using them in product development, offering suggestions to improve logistics and distribution, and analyzing financial indicators and costs.
JFE Steel views automobiles, infrastructure materials and energy as the three key areas for research and development. In each area, the company intends to accelerate the pace of introducing new products and solutions. In regard to its manufacturing process, the company will work on developing innovative manufacturing technologies such as eco-friendly raw material pre-processing. These technological developments leverage data science and robotics to closely align with the needs of customers and society at large. JFE Steel plans to invest 110 billion yen into research and development over the span of three years, starting in 2018.

Promotion of Research and Development

JFE Steel uses customer surveys, interviews and construction evaluation forms to collect and assess data on the company’s construction management, product quality, advanced technologies and innovation. Each division analyzes and applies the data for quality improvement, new product development and the overall strengthening of after-sales service, to ultimately enhance customer satisfaction.

Meeting Customer Needs

To respond quickly to diversifying markets and customer requests, JFE Shoji Trade is strengthening its supply chain for materials procurement, processing and distribution. In addition, employees receive training to upgrade their abilities to present sophisticated proposals to customers. Furthermore, selected regional employees of overseas offices receive group training in Japan to strengthen the satisfaction of the company’s overseas customers.

Responsibility for Export Practices

Each JFE operating company promotes international peace and security by working against the spread of weapons of mass destruction and excess accumulation of conventional weapons. Specifically, the company carries out inspections to confirm the final destinations, customers and applications of its exported products, and then ensures that export procedures are carried out properly. In addition, the Legal Affairs Department conducts internal briefings to disseminate knowledge of export-related laws and regulations, such as the Foreign Exchange and Foreign Trade Act. Also, JFE provides education on export security controls and related measures for the employees of Group companies involved in trading.

Internal Awards

The following technical and product developments were awarded in FY2017.

<table>
<thead>
<tr>
<th>Prizes/Awards</th>
<th>Awarded Items</th>
<th>Awarded Departments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Excellence Award, JFE Steel President’s Awards</td>
<td>Multi-faceted contributions on the distribution side of SCM for overseas manufacturing bases</td>
<td>Logistics Department and others</td>
</tr>
<tr>
<td>Introduction of innovative technology to descaling lines to achieve high production efficiency</td>
<td>Hot Rolling Department, West Japan Works (Kurashiki District) and others</td>
<td></td>
</tr>
<tr>
<td>Development of the next-generation low-NOx radiant tube burner</td>
<td>Plant Engineering Department, West Japan Works (Fukuyama District) and others</td>
<td></td>
</tr>
<tr>
<td>Establishment of a production base for domestic infrastructure materials and larger sales infrastructure</td>
<td>Products Service &amp; Development Department, Chita Works and others</td>
<td></td>
</tr>
<tr>
<td>Gold Prize, New Product Development Awards</td>
<td>JEFORMA™ Series of Excellent Formable High Strength Steel Sheets</td>
<td>Sheet Products Research Department, Steel Research Laboratory and others</td>
</tr>
<tr>
<td>Grand Prize, JFE Engineering President’s Awards</td>
<td>Establishment of the effluent gas recirculation technique, which directs effluent gas below the incineration furnace grates as air for incineration</td>
<td>Power Machinery Design Department, Engineering Design Center, Environmental Solutions Sector and Research Center of Engineering Innovation</td>
</tr>
</tbody>
</table>
Suppliers

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

Basic Policy on Procurement
JFE Steel upholds its Basic Policy on Procurement to conduct purchasing activities with fairness and sincerity and thereby continue earning supplier trust as a good business partner.

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 that such efforts increase stakeholder satisfaction and lead to strengthened corporate value.

We purchase raw materials after confirming that suppliers are not using conflict minerals.

Supplier Support for CSR
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Win-win Relationships with Suppliers
JFE Steel establishes win-win relationships with our suppliers by leveraging their ideas for improving materials, designs, shapes, specifications and production methods. The company’s value-analysis activities allow them to propose how to reduce costs, improve materials functions, and upgrade quality, safety and work efficiency. The company then strives to implement the ideas wherever possible.

Fair and Sincere Procurement
JFE Engineering, viewing its suppliers as key partners in achieving mutual growth, strives to nurture mutual trust and reinforce partnership relationships. The company collaborates with suppliers on CSR initiatives and upholds its Purchasing and Procurement Policies as a standard for fair and transparent procurement activities.

Ensuring a Safe, Fair Supply Chain
Corporate social responsibility (CSR) is a pivotal element in JFE Shoji Trade’s supply chain for the provision of products, functions and services through its global business. Customer demand for CSR-based procurement is increasing every year. In addition to its initiatives for quality, stable supply, safety and reasonable prices, the company is enhancing support for the global environment, human rights and occupational safety and health.
Contributing to Societal Development

Shareholders and Investors

JFE Standards of Business Conduct (Excerpt)

(2) Be open to society
Disclose corporate information actively and engage in constructive dialogues with diverse stakeholders to enhance our corporate value.

Returns to Shareholders

The JFE Group positions returns on shareholder investment as one of its top priorities. Profits are basically returned in the form of dividends. The Group’s basic policy under its Sixth Medium-term Business Plan is to strengthen the domestic profit base and expand overseas businesses and their profitability to achieve sustainable growth for the Group. In addition, we intend to maintain our payout ratio at about 30% by improving profitability and cash flow toward realizing the sound financial standing required for an A international credit rating.

Proactive Information Disclosure

The JFE Group strives for fair disclosure based on established internal policy. We actively communicate with investors by holding meetings when announcing financial results, medium-term business plans or other important information. The executive directors explain the announced results and answers questions at investor meetings, and they also hold small-group briefing sessions and conducts individual interviews with institutional investors and securities analysts. In addition, they 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 Group also distributes e-mails regarding IR information. Important press releases and Notices of the Ordinary General Meeting of Shareholders are provided in English for overseas investors.

In addition, JFE Holdings is committed to fair disclosure of information under its disclosure policy.

<table>
<thead>
<tr>
<th>Major IR Activities</th>
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</thead>
<tbody>
<tr>
<td>Activity</td>
</tr>
<tr>
<td>Investor meetings</td>
</tr>
<tr>
<td>Individual interviews with institutional investors and securities analysts</td>
</tr>
<tr>
<td>Briefings for private investors at securities firms</td>
</tr>
</tbody>
</table>

Information for Shareholders and Investors

In Japanese: https://www.jfe-holdings.co.jp/investor/disclosure-policy.html
In English: https://www.jfe-holdings.co.jp/en/investor/index.html

Enhancing Communication with Shareholders

JFE Holdings created its Investor Relations and Corporate Communications Department in April 2015 to facilitate more interactive communication with diverse stakeholders. The collection and dissemination of integrated information is being enhanced to provide management with more useful information for constructive dialogues with shareholders, including individual investors as well as domestic and foreign institutional investors. General meetings of shareholders are opportunities for dialogue with shareholders, so JFE sends invitations at the earliest possible date to maximize attendance and avoid overlapping with the shareholder meetings of other companies.

The company has been posting an invitation on its website at the earliest possible date while allowing online voting for shareholders who are unable to attend. Also, plant tours and company briefing sessions are organized to foster shareholder understanding of the JFE Group.

In FY2017, workplaces of JFE Steel, JFE Engineering and Japan Marine United held such events for about 2,000 shareholders. In FY2018, such activities will continue along with direct communication with shareholders to deepen their understanding of the JFE Group.

Disclosure Policy

Contributing to Societal Development

Local Communities

JFE Standards of Business Conduct (Excerpt)

(3) Work with communities
Actively contribute to host communities as a good corporate citizen by emphasizing harmony and cooperation.

Local Activities

Host Communities
Every year, the JFE Group opens its manufacturing facilities to residents in local host communities for demonstrations, tours and other events.

On-site Events in FY2017

<table>
<thead>
<tr>
<th>Location</th>
<th>Event</th>
<th>Date</th>
<th>Attendees</th>
</tr>
</thead>
<tbody>
<tr>
<td>East Japan Works, Keihin</td>
<td>Keihin Community Festival</td>
<td>May 28</td>
<td>48,000</td>
</tr>
<tr>
<td>West Japan Works, Kurashiki</td>
<td>JFE West Japan Festival in Kurashiki</td>
<td>November 3</td>
<td>90,000</td>
</tr>
<tr>
<td>West Japan Works, Fukuyama</td>
<td>JFE West Japan Festival in Fukuyama</td>
<td>May 14</td>
<td>83,000</td>
</tr>
<tr>
<td>Chita Works</td>
<td>Handa Community Industrial Festival</td>
<td>November 11</td>
<td>21,000</td>
</tr>
</tbody>
</table>

In addition, on-site recreational facilities are made available for community sports such as soccer, baseball, volleyball and basketball as well as other events sponsored by Group companies. 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.

Education at Elementary Schools
JFE Steel East Japan Works conducts plant tours for students at nearby elementary schools. In addition, company employees visit schools to give lectures on steelmaking processes, the features of steelworks, environmental initiatives and other topics to deepen understanding of the steel industry. These lectures have been given to over 150 classes since its start in FY2012. In FY2017, the company conducted the first class at a school for hearing impaired children.

Initiatives to Preserve Biodiversity
The JFE Group engages with members of the community in activities to preserve biodiversity.

JFE Steel has opened its Environment Pond at the Chita Works to the community for a firefly festival every year since 2014. Children at the event have the opportunity to release fireflies. JFE Engineering regularly holds events for observing and studying the natural environment, including the behavior and habitats of aquatic life, after inviting children and their parents to capture water creatures in a biotope along the JFE Dragonfly Path in the Tsurumi Works.

Tours of Steelworks
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 each steelworks, in conjunction with festivals and other events.

Observing aquatic life
Support for External Organizations

- **UN World Food Programme**
The JFE Group supports activities of the Japan Association for the World Food Programme, an NPO-accredited supporter of the UN World Food Programme (WFP), which works to eliminate hunger.

- **Supporting Training for Foreign Medical Professionals**
Toranomon Hospital in Tokyo, with the assistance of private corporations including the JFE Group, manages the Japanese Council for Medical Training to provide training opportunities to foreign doctors. The program invites doctors from developing countries, primarily in Southeast Asia, to study in Japan and then return home to promote enhanced medical standards. This also fosters stronger relationships between those nations and Japan.

- **Japanese Foundation for Cancer Research**
Since its establishment in 1908, the Japanese Foundation for Cancer Research has upheld its basic philosophy of aiming to improve the well-being of people everywhere by achieving better cancer control. The foundation, which is supported by the JFE Group, 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. The JFE Group supports the contest as a way to promote stronger international exchange.

High School Essay Contest

The Japan Science & Engineering Challenge is a national science-paper contest for high school and technical college students. Under the sponsorship of the Asahi Shimbun Company and TV Asahi Corporation, the contest has been supported by JFE Steel since 2006 to nurture future scientists and engineers.

Career Education for Students

As part of career education for high school and junior high school students, JFE Steel and Kawasho Foods Corporation, a member company of the JFE Shoji Trade group, cooperate with the School Support Center, a specified Nonprofit Corporation, to invite students for training. The participants learn how society is supported by specific kinds of work as well as the products and services related to such work.

Since 2006, JFE Steel has participated in the Keizai Koho Center’s “Business Training for Japanese School Teachers.” Teachers from primary, junior high and high schools learn about business operations, human resource development, safety and environment-protection-related initiatives, among other topics, with the intention of sharing that knowledge with their students and leveraging it for better school management. In addition, some facilities invite local junior high students and host work-experience sessions.

In addition, JFE Engineering held a plant tour for female junior high, high school and university students to encourage them to pursue careers in science and technology.
**FY2017 Internship Achievements**
The JFE Group annually hosts many trainees and interns from overseas to help them gain practical experience at plants as well as design and construction sites. They also participate in group work.

<table>
<thead>
<tr>
<th>Number of Interns Accepted by Each Operating Company</th>
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<tbody>
<tr>
<td>JFE Steel</td>
</tr>
<tr>
<td>Approx. 310</td>
</tr>
</tbody>
</table>

**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 FY2017, they donated 700 sets of desk chairs, 17,000 notebooks and 12,500 cans of food.

**Supporting School Meals in Developing Countries**
JFE Shoji Trade participates in an activity led by TABLE FOR TWO International, a specified Nonprofit Corporation, under which employees donate 20 yen for each designated meal purchased at the company’s cafeteria. The donations help pay for school meals in developing countries.

**JFE 21st Century Foundation**
The JFE 21st Century Foundation was founded in 1990 through a donation from the JFE Group (the former Kawasaki Steel) to operate as a public-service corporation that contributes to society. It engages in various public services, such as supporting research at universities and cultural development.

**Support for Technology Research**
The foundation has been highly acclaimed by many universities for its support of technology research since FY1991.

In FY2017 it fielded 169 grant requests and provided a total of 52 million yen in the form of grants valued at two million yen each for 13 projects involving iron and steel technologies and 13 projects related to environmental technologies, including those designed to mitigate global warming.

**Support for Regional Activities**
The foundation financially sponsors community cultural activities including music, art, traditional events, community revitalization, community activities and the conservation of cultural property.

In FY2017 it sponsored events in cities across Japan and overseas, including Chiba, Kawasaki, Kurashiki and Fukuyama as well as Jiaxing in Zhejiang Province, China.

**Supporting the Japan Overseas Educational Services Writing Contest and Anthology Donation**
The Japan Overseas Educational Services organizes contests in the areas of essays, poems, tanka and haiku for Japanese students attending elementary and middle schools overseas. The JFE Group has been cosponsoring the contest by offering JFE 21st Century Foundation prizes since FY1991. The foundation also donated 850 copies of “Chikyu ni Manabu” (Learn from the Earth), a collection of the winning entries again in FY2017, to 673 elementary and middle schools and 86 public libraries in the regions where the Group operates its steel business.
Contributing to Societal Development

Employees

JFE Group’s Basic Policy on Human Resource Management

1. Respect Human Rights and Facilitate Fair Management of Human Resources
   The Group manages human resources fairly by respecting the human rights of all employees and nurturing employees who embrace the Group’s corporate values and standards of business conduct.

2. Foster a Corporate Culture that Nurtures People and Promotes Satisfying Workplaces
   The Group facilitates interactive communication among employees to cultivate a corporate culture that nurtures human resources and creates safe, attractive environments where everyone can enjoy working.

3. Diversify Human Resources
   The Group ensures that diverse all people, including women, non-Japanese, the elderly and the disabled, can demonstrate their full potential.

4. Recruit and Steadily Nurture Excellent Human Resources
   To survive in an increasingly complicated and diversified global environment, the Group steadily recruits diverse, high-quality skilled human resources, ensures that they receive the skills and knowledge necessary to continue strengthening the Group’s technological capabilities, and nurtures their global capabilities.

JFE Group Health Declaration

1. JFE, recognizing that safety and health are fundamental for fulfilling its mission, creates workplaces in which every employee can work with vigor.
2. JFE and its health insurance union work together to advance initiatives for maintaining and upgrading the physical and mental health of employees and their families.
3. JFE gives top priority to safety and health and to creating a health culture in which each employee takes personal responsibility.

Respect for Human Rights in the Workplace

The JFE Group, 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 Group 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.

Workstyle Reform

Management of the JFE Group recognizes that creating workplaces to provide dignity and job satisfaction for all is essential for maximizing the potential of individuals. The JFE Group carefully recruits and nurtures human resources to support sustainable growth and is advancing reforms to realize more flexible workstyles for everyone.

S

Workstyle Reform

JFE Steel is accelerating its efforts to enhance productivity and respond to more diverse needs of employees in their workstyles to help drive initiatives such as strengthening its manufacturing base and expanding overseas. Specific initiatives have been implemented to improve employee awareness and cultivate an organizational climate in which everyone can maximize their abilities. These include designating days in which employees are encouraged to leave work on time, conducting pilot programs in standardizing the number of hours between work shifts* and work-at-home systems, and encouraging employees to take paid leave.

E

Nurturing a Corporate Culture of Coming Early and Leaving Early

JFE Engineering is striving to nurture a corporate culture of coming to work early and leaving early by designating 8:00 am to 4:45 pm as its standard working hours and in principle prohibiting work after 8 pm. Other initiatives include planning work and vacation schedules through discussions between employees and their supervisors and designating days when employees are encouraged to take paid leave or leave work on time. Telecommuting has been implemented to facilitate flexibility in workstyles. Now a working environment is in place in which employees

* A program to set a certain length of time between clocking out and clocking in on the next day to protect an employee’s private life and sleeping hours.
Operational Reforms

Upgrading Mission-critical Systems
Since FY2016, JFE Steel has been upgrading mission-critical systems at each steelworks. The systems are being standardized to streamline processes from order acceptance to production and delivery. Integrating the databases of all production sites leads to better coordination between steelworks. And this allows for the realization of our ideal, “virtual one steel works,” toward facilitating optimized company-wide production planning so that we can respond to customer needs faster and more flexibly.

Smart-Work Project
JFE Engineering has been actively working on operational reforms since August 2014 as part of its "SHAPE UP" project. To further expand this effort, the company set up its "Office of Smart-Work Promotion" in April 2018.

By leveraging various IT tools and systems, and creating an unconventional working style in terms of time, location and method, the company aims to achieve both work-life-balance and improved productivity while maximizing overall output.

Also, in order to achieve a five-day workweek at construction sites, JFE Engineering is working on operational reform and efficiency at these sites.

JFE Shoji Trade will continue to drive its J-SLIM program, which is an operational reform aimed at increasing work efficiency and performance in four focus areas: systems, company-wide management, working environments and line work. In 2018, the company started one of the major initiatives in this program, which is to examine and introduce the latest technology tool RPA (software that automates manual operations carried out on terminals). Where this was already implemented, the company is seeing good outcomes such as reduced operational time and improved service levels. JFE Shoji Trade will continue with its effort to think outside of the box and re-examine how work is being done, and also reform the mindset of its officers and employees to reform its corporate culture.

Invigorating Workplaces through Small Group Activities
JFE Steel has approximately 1,500 small groups that 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 held twice a year. Also, groups selected through competition are given opportunities to go overseas as incentives.

*Designed to turn JFE into an excellent company and propel it to the number one position in its industry (called JE1 Activities at JFE Engineering).

JFE Engineering has about 190 teams and 1,600 employees, including those of group companies worldwide, involved in JE1 Activities. The results of these activities are showcased at a company-wide competition held at the end of the fiscal year. Activities focused on topics such as quality, efficiency, safety or costs contribute significantly to workplace vitality and corporate performance.

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Change of Work Time
Under the slogan “Change of Work Time,” initiatives have been implemented to reduce work hours, such as designating Wednesdays as the day to encourage everyone to leave on time, prohibit all work after 10 pm, and also encourage taking paid leave. To support more diverse workstyles, JFE Shoji Trade changed our flexible working hour program in April 2016 by setting the core worktime between 11 am to 2 pm, and by introducing trial programs such as working at home for employees pressed for time due to childrearing or nursing duties.

Invigorating Workplaces through Small Group Activities
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*Designed to turn JFE into an excellent company and propel it to the number one position in its industry (called JE1 Activities at JFE Engineering).
By designating workforce diversity as a key business objective, the JFE Group is promoting efforts to maximize the potential of employees regardless of gender, nationality, creed, lifestyle or family background.

- **Company Policy Explained by the President**
  The president of JFE Holdings has endorsed the Declaration on Action that was introduced by a group of male leaders in Japan who intend to create “A Society in which Women Shine” with the support of the government’s Cabinet Office Gender Equality Bureau. He also announced additional measures to support the professional development of female personnel, thereby communicating both inside and outside the company that women can play active roles at JFE.

- **Supporting Women in Professional Development**
  The JFE Group 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. The Group has set a target to triple its number of women in managerial positions by 2020. As of the end of August 2014, there were 94 female managers, or 1.8% of all managerial positions, at JFE Holdings and its three operating companies. By April 2018, the figure increased to 274, or 4.9%, much closer to the target.

### Female Managers in the JFE Group: Actual and Target

<table>
<thead>
<tr>
<th>Year</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>August 2014</td>
<td>94</td>
</tr>
<tr>
<td>April 2018</td>
<td>274</td>
</tr>
<tr>
<td>2020 (Goal)</td>
<td>280+</td>
</tr>
</tbody>
</table>

The JFE Group formulated an action plan to support women in their professional development in compliance with the Act on Promotion of Women’s Participation and Advancement in the Workplace (enforced in April 2016), based on which the company discloses relevant information. In recognition of its efforts to encourage the empowerment of women, JFE Holdings was selected three times as a “Nadeshiko Brand*” during FY2013-FY2016.

- **Activities by Diversity Promotion Sections**
  To ensure the consistent promotion of diversity, each operating company has a Diversity Promotion Section to organize educational activities, such as rank-based training and women’s exchange meetings, and to share and implement best practices across the Group.

- **Key Initiatives**
  - **S** JFE Steel provides career support and management training for managers and other employees to cultivate a culture in which diverse human resources can demonstrate their full potential. Its steelworks employ more than 330 females who are currently working on-site. The company supports employees who are using childcare and nursing care by providing its childcare facilities (opened in the Chiba district in April 2017 and Kurashiki and Fukuyama districts in April 2018) and nursing care seminars.
  - **E** JFE Engineering actively hires personnel with diverse characteristics and values, as well as people from other business sectors. 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 employee rankings based on operational tasks.
  - **T** JFE Shoji Trade is expanding opportunities for female employees by promoting them to managerial positions, expanding clerical categories and revising duties. It is also supporting career development through enhanced training programs. Management training in Japan is provided for employees hired overseas to promote global personnel development and increased interaction. The company is creating increasingly sound and flexible working environments by introducing a system for working at home, expanding nursing care support, encouraging employees to take paid leaves and other efforts.

*The Nadeshiko Brand represents a joint initiative by the Ministry of Economy, Trade and Industry and the Tokyo Stock Exchange. It recognizes exemplary efforts by companies to encourage women to play active roles and continue working long-term. The targets are representative companies from business sectors listed on the TSE first section.*
Securing Diverse Human Resources

**Employment of People with Disabilities**
The JFE Group has three special subsidiaries, JFE Apple East Corporation, JFE Apple West Corporation and Mie Data Craft Co., Ltd., to employ people with disabilities and create enjoyable workplace environments for them.

| Employment of People with Disabilities (as of June 1 of each year) (%) |
|----------------|----------------|----------------|----------------|----------------|
|                | 2014 | 2015 | 2016 | 2017 | 2018 |
| JFE Steel      | 2.16 | 2.25 | 2.24 | 2.34 | 2.33 |
| JFE Engineering | 1.81 | 2.01 | 1.59 | 2.01 | 2.14 |
| JFE Shoji Trade | 2.30 | 2.25 | 2.11 | 1.86 | 2.20 |

**Reemploying Retirees**
The JFE Group reemploys people after mandatory retirement at age 60, largely to ensure that the skills and experience of veteran employees are handed down. In the spirit of Japan’s Act on Stabilization of Employment of Elderly Persons, the Group has created a system for all employees to work until the age of 65. As of April 2018, 1,220 elderly employees, about 6% of the total, are working at JFE Steel, JFE Engineering and JFE Shoji Trade.

For an enhanced work-life balance, JFE Steel employees can choose full-time employment or shorter workweeks after reaching their retirement age.

JFE Engineering created the Skilled Partner Program to rehire employees who want to continue working after mandatory retirement at age 60.

For an enhanced work-life balance, JFE Shoji Trade employees who reach retirement age may choose from a variety of working arrangements, including full-time employment, shortened workweeks and shortened daily work hours.

**Respect for Sexual Minorities (LGBT)**
Under the Diversify Human Resources section of its Basic Policy on Human Resource Management, the JFE Group is cultivating a corporate culture that accepts diversity, including sexual minorities, through training to deepen awareness of human rights as well as position-specific curriculums. In FY2017, Group-wide LGBT training for human resources employees was conducted with external instructors.

In addition, the Group recently included sexual minorities in the compliance guidebook it distributes to all employees as a means of promoting common understanding.

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

**Recruitment Results (Three Operating Companies, Excluding Their Subsidiaries) in FY2018**

<table>
<thead>
<tr>
<th>Position</th>
<th>Target</th>
</tr>
</thead>
<tbody>
<tr>
<td>JFE Steel</td>
<td>Career-track white-collar positions</td>
</tr>
<tr>
<td>JFE Engineering</td>
<td>Career-track technical positions</td>
</tr>
<tr>
<td>JFE Shoji Trade</td>
<td>On-site positions for regular recruitment</td>
</tr>
<tr>
<td>JFE Engineering</td>
<td>Career-track position</td>
</tr>
<tr>
<td>JFE Shoji Trade</td>
<td>Production/construction positions (technical)</td>
</tr>
<tr>
<td>JFE Shoji Trade</td>
<td>Career-track position</td>
</tr>
</tbody>
</table>

**Target Ratios for Female Recruits**

<table>
<thead>
<tr>
<th>Category</th>
<th>JFE Steel</th>
<th>JFE Engineering</th>
<th>JFE Shoji Trade</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employees</td>
<td>44,554</td>
<td>9,307</td>
<td>7,333</td>
</tr>
<tr>
<td>Male</td>
<td>39,207</td>
<td>8,089</td>
<td>5,339</td>
</tr>
<tr>
<td>Female</td>
<td>5,347</td>
<td>1,218</td>
<td>1,994</td>
</tr>
<tr>
<td>Management Positions</td>
<td>11,112</td>
<td>2,842</td>
<td>1,532</td>
</tr>
<tr>
<td>Male</td>
<td>10,545</td>
<td>2,719</td>
<td>1,336</td>
</tr>
<tr>
<td>Female</td>
<td>567</td>
<td>123</td>
<td>196</td>
</tr>
<tr>
<td>Ratio of women in management positions (%)</td>
<td>5.1</td>
<td>4.3</td>
<td>12.8</td>
</tr>
</tbody>
</table>

Scope: Consolidated subsidiaries (JFE Steel: 156, JFE Engineering: 58, JFE Shoji Trade: 101)
Employee Data (Non-consolidated)

<table>
<thead>
<tr>
<th>Category</th>
<th>JFE Steel</th>
<th>JFE Engineering</th>
<th>JFE Shoji Trade</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employees</td>
<td>15,578</td>
<td>3,752</td>
<td>955</td>
</tr>
<tr>
<td>Male</td>
<td>14,327</td>
<td>3,267</td>
<td>606</td>
</tr>
<tr>
<td>Female</td>
<td>1,251</td>
<td>485</td>
<td>349</td>
</tr>
<tr>
<td>Management positions</td>
<td>2,715</td>
<td>2,215</td>
<td>612</td>
</tr>
<tr>
<td>Male</td>
<td>2,602</td>
<td>2,100</td>
<td>574</td>
</tr>
<tr>
<td>Female</td>
<td>113</td>
<td>115</td>
<td>38</td>
</tr>
<tr>
<td>Women in management positions (%)</td>
<td>4.2</td>
<td>5.2</td>
<td>6.2</td>
</tr>
<tr>
<td>Recruits</td>
<td>837</td>
<td>147</td>
<td>66</td>
</tr>
<tr>
<td>Male</td>
<td>734</td>
<td>127</td>
<td>39</td>
</tr>
<tr>
<td>Female</td>
<td>103</td>
<td>20</td>
<td>27</td>
</tr>
<tr>
<td>New graduates</td>
<td>732</td>
<td>77</td>
<td>57</td>
</tr>
<tr>
<td>Mid-career</td>
<td>105</td>
<td>70</td>
<td>9</td>
</tr>
<tr>
<td>Years employed</td>
<td>16.5</td>
<td>13.6</td>
<td>12.1</td>
</tr>
<tr>
<td>Male</td>
<td>16.3</td>
<td>13.6</td>
<td>12.1</td>
</tr>
<tr>
<td>Female</td>
<td>18.5</td>
<td>13.6</td>
<td>11.9</td>
</tr>
<tr>
<td>Job turnover rate (%)</td>
<td>2.03</td>
<td>0.94</td>
<td>2.1</td>
</tr>
<tr>
<td>Rehired employees</td>
<td>1,129</td>
<td>321</td>
<td>17</td>
</tr>
<tr>
<td>Average annual leave taken days per year</td>
<td>15.5</td>
<td>17.0</td>
<td>12.3</td>
</tr>
<tr>
<td>Average overtime (hours per month)</td>
<td>27.8</td>
<td>26.8</td>
<td>26.5</td>
</tr>
<tr>
<td>Employees working shorter hours for childcare (aggregated)</td>
<td>146</td>
<td>58</td>
<td>13</td>
</tr>
</tbody>
</table>

- As of April 1, 2018. Other figures are as of FY2017.
- Management positions at JFE Engineering and JFE Shoji Trade include employees on loan.
- Job turnover rate: percentage of employees who voluntarily choose to resign from the organization.

Human Resource Development

The JFE Group collectively carries out human resource development with an emphasis on nurturing the capacities of each employee and cultivating global human resources to support the expansion of our overseas business.

- **Utilizing Skill Data for Training Programs**
  The company updated the evaluation system it uses at manufacturing sites to quantitatively analyze the skill level of each employee. By focusing on infrequent or irregular tasks involving relatively low skill levels, the training program is linked organically to accumulated skill data, backed by practical guidance from full-time instructors (technical experts) who possess advanced skills.

- **Training Opportunities and In-house Recruitment**
  The company has adopted an in-house recruitment system for employees who are especially interested in particular positions, allowing them to challenge themselves and make the most of their capabilities.

- **Diverse Measures for Employee Development**
  Each employee is provided with a planning sheet that clearly defines their individual training points and goals. Also, the IT Literacy Training program is conducted at each job level to engage employees in digital innovation and help them learn how to assess the businesses they are engaged in and devise new ideas.

- **Developing Global Personnel**
  In addition to hiring and developing non-Japanese for career-track positions in Japan and hiring more local personnel overseas, the JFE Group 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.

Personnel Development Programs

<table>
<thead>
<tr>
<th>Company</th>
<th>Overseas Program</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Study abroad</td>
</tr>
<tr>
<td></td>
<td>Short-term overseas language training</td>
</tr>
<tr>
<td></td>
<td>Overseas assignments for younger employees</td>
</tr>
<tr>
<td></td>
<td>Dispatching engineers to international conferences</td>
</tr>
<tr>
<td></td>
<td>Training for regional employees of overseas offices</td>
</tr>
<tr>
<td></td>
<td>Internship for international students</td>
</tr>
</tbody>
</table>

Employee Health and Safety

Providing for the health and safety of employees is a basic requirement of companies, particularly manufacturers, and is fundamental to the continued existence of any company. The JFE Group adheres to the philosophy of safety first, and, together with its group companies and business associates, works to consistently maintain safe working environments and secure workplaces for all employees.

In addition, the Group exchanges ideas on safety and health with the labor union through its Occupational Safety and Health Committee.

Lost-work Injuries and Severity (Rates)

<table>
<thead>
<tr>
<th></th>
<th>FY2013</th>
<th>FY2014</th>
<th>FY2015</th>
<th>FY2016</th>
<th>FY2017</th>
</tr>
</thead>
<tbody>
<tr>
<td>JFE Steel</td>
<td>0.06</td>
<td>0.15</td>
<td>0.15</td>
<td>0.21</td>
<td>0.17</td>
</tr>
<tr>
<td>JFE Engineering</td>
<td>0.01</td>
<td>0.09</td>
<td>0.16</td>
<td>0.15</td>
<td>0.15</td>
</tr>
<tr>
<td>JFE Shoji Trade Group</td>
<td>0.73</td>
<td>0.42</td>
<td>0.28</td>
<td>0.19</td>
<td>0.71</td>
</tr>
<tr>
<td>Manufacturing industry average</td>
<td>0.03</td>
<td>0.40</td>
<td>0.01</td>
<td>0.30</td>
<td>0.02</td>
</tr>
</tbody>
</table>

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

In FY2018, JFE Steel is following three basic strategies: promote the autonomous resolution of issues, strengthen health and safety at business
associates and Group companies and develop activities in line with the Group’s Health Declaration. For example, JFE Steel’s safety level was inspected by an external organization, Du Pont, and the company received feedback on its auditing methods. With this feedback, an internal audit system was implemented and applied to all parts of the company. In addition, the company plans to obtain ISO (JIS) 45001 certification, an international standard for occupational health and safety management systems, and is scheduled to be certified soon. Iterating through the PDCA cycles of these safety and health initiatives, the company is working to establish a corporate culture of safety that is voluntary and independent.

**Employee Health**

We have made the JFE Group Health Declaration (page 57) and collaborate with its health insurance union and industrial health staff to strengthen employee health so that everyone can work with vigor.

**Physical Health Initiatives**

- Ensure the implementation of regular physical examinations and strengthen cancer screenings.
- Prevent aggravation of lifestyle diseases by conducting metabolic syndrome checkups and offering health guidance.
- Encourage participation in sports by supporting club activities and using the Powering Up Health Care program of the health insurance union.
- Promote non-smoking areas and maintain separate areas for smokers and non-smokers in buildings. Provide guidance to help employees quit smoking through industrial physicians and public health nurses.

**Metabolic Syndrome and Smoking Rates**

| Year | Metabolic Syndrome Rates (%) | Smoking Rates (%)
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>2013</td>
<td>35.5</td>
<td>34.6</td>
</tr>
<tr>
<td>2014</td>
<td>35.5</td>
<td>34.2</td>
</tr>
<tr>
<td>2015</td>
<td>35.2</td>
<td>33.7</td>
</tr>
<tr>
<td>2016</td>
<td>35.4</td>
<td>33.2</td>
</tr>
<tr>
<td>2017</td>
<td>34.6</td>
<td>31.4</td>
</tr>
</tbody>
</table>

Data on those aged 40 or older and insured by the JFE Group’s health insurance union.

**Maintaining and Promoting the Health of Employees’ Families**

The JFE Group strengthens the health of employees and their families by, for example, encouraging spouses to undergo health examinations. The rate of health examinations for dependents (age 40 or older) has been steadily increasing over six years, to 43.7% in FY2017, up 9.9 points from 33.8% in FY2011.
Mental Healthcare
The JFE Group conducts four basic initiatives to maintain the mental health of employees: “self-care” for workers who strive to remain aware of stress and take preventive measures; “care by management supervisors” who provide advice to subordinates; “care by industrial health staff” who support employees, managers and supervisors; and “care by human resources outside workplaces,” including specialist clinics and individuals. JFE’s health insurance union also provides mental health counseling, including a 24-hour hotline for employees and their families (spouse and dependents).

Active Exercise
JFE Steel business sites offer the Active Exercise program, which the West Japan Works designed to help people increase their physical strength and prevent injuries due to falling. The program’s effectiveness in preventing occupational accidents and improving health has even attracted attention outside the company, so it is being shared as a contribution to society.

Company-wide Goals and Follow-ups
To drive initiatives regarding maintaining and improving the health of employees and their families, JFE Steel has established and is monitoring the achievement of medium- to long-term goals applicable to all affiliate companies.

Company-wide Targets for 2020

<table>
<thead>
<tr>
<th>Targets</th>
<th>FY2017 Results (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Thorough implementation of physical examinations</td>
<td>Rate of complete exams: 100%</td>
</tr>
<tr>
<td></td>
<td>Rate of complete exams for dependents: 60%</td>
</tr>
<tr>
<td>Preventive health measures</td>
<td>Rate of providing specific health guidance: at least 35%</td>
</tr>
<tr>
<td></td>
<td>Rate of obesity (BMI: 25% or higher) 25% or less</td>
</tr>
<tr>
<td>Maintaining and improving health</td>
<td>Participation in the Powering Up Health Care program: at least 50%</td>
</tr>
<tr>
<td>Promotion of non-smoking</td>
<td>Smoking rates: 25% or less</td>
</tr>
</tbody>
</table>

Developing Dynamic Working Environments

Sound Labor-Management Relations
Recognizing that labor-management cooperation is essential for the company to fully tackle its business challenges, JFE Steel has established a strong relationship with its labor union based on 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.

JFE Steel management and labor regularly exchange opinions and share information. The company president and other executives exchange views with representatives of its labor union during semiannual Management Committee meetings.

Health and Productivity Planning Management Promotion System

- JFE Holdings
- JFE Steel
- JFE Engineering
- JFE Shoji Trading

Company-wide Industrial Physicians Subcommittee
Company-wide Industrial Physicians Meeting

- Health and Productivity Planning Management Promotion WG
- Health and Productivity Management Promotion Committee (Chaired by an Executive Officer)
- Industrial Health Staff Subcommittee
- Industrial Health Staff Meeting
- Health Staff Subcommittee
- Health Managers Meeting
- Health Audit

Health and Productivity Planning Management Promotion WG Members

- Each region, works, main office
- Industrial physicians and public health nurses
- Manager of Labor Management Office, Labor Management HR Department, Organizational HR Department
- Office of Safety and Health (health staff), Safety and Health Department
- Health Insurance Union
- Directing Manager, Manager of Health Development Office
- Health Staff Subcommittee
- Health Staff Meeting
- Health and Productivity Management Promotion WG

Discussion Topics
- Evaluation of Health and Productivity Management (physical, mental and work environment) Evaluation of indices and activities
- Company-wide activities
- Reporting to the management team

Frequency
- February, May, August, November (once a quarter)