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## As we enter our next stage, difficult times are creating promising opportunities.

JFE aims to achieve sustainable growth by restructuring its steel business and strengthening initiatives to mitigate climate change.

COVID-19 continues to exert a huge impact on economic activity and the lives of people worldwide, showing no clear sign of containment. JFE, despite operating in this increasingly unpredictable business environment, continues to push ahead decisively toward sustainable growth, determined to realize the company's future vision.

In addition to providing customers with much-needed solutions, it is also our mission to support industrial and societal development, regardless of the business environment, based on JFE's corporate vision of *Contributing to society with the world's most innovative technology*.

In 2020 we have been restructuring our core steel business to ensure that we can continue to fulfill our mission. Along with our restructuring, we have made this a landmark year for tackling climate change, including initiatives to reduce our CO<sub>2</sub> emissions.

JFE is determined to steadily progress toward its next stage of corporate development for strengthened profitability and sustainable growth, including through environmental, social and governance (ESG) initiatives.

## Our role and vision

JFE produces diverse products, technologies and services centered on steel, a basic material that underpins the lives of individuals and contributes to industrial and societal development.

Still-abundant global reserves of iron enable steel to continue to be mass produced at relatively low cost. Steel is strong, easily processed. Moreover, its manufacture has less environmental impact than that of many other materials. It also is very recyclable and maintains its high quality when it is reused in new products. No other material possesses so many excellent qualities.

Long into the future, steel will continue to underpin human life as an indispensable material for industry and society. Moreover, the global demand for steel is expected to grow steadily over the long term as economic development progresses in emerging countries, particularly in Asia.

Given the vast potential of steel, JFE is deeply committed to supporting diverse industries as well as daily life, societal progress and the resolution of critical issues in today's world. To do this, however, JFE must continue to manufacture high-quality steel that combines excellent performance properties with low environmental impact, and then provide such products and solutions stably and sustainably through sales networks built on relationships of trust.

As a globally traded commodity, steel is easily affected by fluctuations in international business and/or raw materials prices. Such factors inevitably impact JFE's earnings. Furthermore, JFE is faced with COVID-19, Japan's low birthrate and aging population, rising protectionism worldwide and mounting environmental risks. Such developments have made it ever more challenging to help resolve pressing issues in the world.

Ultimately, JFE must function as a strong and resilient corporate group to provide sustainable value over the long run, adapting nimbly and strategically to broad change in the current business environment. We are taking all possible steps to contribute to economic sustainability by providing economic value through sustainable growth and to environmental and social sustainability by developing sustainable resolutions for overcoming critical global issues.



## Structurally changing industry and COVID-19

### Steadily pushing forward with measures to improve earnings

The steel industry is facing an extremely harsh business environment. In the face of rising global protectionism, including U.S.-China trade friction since last year, demand for steel outside China has slumped and steel product prices have fallen, particularly in export markets. At the same time, iron ore prices have remained persistently high worldwide due to increased crude steel production, mainly for public works and other infrastructure in China, which produces around half of the world's crude steel. For the global steel industry, this has resulted in high prices for raw materials and low prices for manufactured products, making it difficult to secure profits.

Faced with such conditions in FY2019, our steel business worked diligently to raise steel prices while reducing costs, but the segment recorded its first loss since the foundation of JFE. Overall, JFE recorded a 197.7 billion yen consolidated loss attributable to owners of the parent. We paid an interim dividend of 20 yen per share, but made the difficult decision not to pay a yearend dividend in light of poor financial results. I again offer my sincere apologies for the considerable inconvenience and concern that this has caused our shareholders and other stakeholders.

At present, economic activity worldwide remains suppressed due to COVID-19, and we are beset by unprecedentedly harsh conditions, including a dramatic slowdown in the global economy as well as in Japan. Levels of steel demand have fallen worldwide and automotive production in Japan, which had remained relatively strong, suffered partial stoppages. Also, construction work experienced delays and demand for construction and industrial machinery declined.

Countries are pushing forward with initiatives to prevent further infections while somehow maintaining socio-economic activity. Ultimately, however, it will be difficult to restore conditions to pre-COVID norms.

Considering that our future performance will be significantly impacted by how well we ride out this year, we are treating FY2020—the final year of our Sixth Medium-term Business Plan—as a time for emergency measures. Accordingly, we are swiftly and decisively implementing necessary measures in a united groupwide effort to overcome these difficult times.

In the steel business, we have minimized operational costs by optimizing production in response to dramatically reduced demand for steel. We temporarily suspended operations at two blast furnaces in Kurashiki and Fukuyama and also suspended work at all other facilities as a temporary measure to protect the job security of our employees. Moreover, we have worked tirelessly to improve cash flow, cutting costs by around 100 billion yen through steps such as reducing fixed costs for repairs, etc. and emergency labor measures, while also further refining capital investments, reducing inventory and selling assets such as strategic shareholdings. Efforts to improve steel product prices remain difficult due to weak demand. We will continue to explain the situation to customers as we work to realize sales prices that appropriately reflect inflationary trends affecting the costs of sub-materials, logistics and outsourcing, and also the value we provide through high-quality development, production and service.

In the engineering field, we don't expect any significant impact on public-sector projects, recycling businesses or operation/maintenance of power-generation plants. Moreover, we will continue to adapt to current conditions, such as formulating flexible construction plans that can be adjusted to deal with unforeseen delays, including in construction projects overseas.

The impact of COVID-19 will not be limited to the short term and is expected to widely transform our economy and society. It is difficult to forecast exactly what sort of society awaits us, or how changes will unfold over time, which is why we are preparing for a range of possible scenarios in our business environment and in our group structure, working to ensure profits under any condition. The first major step is the steady restructuring of our core steel business, as announced this past March.

Meanwhile, we intend to promptly finalize our next medium-term business plan as soon as it becomes possible to reasonably forecast business, economic and societal conditions, most likely when the global pandemic is brought under control.

## Assuring that we continue to fulfill our role

### ■ Economic value through sustainable growth

#### Restructuring our steel business for enhanced competitive strength

Over the medium to long term, steel demand in Japan will inevitably decline due to factors including the nation's decreasing population. Overseas, however, steel production capacity will increase in emerging countries as Chinese steelmakers, faced with declining domestic demand, expand into Southeast Asia and increasingly export. Commodities (products), which currently comprise around 30% of steel exports, will be readily manufactured by steel mills in emerging countries. Overall, competition will intensify, making it increasingly difficult to secure profits.

In an industry like steel that utilizes huge manufacturing equipment, substantial investment is needed to periodically replace aged equipment in order to maintain the company's manufacturing base. This highlights the importance of producing products that are profitable enough to overcome these necessary investments and contribute to long-term profitability and growth sustainability.

In order to restructure our steel business, we have thoroughly reviewed our manufacturing systems to strategically focus on areas that can best help us to establish a stable profit base. Domestic operations are being consolidated from eight blast furnaces to seven and crude steel production capacity is being reduced by around four million tons. Our rebuilt production system, including downstream processes, will have an optimal crude production scale of 25 to 26 million tons.

These initiatives will enable us to focus corporate resources on key areas where we are most competitive. I firmly believe that they represent a significant step towards building a strong and resilient business structure.

🔍 See Restructuring of the Steel Business on page 35 for details.

#### Advanced technologies for strengthened manufacturing and DX for enhanced productivity

Boosting competitiveness with advanced technology is vital to ensure that JEF's operating companies maximize their competitive advantages and that JFE harnesses its collective power to overcome global competition.

JFE Steel is implementing sales and product-mix strategies to develop highly value-added and competitive products in the priority fields of automobiles (responding to technological innovations including lighter and electric vehicles), infrastructure materials (for national resilience and high-efficiency construction) and energy (for harsh environments). To expand profitability, the company's sales, manufacturing and research departments are carefully addressing customer needs in an effort to develop products and services that gain greater customer satisfaction. An important part of this effort is investing in steelworks and other facilities in Japan to upgrade their competitiveness in terms of cost advantages, production capabilities, performance and product mix.

JFE's overall competitive advantages are tied directly to its steelworks. At the West Japan Works, JFE's core steelworks, facilities are being constructed or upgraded mainly for upstream processes. A continuous casting machine currently under construction in the Kurashiki district boasts the world's highest technology. Combining high efficiency with high product quality, the new machine will greatly enhance the West Japan Works' competitiveness. Regarding products, our electrical steel sheets were recognized for helping to improve energy savings in electrical devices, earning a Prime Minister's Prize at the 8th Monodzukuri Nippon Grand Awards in January. In view of our electrical steel sheets' demand potential, including for electric vehicle engines, manufacturing facilities are being expanded and enhanced at Kurashiki.

JFE Steel is also pursuing digital transformation (DX) initiatives involving artificial intelligence (AI), the internet of things (IoT), data science such as big data utilization, and robotics. The goal is to realize more innovative productivity, upgrade existing businesses and create new businesses.

Our steel business has introduced cyber-physical systems (CPS) at manufacturing facilities to address issues such as the aging of equipment and the retirement of veteran engineers. The ability to digitally visualize production operations is enabling us to construct systems equipped to prevent various conventional problems. For blast furnaces, the heart of our steelworks, we have installed CPS units that can detect potential problems, reduce stoppage time and swiftly resume operation. In FY2018, we experienced significant lost opportunity due to a prolonged problem in a blast furnace. Since introducing the new CPS units, however, no problem leading to a long stoppage has occurred, so this technology is already starting to help us establish a more stable system of operation. Expanded use of this technology in other manufacturing processes will surely enhance our cost competitiveness and productivity.

CPS is also expected to play a major role in safety management, our highest priority at production sites. At JFE Steel's Chita Works for example, we have installed AI technology to automatically shut down the production line if a person gets too close to equipment in operation. The technology will be installed at other production sites as well.

JFE has been recognized for its efforts to leverage digital technologies for new growth and competitiveness. For six consecutive years, JFE has been selected for inclusion in the Digital Transformation Stock Selection 2020 (DX Stock 2020; previously, Competitive IT Strategy Company Stock Selection) by the Ministry of Economy, Trade and Industry and the Tokyo Stock Exchange.

🔍 Please see DX Feature on page 45 for details.

#### Raising the profitability of global manufacturing bases

JFE's continued growth also depends on increasing the company's presence in overseas markets, specifically in Asia, where there is latent growth potential.

The Overseas Business Promotion Center was established by JFE Steel in April not only to help maximize profits in existing overseas businesses, but also to increasingly develop new business in high-growth fields.

In the expanding markets of Asia, we are developing strategic businesses with local partners such as JSW Steel in India and Formosa Ha Tinh Steel Corp. (FHS) in Vietnam, which will support our sourcing of steel materials from overseas. In India, where demand for steel materials is expected to increase substantially in the future, JSW Steel is achieving steady growth and increasing profitability. Despite holding a modest equity stake, JFE Steel is participating actively in FHS's business, including through technology licensing. Going forward, JFE will continue to deepen its involvement in overseas business to meet growing demand for high-grade steel, particularly in Southeast Asian markets.

JFE Steel will pursue growth across global steel markets, leveraging its extensive technologies and strategic investments for new business opportunities. Steel manufacturing technologies featuring the latest AI and IoT will be used to enhance productivity and deliver consistent quality. JFE Steel will also utilize its advanced technologies and expertise to develop technological-solutions businesses overseas.



Groundbreaking ceremony for Nucor-JFE Steel Mexico

### Improving profitability of the engineering business through eco initiatives

JFE Engineering's revenue exceeded 500 billion yen for the first time in FY2019, and profit also increased year on year. Business expanded both in Japan and overseas thanks to initiatives targeting engineering, procurement and construction (EPC) opportunities and operation of public infrastructure, such as water, sewage and waste treatment facilities, as well as power-generation and other plants, recycling facilities and more. Revenue from such businesses helps to reduce profit fluctuations by contributing stably to income over the long term.

Our environmental engineering businesses include renewable energy such as solar power, geothermal power and biomass power generation, and also PET bottle recycling. Such fields are expected to offer increasing opportunities for business expansion due to growing environmental awareness.

At the same time, business fields that support everyday life, such as water, sewage, waste treatment and power generation, have become the object of renewed attention during the COVID-19 crisis because businesses in these fields must continue to operate under all conditions. JFE Engineering's Global Remote Center is providing 24-hour remote monitoring and operational support for plants around Japan, including waste incinerators and power-generation facilities, which is ideally suited to the current need for non-contact operation. In October 2019, JFE launched Japan's first ever fully automated waste incinerator at a waste-to-energy plant. We will continue to develop technologies for totally automated plants as well as waste incinerators, part of our growing contribution to a more sustainable world.

### Leveraging our trading business network to promote the JFE brand

JFE Shoji, JFE's core trading company, is strengthening its capabilities in consulting and information provision, aiming to grow sustainably with customers as a company with a strong market presence.

In Japan, the company is strengthening the functions of its processing and production bases and also reorganizing its corporate structure, both aimed at enhancing the company's capability to capture demand more effectively. This past April, JFE Shoji Steel Construction Materials and JFE Shoji Usuitakenzai were merged to provide one-stop services covering broad information provision and a wide lineup of construction materials products.

Overseas, trading networks are being expanded in coordination with JFE Steel's overseas business development. Secondary and tertiary processing functions are being strengthened further downstream, new business models are being developed and alliances with outstanding partners are being broadened. Cogent, a Canadian electrical steel sheet processing company, was brought into the JFE Group in 2019 to offer world-class processing and distribution functions for transformer iron-core processing using electrical steel sheets. In the automobile field, initiatives to satisfy the diversifying needs of customers worldwide included building a steel materials processing center in Mexico to play a vital role in the supply chain of JFE Steel's joint venture Nucor-JFE Steel Mexico (NJSM).

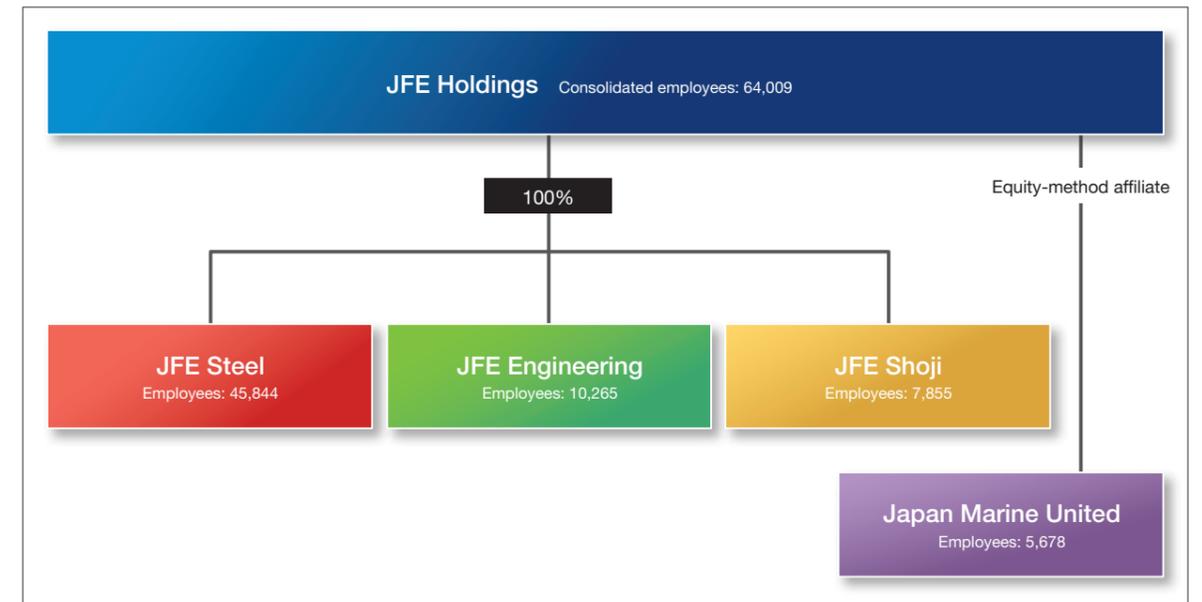
Protracted U.S.-China trade friction and COVID-19 are forcing many companies, particularly multinationals, to diversify their supply chains. This is creating business opportunities for JFE Shoji, which operates an extensive steel-materials supply network organized geographically in Japan, the Americas, China and ASEAN.

JFE Shoji is also sharing strategies more closely with JFE's engineering business, for example, to provide fuel for biomass power plants operated by JFE Engineering. By fully leveraging its global network, JFE Shoji is working to enhance the collective strength of the JFE Group.

### Renewing the competitiveness of Japanese shipbuilding

Our equity-method affiliate Japan Marine United has agreed on a capital and business alliance with Imabari Shipbuilding, Japan's largest shipbuilder, to establish a joint venture company for increased international competitiveness. JFE needs the Japanese shipbuilding industry to maintain its vitality, both as a major user of plates for the steel business and as a partner for product development. The new alliance will allow both companies to leverage their mutual strengths for improved profitability.

Structure of JFE Group (as of March 31, 2020)



### Addressing pressing ESG issues sustainably

#### Environment: Reducing CO<sub>2</sub> emissions by 20% or more by FY2030

JFE is strengthening its commitment to environmental, social and governance (ESG) management through initiatives aimed at resolving pressing issues, ultimately to support the development of local communities and realize a more sustainable world. In steelmaking, the largest source of CO<sub>2</sub> emissions in JFE's overall business, global environmental protection is vital for the company's business continuity. JFE continues to reduce its environmental impact through aggressive development and application of resource- and energy-conservation technologies.

Last year, we issued the results of our analysis of climate-related risks and opportunities, which we conducted in accordance with the recommendations of the Task Force on Climate-related Financial Disclosures (TCFD). We regard this year to be a landmark year to further reinforce our efforts to tackle the issues of climate change, and are actively promoting initiatives for reducing CO<sub>2</sub> emissions.

JFE and the Japanese steel industry as a whole boast world-class technology for reducing environmental impact. The industry is engaged in research and development of super-innovative technologies aimed at realizing Zero-carbon Steel, a 2100 target set by the Japan Iron and Steel Federation.

JFE continues to share the Japan Iron and Steel Federation's commitment and to play an active role. At the same time, we are actively promoting initiatives for reducing CO<sub>2</sub> emissions for an individual company. JFE Steel, in addition to restructuring its operations for optimized production and increased business sustainability, is also working to enhance economic and social sustainability by upgrading its initiatives to address climate change. The strategy is expected to turn JFE into a stronger and more resilient company over the medium and long terms, even when business conditions are especially harsh.

Accordingly, in the steel business, which accounts for most of the JFE Group's CO<sub>2</sub> emissions, we are exploring feasible scenarios with the aim of reducing CO<sub>2</sub> emissions in fiscal 2030 by 20% or more compared to fiscal 2013. We have launched a new project team to reduce our CO<sub>2</sub> emissions, and will start examining various measures to achieve our targets, maximizing the use of the best available technologies and innovations. JFE is carrying out research and development to achieve carbon neutrality within the JFE Group as soon as possible after 2050. Such technologies are expected to be in place to help JFE swiftly achieve this goal in parallel with decarbonization of society as a whole.

In other areas as well, initiatives are being pursued to fight global warming as business opportunities. In engineering, we are actively involved with waste and biomass power generation. Also, through our renewable energy businesses, including solar and geothermal power, we are contributing to a combined annual reduction of CO<sub>2</sub> emissions amounting to around four million tons. We are also accelerating our development of resource recycling businesses, including for PET bottles. In addition, a new team in JFE's trading business is working to strengthen sales of steel materials for the fast-growing field of renewable energy.

Such initiatives are leading to new opportunities both in Japan and in emerging countries. By expanding such businesses, especially in Southeast Asia, JFE hopes to play a major role in protecting the global environment.

### Society: New value for an increasingly complicated and diversified world

We make it our mission to use our business centered on steel to support all industries, to underpin daily life, to contribute to social development and to help solve pressing issues that the world faces. It is vital that we stably secure diverse, high-quality skilled human resources and then create work environments where they can demonstrate their full potential. This is one way we plan to ensure our business continuity and continue creating new value for our rapidly changing world.

JFE is energizing its organization by welcoming employees with diverse values, including the active recruitment of midcareer hires and female employees. In addition to utilizing AI and IoT technologies to nurture younger personnel and equip them with veteran skills, we are also upgrading education, training activities and new childcare-support systems to ensure that female employees can more fully contribute to our workplaces.

Safety and disaster prevention are crucial to our business, so in response to the COVID-19 pandemic, we have made it a top priority to protect employee safety and health. Our steel facilities must operate continuously, so we cannot permit our workforce to be overtaken by the spread of disease. Under our business continuity plan (BCP), which is based heavily on lessons learned from the Great East Japan Earthquake as well as the current pandemic, we quickly implemented measures to prevent the spread of COVID-19, which has enabled us to maintain smooth operations up to the present.

For the time being, given no alternative but to live with COVID-19, we will continue to review and implement our BCP to address all risks, including potential changes in social and economic activity and in the perceptions and behavior of individuals.

### Governance: Revising our corporation for better outcomes

JFE's eight-person Board of Directors includes three outside directors. The company also has three outside Audit & Supervisory Board members. Together, these six people brought in from outside of the corporation are playing active roles in overseeing JFE's business.

To promote greater diversity, Ms. Yoshiko Ando was named a full-time female Audit & Supervisory Board member in 2019 and then became JFE's first female outside director in June 2020. Ms. Ando, an expert in labor administration, offers deep insight in fields such as female participation in workforces, employment and labor. She is also helping JFE to strengthen its governance.

JFE conducted a survey of all directors and Audit & Supervisory Board members on the effectiveness of the Board of Directors. The board, after carefully considering the results of the survey, determined that its overall effectiveness has been enhanced by the inclusion of several outside directors. At the same time, however, three themes were indicated as areas where the board could strengthen its involvement: ESG activities, group-wide risk supervision and business planning in the event of dramatic changes in the external environment.

Regarding ESG activities, it was suggested that the board be more deeply involved in global environmental initiatives, including CO<sub>2</sub> emissions reduction, considering their importance to JFE overall. Regarding risk supervision and business planning, the board plans to look more deeply at these functions in terms of their impact on specific business, particularly in the event of rapid changes in the external environment as experienced during the COVID-19 pandemic.

### To our stakeholders

It has become abundantly clear that COVID-19, more than simply causing a slowdown in the global economy, is bringing about significant changes in global society. It is vital that this situation be addressed with emergency measures. The structure of the world and people's values are undergoing major transformations, and the coming new era may be even more unforeseeable and challenging than the present.

JFE is determined to accurately grasp these structural changes and then respond appropriately in global markets by building a corporate structure that remains strong and resilient in any environment. Our response will be flexible and unconstrained by conventional frameworks.

In fact, we view these adverse conditions, however unfortunate, as opportunities to remake JFE. This is why we have designated 2020 as a landmark year to take on all-new challenges.

