



**JFE**

# JFE Group ESG Briefing

JFE Holdings, Inc.

October 8, 2020

- 1 . JFE Group's Mission and Future Vision
- 2 . The Value of Steel
- 3 . JFE Group's Material CSR Issues
- 4 . JFE Group's Initiatives for the Environmental Issues
- 5 . JFE Group's Contribution to the Social Issues
- 6 . JFE Group's Governance
- 7 . External Recognition in Recent Years

This presentation material is for information and discussion purpose only.

Any statements in the presentation which are not historical facts are future projections based on certain assumptions and currently available information. Please note that actual performance may vary significantly due to various factors.

# JFE Group's Mission and Future Vision



# JFE Group's Mission and Future Vision

JFE

## Corporate Vision

Contributing to society with the world's most innovative technology

## Mission

Underpinning all industries and the lives of people as well as contributing to the development of society and the resolution of social issues through business centered on the material of "STEEL"

### Business Environment

International economic fluctuation

Spread of COVID-19

Declining birth rate and aging population in Japan

Trend of worldwide protectionism

Increasing crisis awareness to the global environment

etc.

Adapting flexibly and appropriately to major changes in the business environment

## Future Vision

Creating economic value through sustainable growth  
"Economic Sustainability"

Making sustainable efforts to resolve social issues through business  
"Environmental and Social Sustainability"

Robust corporate group to deliver value over the long term with the two types of sustainability



Providing solutions that meet the needs of society and customers by leveraging "collective strength of the group" cultivated in a wide range of business fields, including steel, engineering, and trading centered on the material of "STEEL"



Steel sheets for automobiles



Bridges and steel for bridges



Steel sheets for tableware and kitchenware



Urban environmental plants



Biomass power generation facilities

## Making sustainable efforts to resolve social issues

- Realizing comfortable lifestyles through supply of automobiles, ships, and household appliances with advanced function
- Constructing strong infrastructure through development in the civil engineering and construction fields
- Ensuring stable energy supply and spreading the use of renewable energy toward sustainable society
- Developing and supplying environmentally friendly products and promoting resource recycling
- Contributing to solving global climate change through efforts to reduce CO<sub>2</sub> Emissions
- Developing human resources and creating work environment where diverse human resources can maximize their abilities
- Creating prosperous coexistence with local community etc.

# The Value of Steel



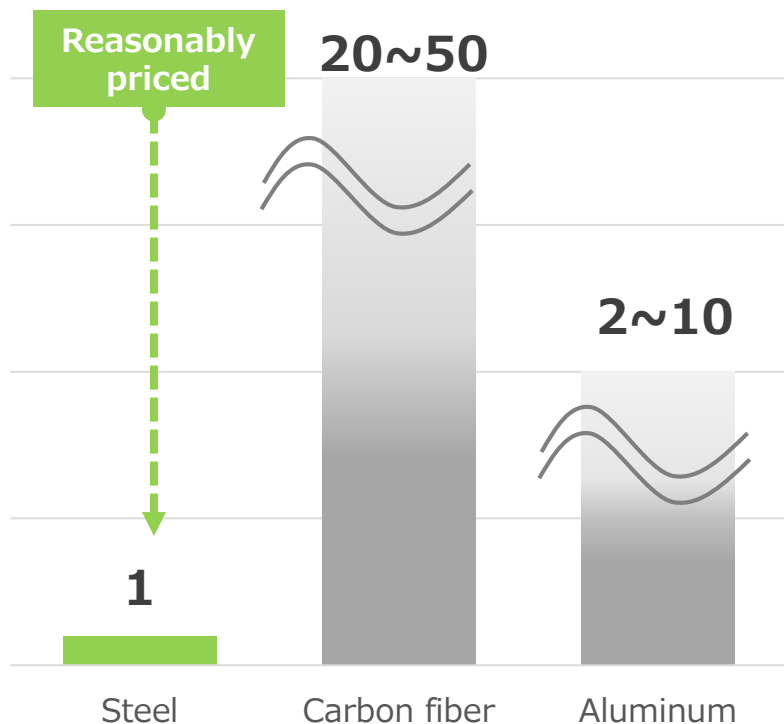
JFE

# Produce : High Economic Efficiency and Low Environmental Impact

## Mass production at low cost

Steel is a material with rich reserves and a long history of development. It can be stably mass produced at a reasonable price, contributing to the sustainable development of society.

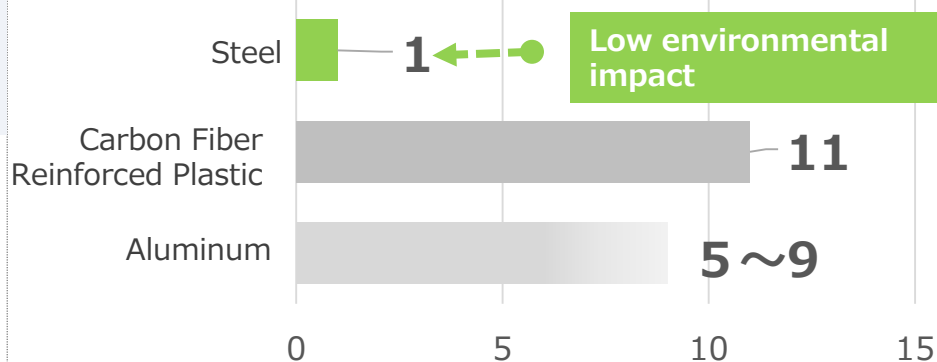
### Price comparison



Internal investigation  
Comparisons with other materials' prices per unit weight, with steel as 1

Extremely low environmental impact, when compared to other materials

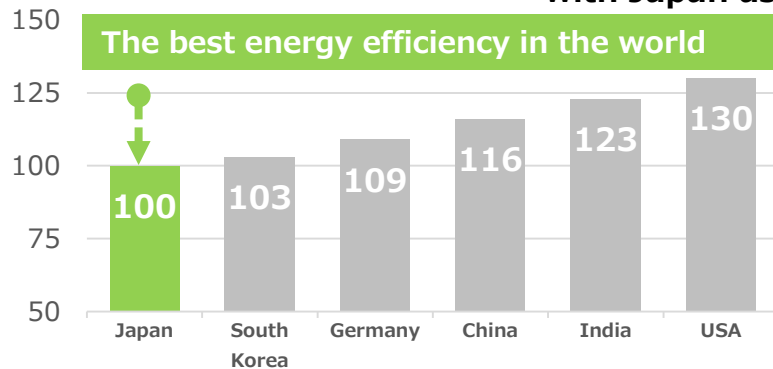
### GHG emissions at manufacturing stage\*



\* Comparison with other materials' GHG emissions per unit weight, with steel as 1

### Japan's steel industry keeps the top energy efficiency in the world

### The world's energy efficiency quotient, with Japan as 100



Source: 2015 Research Institute of Innovative Technology for the Earth (RITE)

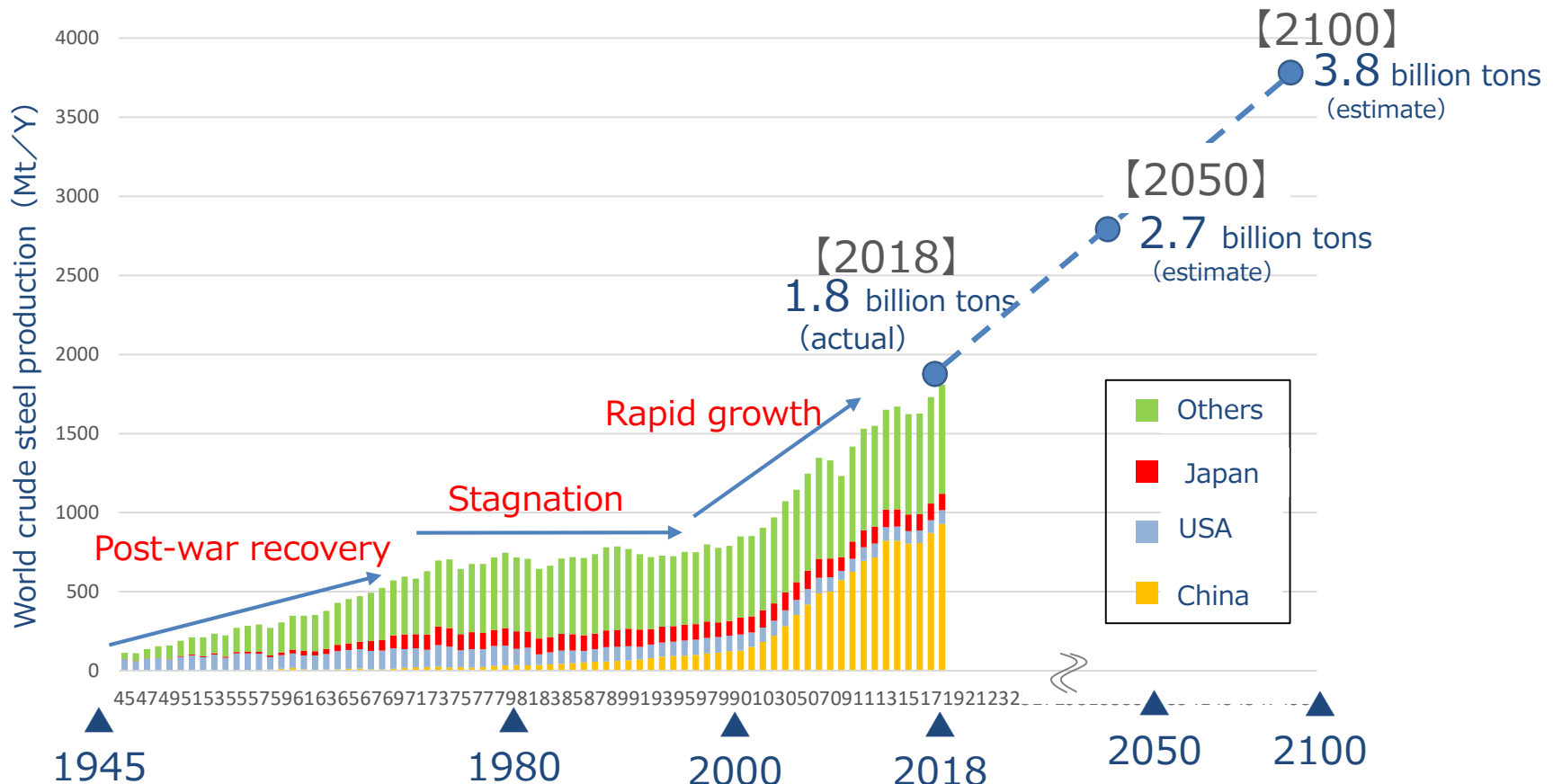


JFE

# Use : Foundation for Life and Society(1)

## The potential to grow on a global level

Amid the economic growth in emerging countries, the long-term global demand for steel is expected to keep growing.



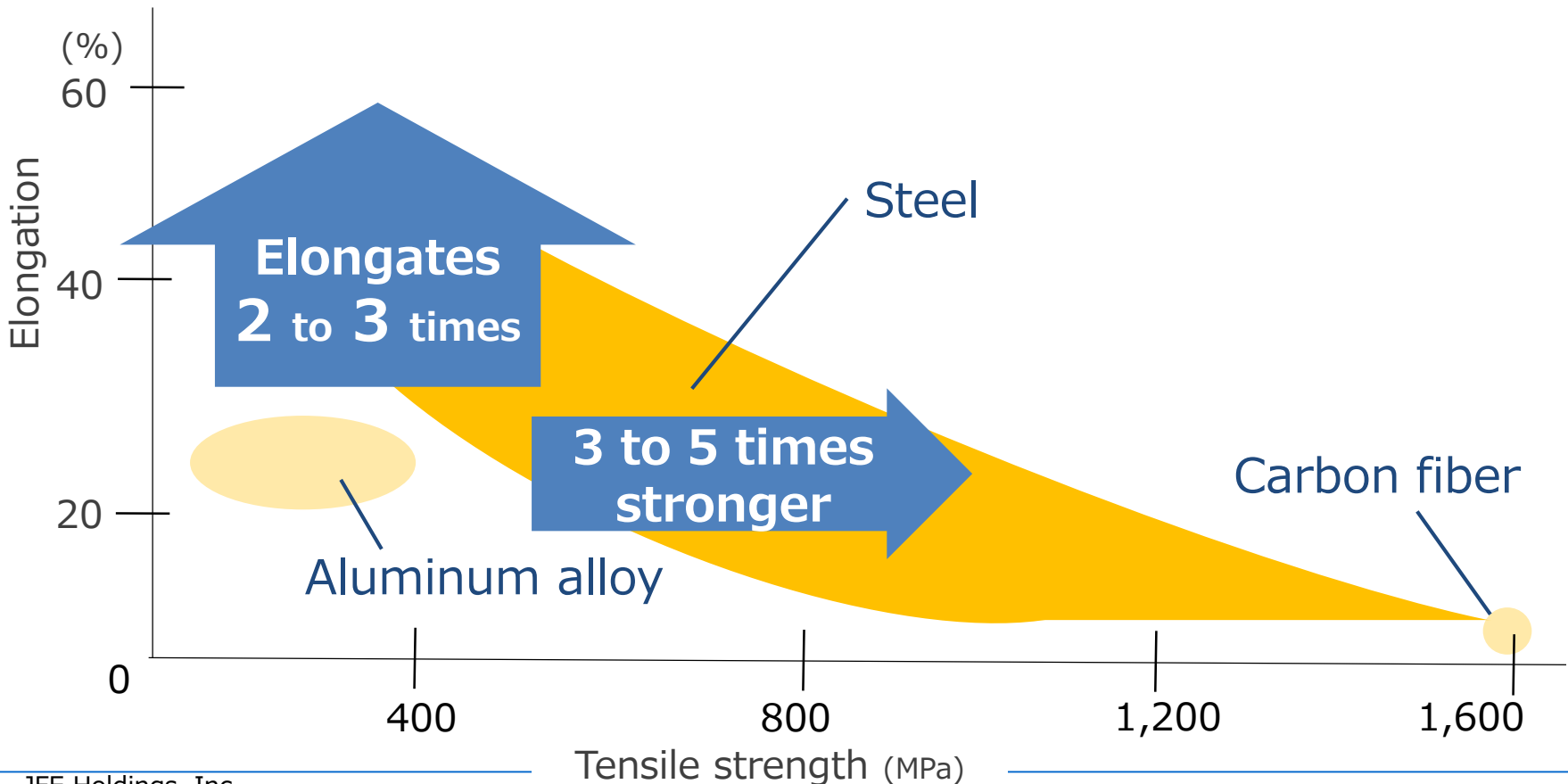
(Source: The Japan Iron and Steel Federation)





## Potential for evolution

- Steel can be elongated two to three times more than aluminum at the same strength, and is three to five times stronger at the same extended rate.
- Steel still has considerable potential for evolution. Emerging needs of society will make steel evolve, which contributes to a productive future.





# Recycle : Excellent Recyclability

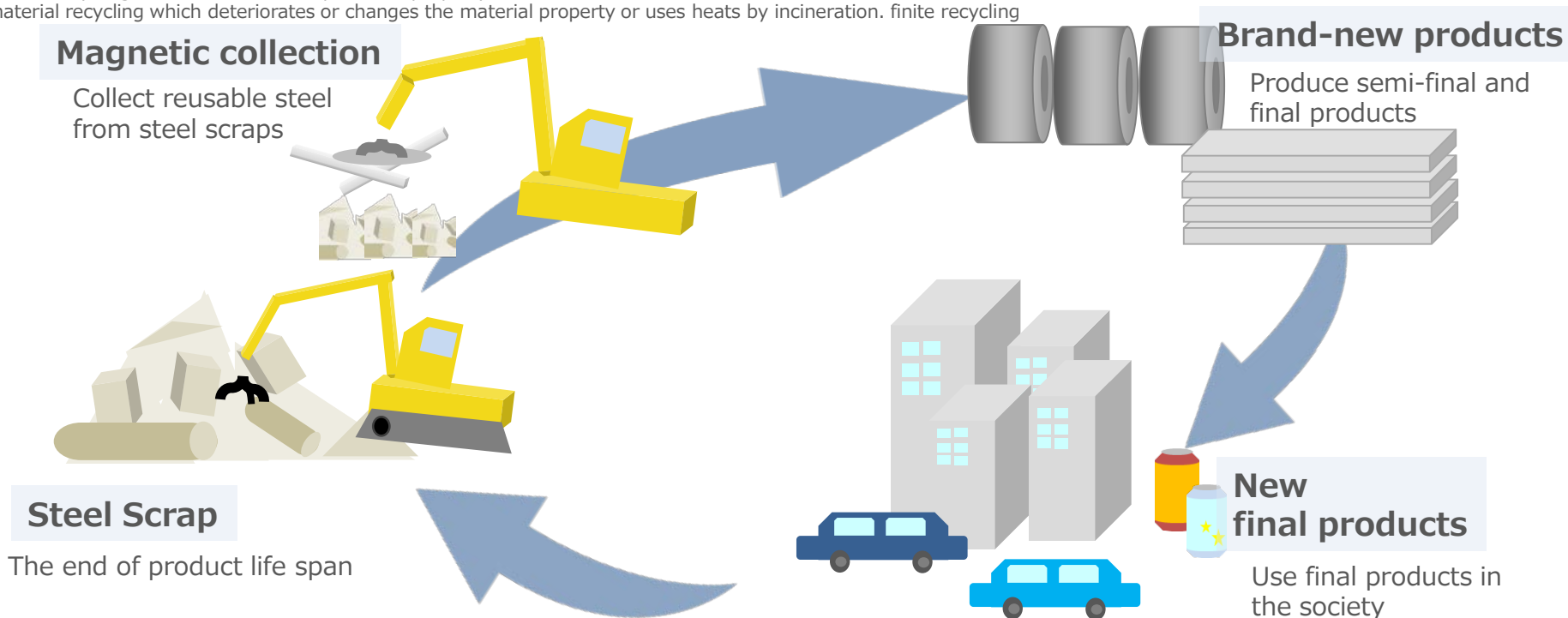
JFE

## Steel's closed-loop recycling\*1

- Steel is **reborn over and over again into a high-quality, high-functional product** thanks to its special characteristics, highly efficient separation and retrieval technologies.
- From a sustainability perspective, closed-loop recycling is superior to open-loop recycling\*2 because of reducing additional consumption of natural resources, emissions of environmental substances, and waste.
- Using Life Cycle Assessment to evaluate the entire life cycle, materials with excellent recyclability have less environmental impact such as global warming.

\*1 infinite recycling which maintains the products' property

\*2 material recycling which deteriorates or changes the material property or uses heats by incineration. finite recycling





# JFE Group's Material CSR Issues



# JFE Group's Material CSR Issues

JFE

Identified the following 13 issues in 5 areas as material CSR issues and promoting CSR initiatives

Areas of Focus		Material CSR issues
Activity	Provide quality products (customer satisfaction)	<b>Stably supply products</b>
		<b>Ensure quality</b>
		<b>Pursue R&amp;D operations</b>
		<b>Respond to customer needs</b>
	Protect the global environment	<b>Develop and provide environmentally friendly products</b>
		<b>Mitigate climate change</b>
		<b>Protect the global atmosphere</b>
		<b>Pursue resource recycling</b>
		<b>Prevent workplace accidents</b>
	Ensure occupational safety and health	<b>Ensure the health of employees and their families</b>
		<b>Pursue diversity and inclusion</b>
	Recruit and nurture diverse human resources	<b>Strengthen human resource development programs</b>
Basis of activity	Thoroughly enforce compliance	<b>Ensure adherence to Corporate Ethical Standards and compliance</b>

**Goals**

- Increased corporate value and sustainable growth of the JFE Group
- Help realize sustainable society

**Corporate Governance (Ensure Fairness, Objectivity and Transparency)**

**Respect and Maintain Awareness of Human Rights**

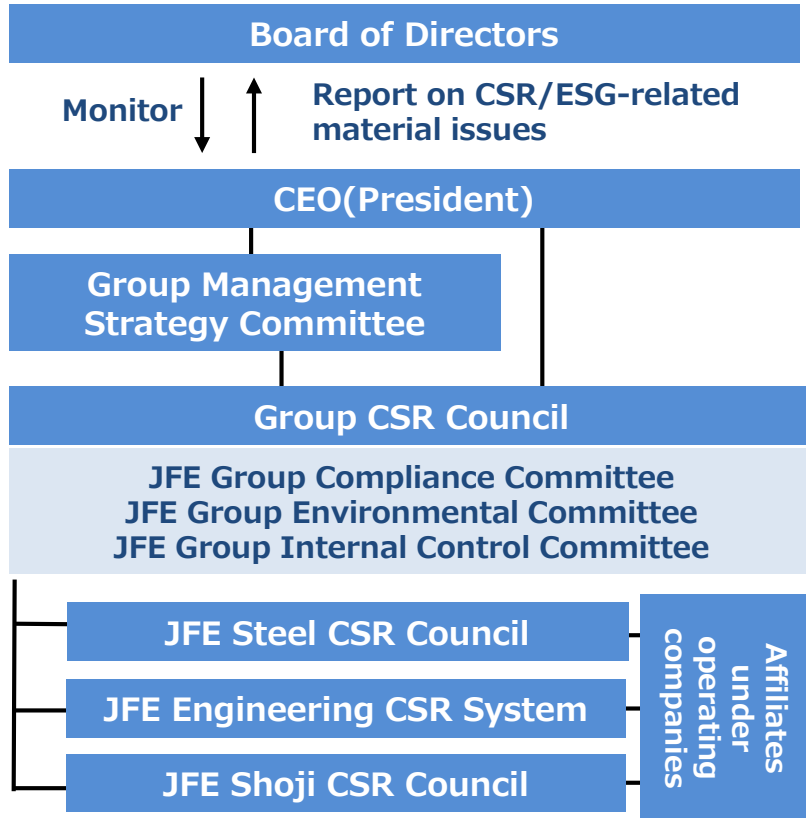


# JFE Group's CSR Management

JFE

- Group CSR Council monitors and supervises CSR initiatives of JFE Group
- Material CSR issues are deliberated at Group Management Strategy Committee and reported to Board of Directors
- Board of Directors monitors material CSR issues, including setting KPIs and status of each initiatives, through discussions

## CSR Structure



## Issues Discussed at Group CSR Council

Compliance, environment, climate change, internal controls, personnel/labor, safety, disaster prevention, social contribution, information security etc.

- Group-wide deliberations (including instructions and guidance on important issues)
- Monitoring penetration of policies within Group
- Monitoring deployment of policies throughout Group

## Topics Discussed at the Board Meeting

- CSR・ESG initiatives
- Set key performance indicators (KPIs) for material CSR issues and the status of each initiative
- Climate change initiative
- Safety initiatives of each company
- Operational status of the whistleblowing system
- Publishing the CSR report and integrated report



# JFE Group's Initiatives for the Environmental Issues

- **Climate change issues are serious management issues from the viewpoint of business continuity for JFE Group** that involves in steel manufacturing, which emits massive amounts of CO<sub>2</sub>.
- **Urgent initiatives are necessary to respond to global climate change issues** such as the emergence of extreme weather

**JFE Group decided to position 2020 as a turning point for the promotion of initiatives for climate change, and set targets for reducing CO<sub>2</sub> emissions**

- Accelerate initiatives for climate change issues such as Research & Development of new technology in line with the corporate vision “**Contributing to society with the world's most innovative technology**”
- Promote initiatives to enhance corporate value not only from the perspective of business risks but also **business opportunities that contribute to the realization of sustainable society**



## JFE Group's targets for reducing CO2 emissions

### Toward FY2030

Aim to reduce CO<sub>2</sub> emission in FY2030 by 20% or more compared to FY2013

- Launched a new project team headed by JFE Steel President to start examining various measures to achieve our targets.
- Continue to share the Japan Iron and Steel Federation's Commitment to a Low-carbon Society to play an active role.

### Toward 2050

In line with the social transformation to establish carbon-free infrastructure, strive to be carbon neutral within the JFE Group as soon as possible after 2050

- Carry out Research & Development to be ready to show a lineup of carbon neutral technologies in the business processes well ahead of 2050





# Strengthen JFE Group's Initiatives for Climate Change Issues (3)

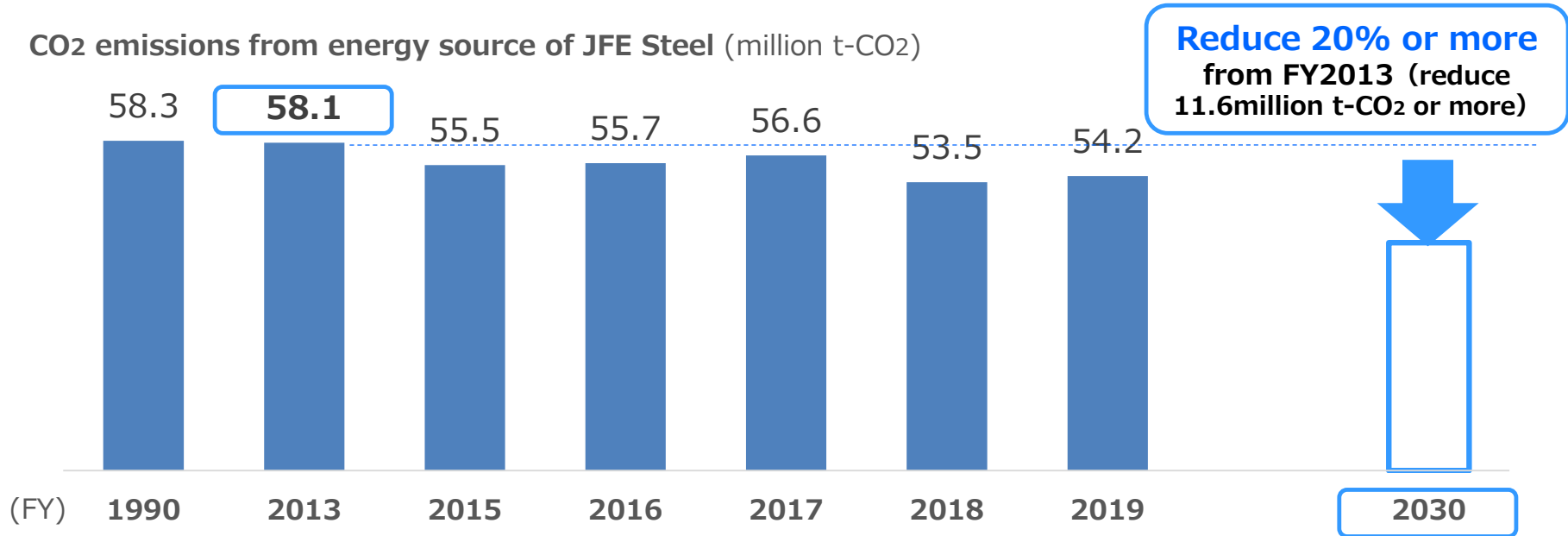
JFE

## FY2030 Target

- **Promote initiatives to achieve our target that is significantly exceeds Japan's nationally determined contribution\*1, NDC, of CO2 reduction in FY2030** (\*1CO2 emissions from energy sources of industrial sector: approx. 6.5% reduction from FY2013)
- **The impact of the structural reforms\*2 is incorporated in the target, but it's unable to achieve the target only by this impact. Maximize the use of existing and many developing technologies to realize significant CO2 emissions reduction** (Super innovative technologies including CCS etc. are out of scope of the FY2030 target)

\*2 Upstream process and hot rolling equipment in the East Japan Works (Keihin) will be shut down by FY2023 or thereabouts. Released on March 27, 2020 "JFE Steel to Optimize Domestic Production Operations through Structural Reforms"

CO2 emissions from energy source of JFE Steel (million t-CO2)



※1 The CO2 coefficient for electricity purchased in FY2019 is that of FY2018 on the Japan Iron and Steel Federation's Commitment to a Low Carbon Society

※2 FY2018 figure is recalculated based on the CO2 coefficient for electricity purchased in FY2018 on the Japan Iron and Steel Federation's Commitment to a Low Carbon Society

※3 Figures from FY2013 to FY2016 are added CO2 emissions of Sendai Works of JFE Bars and Shapes

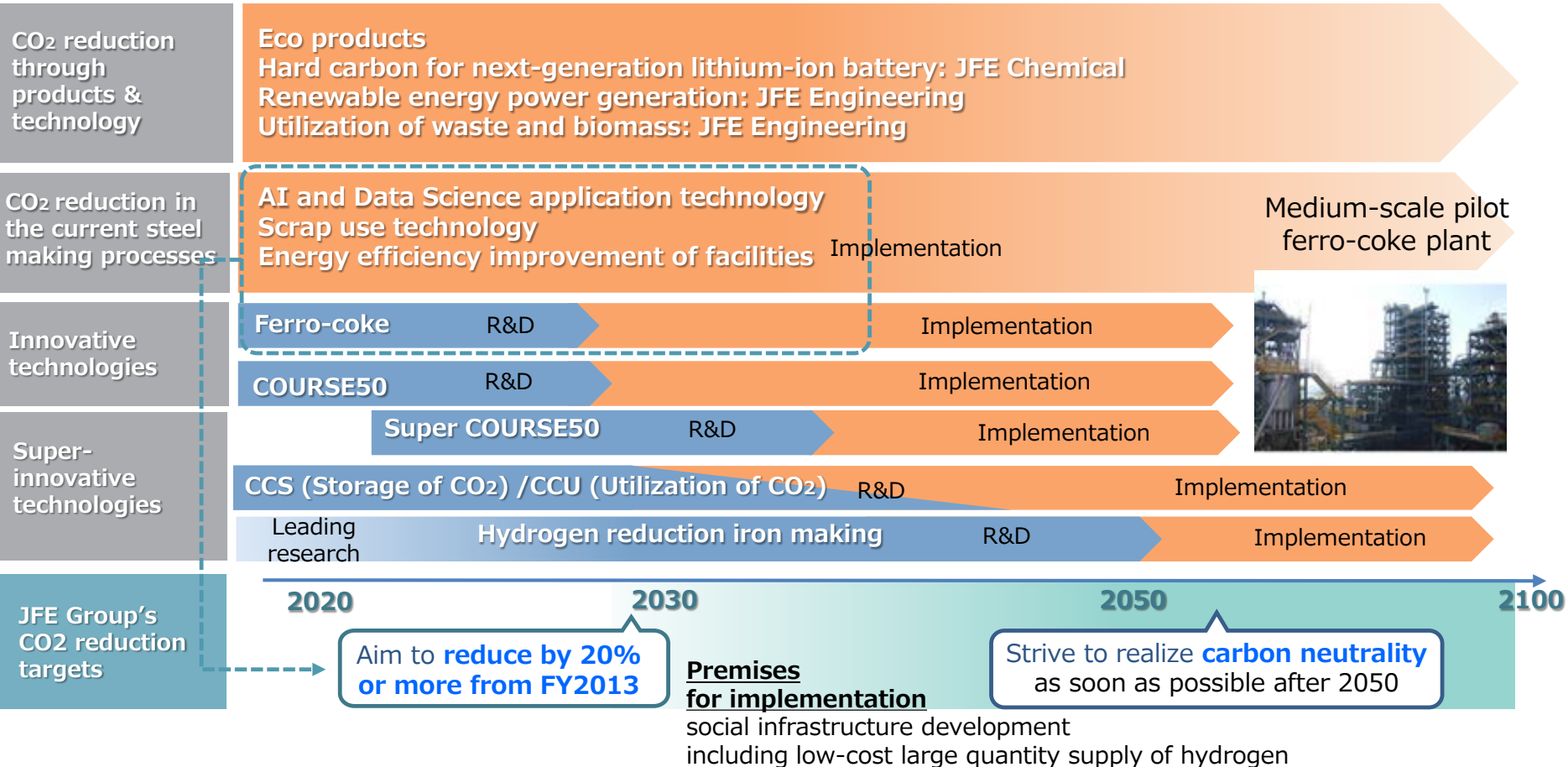


# Strengthen JFE Group's Initiatives for Climate Change Issues (4)

JFE

**Toward 2030** : Aim to reduce CO2 emission by 20% or more by improvement of the current steel making processes and expanding the application of Ferro-coke technology that is under development etc.

**Toward 2050** : Promote Research & Development of various innovative technologies to implement as soon as possible in line with the social transformation to establish carbon-free infrastructure, including low-cost larger quantity supply of hydrogen



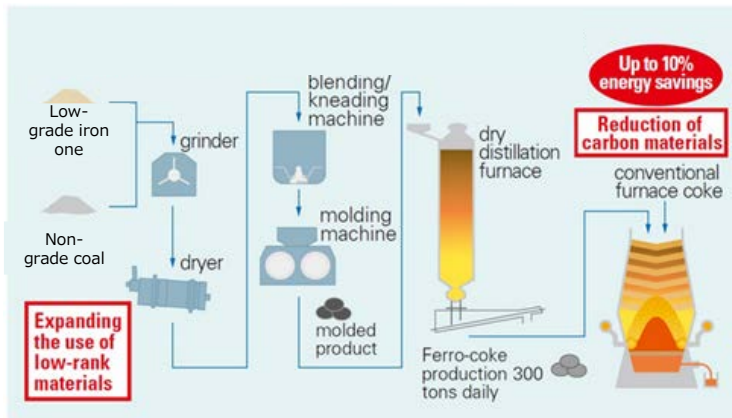


Promote the development of innovative technologies to achieve decarbonization ahead of the rest of the world

## Innovative Technology Ferro-coke

- Innovative material for a blast furnace produced from low-grade iron ore and coal
- Energy saving technology that **significantly reduces the amount of use of cokes in blast furnace** by catalytic effect of metallic iron in Ferro-coke
- Scheduled to **start test operation** of a medium-scale pilot Ferro-coke plant in the West Japan Works (Fukuyama) **in October** after completing construction, which produces 300t/d of Ferro-coke
- Pursue **10% reductions of energy consumptions and CO2 emissions of iron-making process** and **expand the use of low-rank materials**

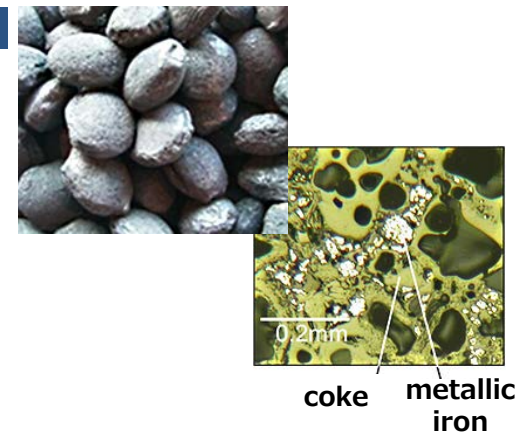
### ■ Ferro-coke production process



### ■ Medium-scale pilot plant



### ■ Ferro-coke and cross-section of particle





## Introducing Data Science Technology at All Steelworks Blast Furnace

- Converting all blast furnaces in Japan to Cyber Physical System (CPS)
- Allowing to predict heat conditions and anomalies of permeability, which were difficult to predict

Grasp furnace conditions and predict anomalies

Realize stable and efficient operation

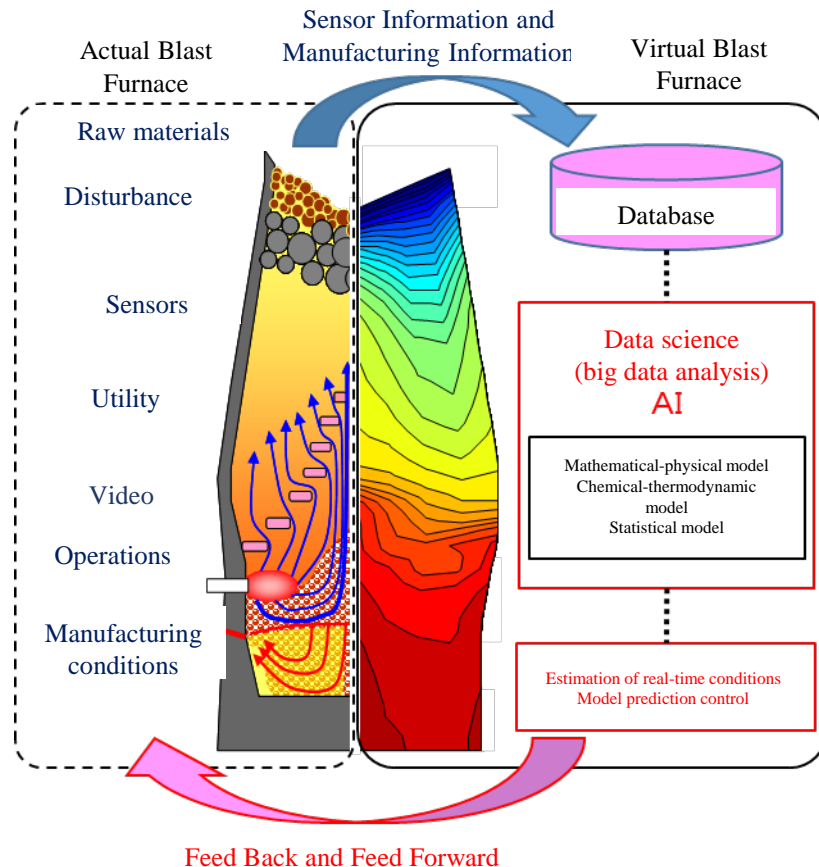
Contribute to saving energy consumption of blast furnace

Reduce CO<sub>2</sub> emissions from Steelworks

### Cyber Physical System (CPS)

- Collect enormous sensor data from physical space such as actual manufacturing processes and products into virtual (cyber) space
- Feed back results of analysis by various methods to physical space in real time
- Contribute to improving productivity and stability by feeding back internal conditions of facilities that are unable to be observed in reality and future predictions

### ■ Blast Furnace CPS Concept





## Super Innovative Technologies CCS and CCU (effective use and storage of CO<sub>2</sub>)

- Actively engaged in the development of new technologies to separate and capture CO<sub>2</sub> from blast furnace gas in line with the COURSE50 project
- One of the first domestic steel manufacturers to initiate R&D into the effective use of CO<sub>2</sub> separated and captured from blast furnace gas as valuable resource.

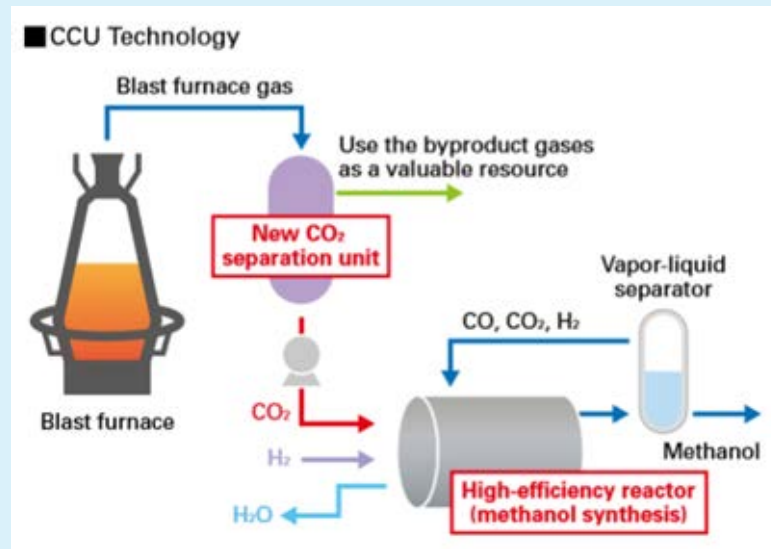
- Promote R&D into CCU as a participating member of NEDO project\*<sup>1</sup>
- Initiate together with RITE\*<sup>2</sup> to develop innovative technologies for synthesizing methanol (CH<sub>3</sub>OH) from CO<sub>2</sub> in blast furnace gas

Apply the expertise in CO<sub>2</sub> separation and recovery technologies acquired through the COURSE50 project to the development of CCU

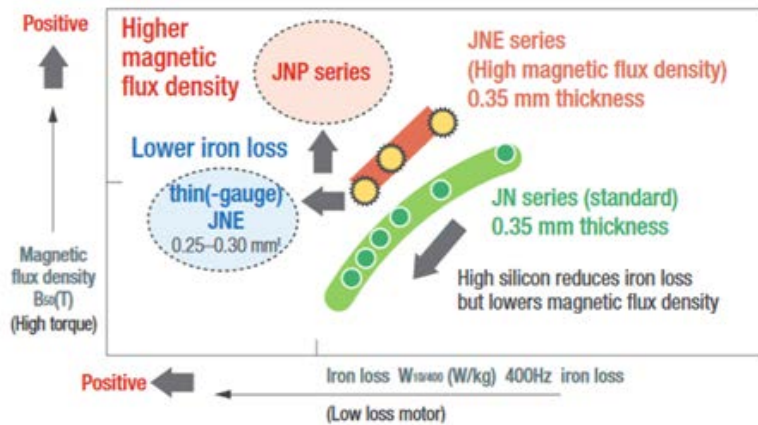
\*1 New Energy and Industrial Technology Development Organization  
 "Development of next-generation thermal power generation technologies / Development of basic technologies for next-generation thermal power generation / Development of CO<sub>2</sub> utilization technology project"

\*2 Research Institute of Innovative Technology for the Earth

CCS : Carbon Capture and Storage    CCU : Carbon Capture & Utilization



## Electrical Steel Sheets for Electric Vehicles

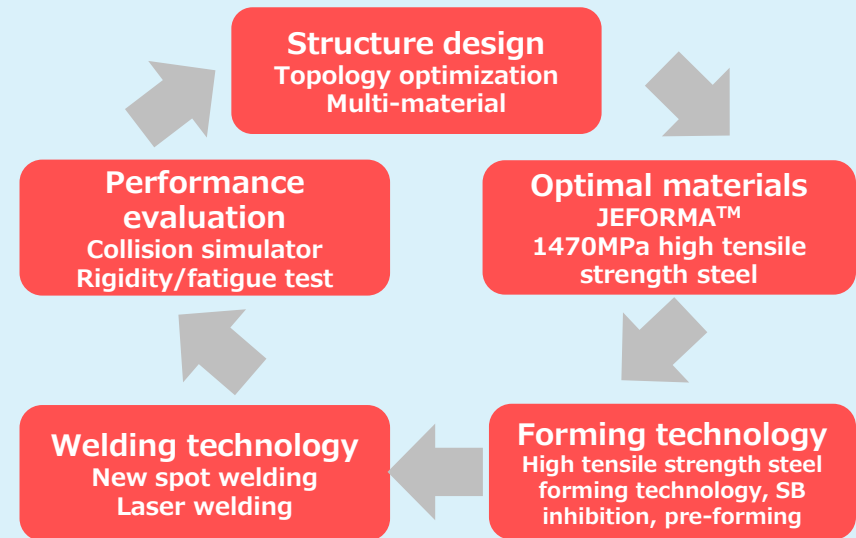


## JFE's strengths

- Ultra-thin electrical steel sheets with top-class, worldwide competitiveness
  - A comprehensive supply network covering major Japanese, US, and European automobile and parts manufacturers
- Used by major automobile manufacturers as a core material for motors of electric vehicles
  - **Contribute to making motors for electric vehicle more compact and efficient** with product lineup that achieves a fine balance between higher magnetic flux density and lower iron loss

## High tensile strength steel sheets

- Contribute to achieving weight reduction of automobiles though leveraging accurate materials designs and application technology solutions
- **1470MPa-grade cold-rolled high tensile strength steel** has **the world's highest tensile strength** for automobile parts formed through cold forming
- Enable **significant weight reduction in automobile frames**  
⇒ Bring **huge reduction in CO2 emission during driving**





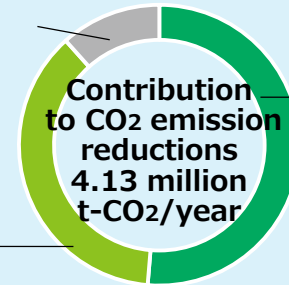
**Contributing to approx. 4 million tonnes of CO2 reduction per year through waste-to-energy and biomass power generation, and renewable energy business including solar and geothermal power etc.**

- Expanding **EPC (engineering, procurement, construction) and O&M (operation and maintenance)** businesses in **renewable energy power generation including biomass, geothermal, and solar power**
- Urban Energy, a subsidiary, introduced **energy plans with 100% renewable energy**
- **Promoting local production and consumption of electricity** mainly of renewable energy through regional electricity retail companies in partnership with local municipal governments

**Contribution to CO2 emission reductions by renewable energy plants (FY2019)**

Other (biogas, geothermal, solar power, wind) 0.48

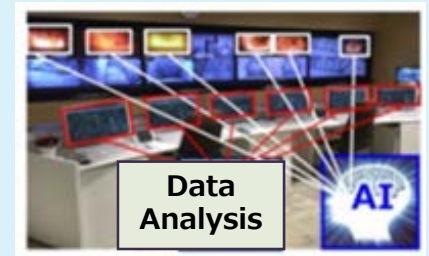
Biomass power generation: 2.12



Waste power generation: 1.53

**Contributing to stable operations of waste-to-power plants and increase in power generation by leveraging advanced technologies**

- Established **the Global Remote Center** that provides high value-added services by **leveraging AI and Big Data**, including remote plant monitoring, operational support and maintenance
- Introducing **the world first automated incinerator operation system** for waste-to-power generation field



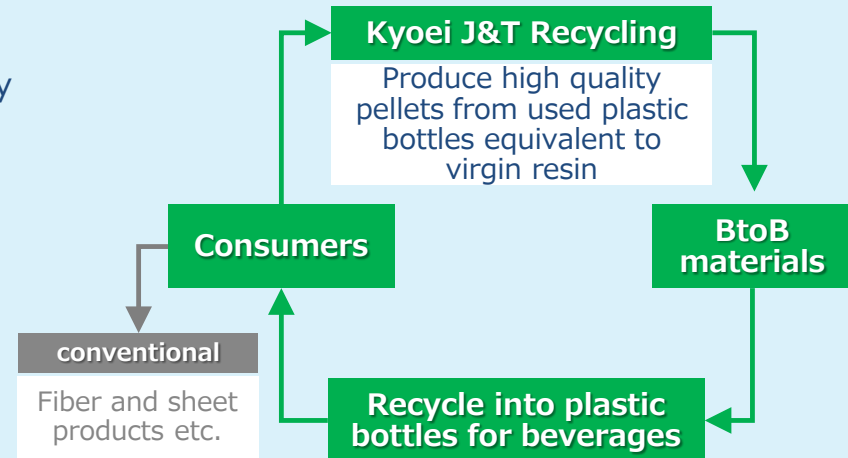


JFE

- J&T Recycling is a subsidiary that operates recycling business with **the biggest waste incineration capacity in the Tokyo metropolitan area**
- **Accelerating the development of new recycling business** such as recycling of waste plastic bottles

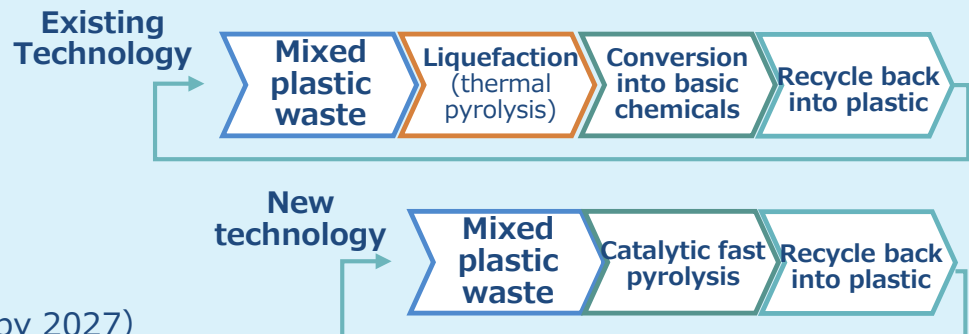
Constructing a Japan's biggest factory to produce recycled material from waste plastic bottle, which contributes to Bottle-to-Bottle (BtoB) shift

- Established a JV between J&T Recycling and Kyohei Industry
- Produce transparent raw materials for plastic bottles from waste plastic bottles
- **Contribute to reduce CO2 emissions and save natural resource consumption through supplying raw materials to produce recycled plastic bottles**



## Participating in R Plus Japan, a waste plastic recycling business

- Established a JV with a group of 12 companies across industries
- **Challenge the development of efficient recycling technology with low environmental impact** by utilizing the technology of ANELLOTECH in US  
(Date of commencement of business: June 2020, Aiming to commercialize the recycling technology by 2027)





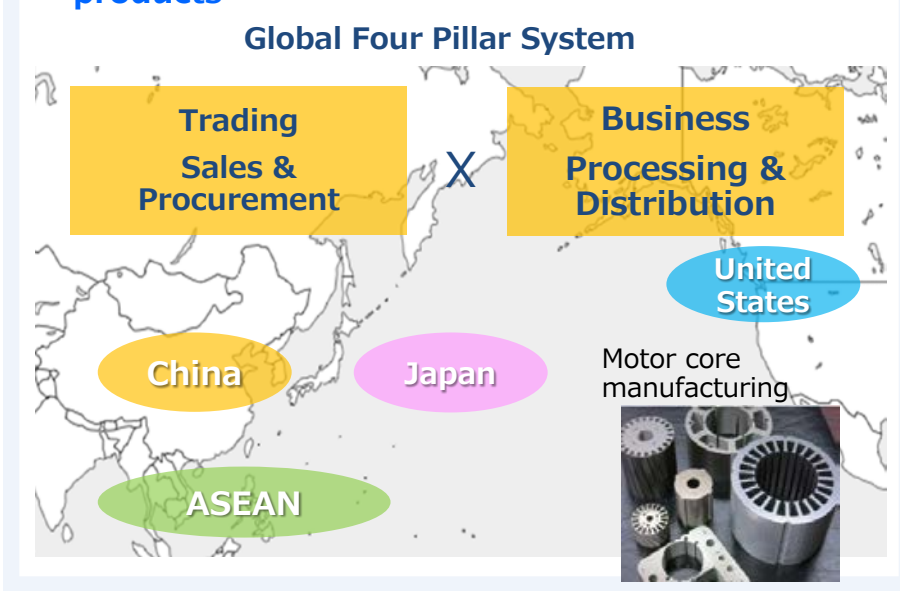


# Initiatives of Shoji (Trading) Business

- **Globally providing environmentally friendly products** including steel products, such as high tensile strength steel sheets and electrical steel sheets, that can contribute to solving climate change issues, and scraps
- **Focusing on providing steel products** and **biomass fuel for power generation** in **renewable energy field**

## Supply of environmentally friendly products

- **Under a global four pillar system** (Japan, US, China and ASEAN), **achieving stable supply** of steel products including **electrical steel sheets, which contribute to improving efficiency of motors and transformers, not only as materials but also processed products**



## Supply of biomass fuel

- **Contributing to promotion of renewable energy through stable biomass fuel supply**
- Supplying fuel to biomass power generation companies, including JFE Engineering, and contributing to realizing sustainable society by JFE Group

## Sales of steel products in renewable energy field

- Launched Renewable Energy Steel Products Team in July 2020
- Globally expand steel business in renewable energy field, and consider to formulate a supply chain model for material processing to meet specific customer needs



# Adapting to Climate Change Risks and Opportunities (1)

## (Analysis and Evaluation in line with the TCFD recommendations)

JFE

### JFE Groups' governance and business strategy is adaptive to climate change risks and opportunities, which are analyzed and evaluated in line with the TCFD recommendation

Adaptation for the four core elements proposed by TCFD

<b>Governance</b>	<ul style="list-style-type: none"><li>• Identify "mitigate climate change" as a material CSR issue, and promote efficient PDCA cycle and effective CSR management</li><li>• The Group Environmental Committee discusses measures, and guides and supervises each initiative</li><li>• The Group Management Strategy Committee deliberates material issues, and the Board of Directors receives reports on and supervises them</li></ul>
<b>Strategy</b>	<ul style="list-style-type: none"><li>• In the 6th medium-term business plan, contribution to "realization of a sustainable society" is positioned as an important management issue, and promote "continuous efforts to address ESG issues" as a major initiative</li><li>• Identify key factors that impact JFE's business and evaluate their risks and opportunities through scenario analysis</li></ul>
<b>Risk management</b>	<ul style="list-style-type: none"><li>• Corporate officers in charge strive to recognize risks, which are collected and managed through the Group CSR Council</li><li>• Measures to mitigate frequency and impact of risks are deliberated and decided</li></ul>
<b>Indices &amp; targets</b>	<ul style="list-style-type: none"><li>• Promoting initiatives to achieve targets in Low Carbon Society of the Japan Iron and Steel Federation</li><li>• Played a pivotal role in the development of the Japan Iron and Steel Federation's long term vision for climate change mitigation</li><li>• Set JFE Group's own targets for CO2 emissions reduction, and promote initiatives for achieving them</li></ul>



# Adapting to Climate Change Risks and Opportunities (2)

## (Analysis and Evaluation in line with the TCFD recommendations)

JFE

**Identified 7 important factors in 2 scenarios. Evaluate climate-related risks and opportunities and use them to develop future business strategies**

		2 °C Scenario	4 °C Scenario
Outline of Scenario		<ul style="list-style-type: none"> <li>➤ <b>Bold policies and technological reforms</b> will <b>hold the increase in temperature below 2°C</b></li> <li>➤ <b>Societal changes associated with the transition</b> to decarbonization will <b>affect business</b></li> </ul>	<ul style="list-style-type: none"> <li>➤ Even with the new policies in various countries stipulated, <b>temperature will rise up to 4°C</b></li> <li>➤ <b>Climate changes</b> such as rising temperatures <b>will affect business</b></li> </ul>
	Important Factor	Evaluation Results	
2 °C Scenario	1) Decarbonization in steel production processes	Opportunities	<ul style="list-style-type: none"> <li>• Develop and put into practical use innovative technologies in addition to existing ones</li> </ul>
		Risks	<ul style="list-style-type: none"> <li>• Investment on implementing innovative technologies is feasible</li> <li>• The Group's cost competitiveness will be maintained through implementation of a uniform carbon price across all countries</li> </ul>
	2) Increase in demand for the effective use of steel scraps	Opportunities	<ul style="list-style-type: none"> <li>• Converter furnace steelmaking is increasing due to constraint on the supply of scra</li> <li>• Expansion in electric furnace steelmaking and electric furnace engineering, scrap logistics business</li> </ul>
		Risks	<ul style="list-style-type: none"> <li>• Increase in demand for electrical steel sheets due to increase in electric vehicles</li> <li>• Increase in demand for special steel due to increased car sales</li> <li>• Increase in demand for high tensile strength automotive steel sheet</li> <li>• Recyclability of steel is gaining attention again</li> </ul>
3) Change in demand for steel for automobiles and others	Opportunities	<ul style="list-style-type: none"> <li>• Increase in demand for electrical steel sheets due to increase in electric vehicles</li> <li>• Increase in demand for special steel due to increased car sales</li> <li>• Increase in demand for high tensile strength automotive steel sheet</li> <li>• Recyclability of steel is gaining attention again</li> </ul>	
	Risks	<ul style="list-style-type: none"> <li>• Effect of trend to use multi-materials is limited</li> </ul>	
4) Increase in demand for solutions promoting decarbonization	Opportunities	<ul style="list-style-type: none"> <li>• Entire construction and operation of renewable energy plants</li> <li>• Entire construction and operation of incinerators and plastic recycling plants</li> <li>• Entire construction of CCU/CCS facilities</li> <li>• Overseas expansion of low-carbon business</li> </ul>	
	Risks	<ul style="list-style-type: none"> <li>• Effect of trend to use multi-materials is limited</li> </ul>	
4 °C Scenario	5) Unstable raw material procurement	Risks	<ul style="list-style-type: none"> <li>• Ongoing specific measures:- Diversify supply sources- Increase plant capacity</li> </ul>
	6) Damages to business bases	Risks	<ul style="list-style-type: none"> <li>• Measures against flood and drought are already in progress</li> <li>• Impact of flooding caused by sea level rise can be addressed with current countermeasures</li> </ul>
	7) National resilience	Opportunities	<ul style="list-style-type: none"> <li>• Reinforce infrastructure with steel and other relevant product</li> </ul>



## Water-related risks and mitigation

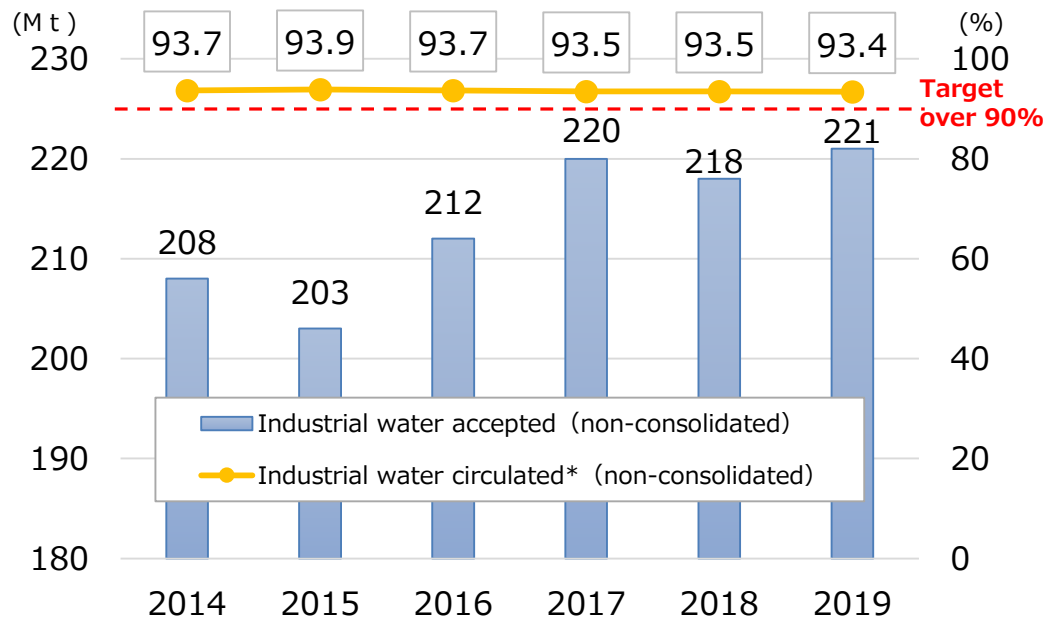
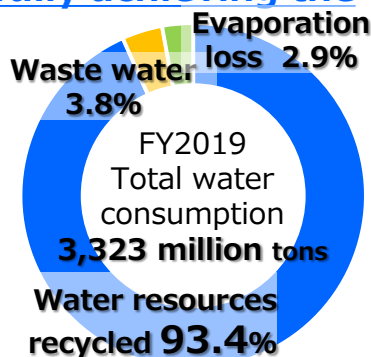
- JFE Steel identifies and evaluates water-related risks such as drought and flooding based on damage reported in the past for each steelworks and on forecast data from the Meteorological Agency.
- It identifies steelworks having risks that are affected by climate change and mitigates their risks by creating a BCP.

## Cycle use of water

### JFE Steel's target water recycling rate: 90% or more

- Improve the recycling rate by **adopting purification processes** such as biological and chemical wastewater treatments
- Have been successfully achieving the target**

The target water recycling rate (90% or more) at JFE steel, which is extremely high considering the amount evaporated when water is used, is achieved in FY2019.





# JFE Group's contribution to the Social Issues



# Materials regarding Society

JFE

In order to survive and continue to create added value in an increasingly complex and diverse environment, it is necessary to recruit and nurture diverse and advanced human resources, promote initiatives to maximize the abilities of employees, promote initiatives to improve safety, and ensure the health of employees and their families.

Based on **JFE Group’s Basic Policy on Human Resource Management**, JFE Group develops businesses that grow together with its employees.

## Material CSR Issues regarding “Social”

Areas of Focus		Material CSR Issues
Activity	Ensure occupational safety and health	<b>Prevent workplace accidents</b> <b>Ensure the health of employees and their families</b>
	Recruit and nurture diverse human resources	<b>Pursue diversity and inclusion</b> <b>Strengthen human resource development programs</b>

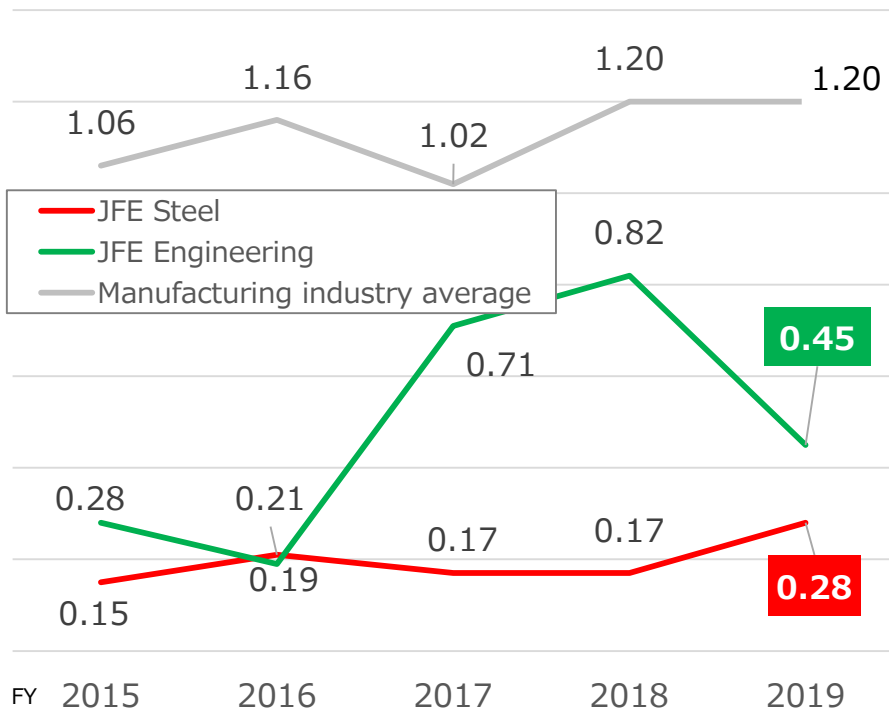


# Initiatives for Ensuring Safety

## Prevent workplace accidents (Safety records Targets and results)

- Although JFE's lost-work injuries ratio is far below the average of manufacturing industry, it has not improved in recent years.
- Workplace fatalities in FY2019: 4 in JFE Steel, 2 in JFE Engineering
- **Eradicate workplace fatalities and continue to implement measures to improve safety records**

### Lost-work Injuries Ratio



### KPIs for FY2020 (excerpt)

Group-wide	Workplace fatalities: zero occurrences
ST	Lost-work injuries ratio : ~0.10 <Crucial measures> <ul style="list-style-type: none"> <li>• Promotion of safety initiatives by utilizing ICT (e.g. <a href="#">Installing safety monitoring system, Safety support by using AI-image-analysis</a> etc.)</li> </ul>
EN	Lost-work injuries ratio : ~0.25 <Example of advanced measure> <ul style="list-style-type: none"> <li>• Conduct the risk simulation training, using safety-simulation vehicles and VR</li> </ul>
SH	<Crucial measures> <ul style="list-style-type: none"> <li>• Prevention of accidental contact through equipment improvements (Installation of safety sensor equipment, etc.)</li> </ul>

JFE Steel and JFE Engineering: parent company, business associates and contractors  
 Lost-work injuries ratio= Number of lost-time injuries / number of hours worked × 1,000,000

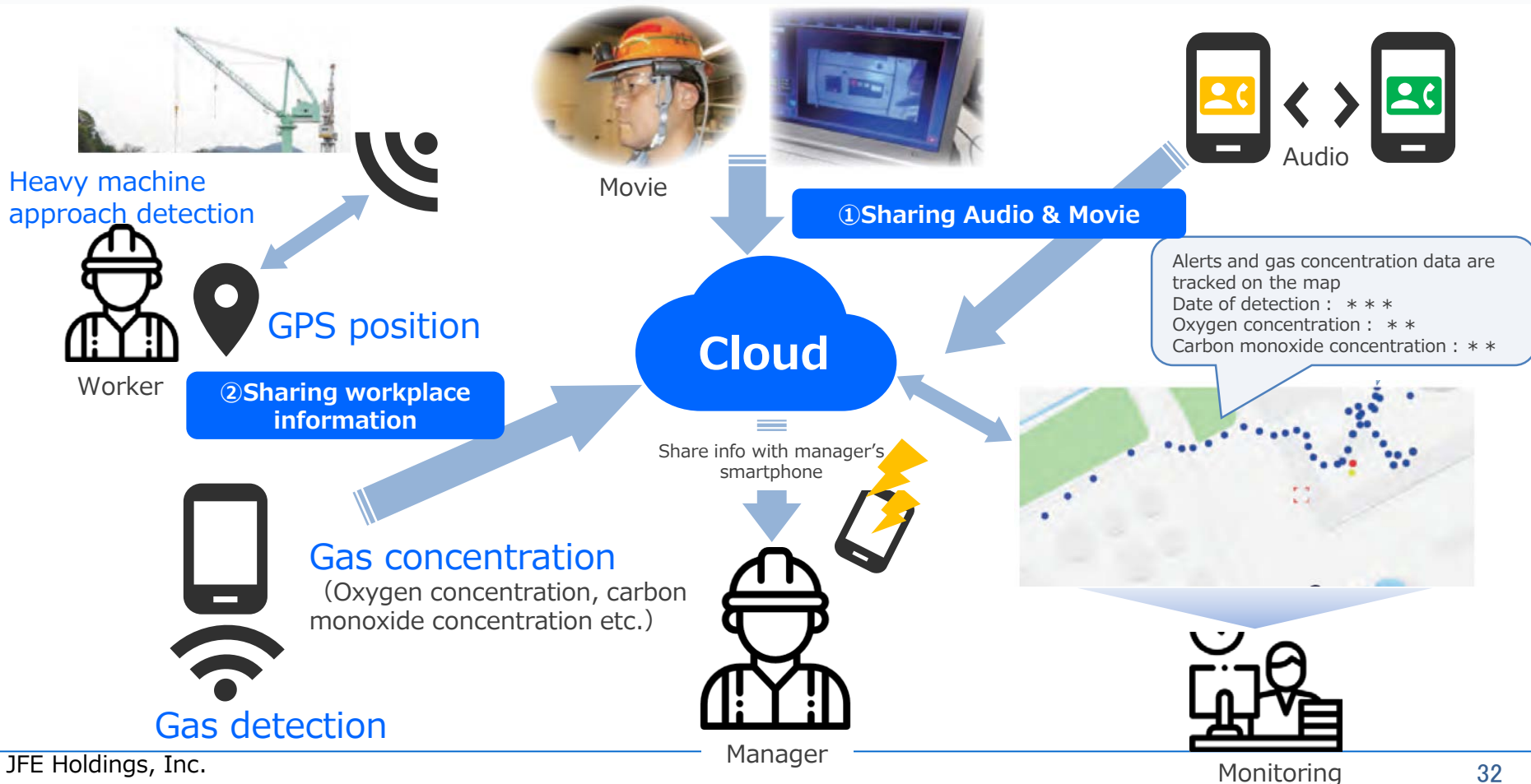


# Initiatives for Ensuring Safety (Steel Business)

JFE

## Ensuring employees' safety by utilizing ICT (Safety support system)

- Safety support system is useful for ensuring workers' safety through **①audio and video communication among the group** and **②sharing the workplace information such as workers' location and motion, detection of approaching heavy machine, and gas concentration.**
- Cloud system gathers such information, and managers can monitor it through their smartphones.







# Diversity & Inclusion

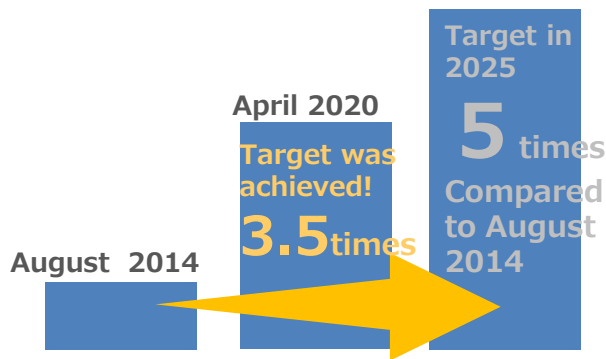
JFE

Promote initiatives to maximize the abilities of employees with diverse backgrounds in terms of gender, nationality, values, or lifestyle.

## Supporting women in professional development

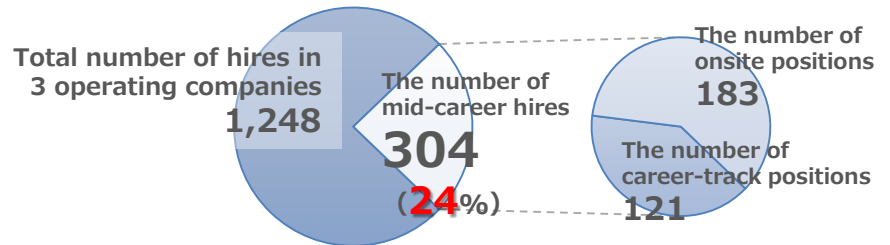
- Each operating company has [Diversity Promotion Section](#) to organize educational activities, such as rank-based training and women’s exchange meetings, and to implement best practices across the Group.
- Increased hiring of female employees  
ST: Steelworks employ approx. 400 females who are currently working on-site.
- [Enhanced childcare-support programs](#) that significantly exceed statutory requirements.
- Set a target of [females in managerial positions](#)

### <Female managers in the JFE Group: Actual and Target>



## Hiring diverse human resources

- Continuously hire new employees to support JFE Group’s sustainable development
- [Actively hire personnel with diverse characteristics and values](#) as well as people from other business sectors



## Improving awareness and offering training programs

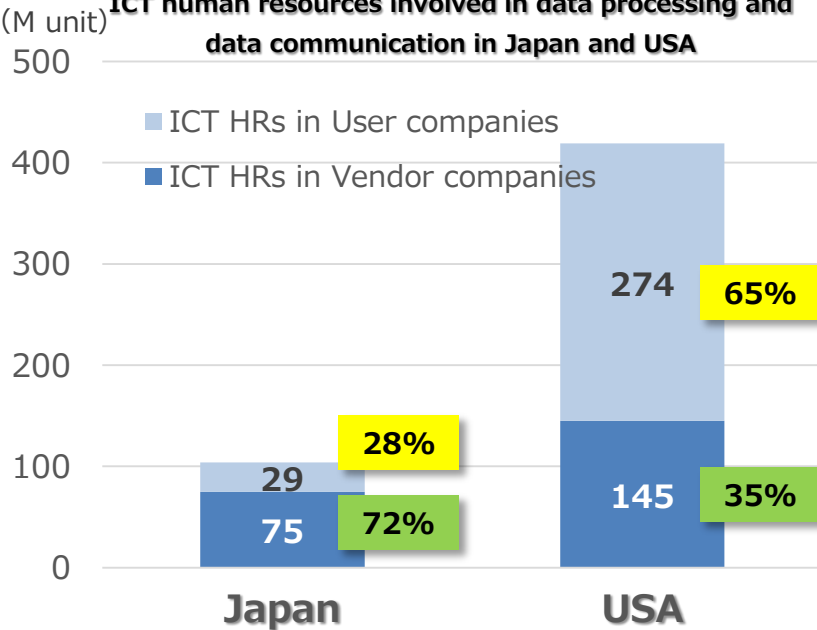
- Provide opportunities for management to improve awareness of diversity
- [Provide leadership training and seminars for female employees](#)
- To respect LGBTQ (sexual minority), [an LGBTQ study group was convened](#) for human resources representatives in each district of JFE Steel’s business locations.



# Human Resource Development to Enhance DX Strategy (Steel Business)

JFE

ICT human resources involved in data processing and data communication in Japan and USA



Source : The Ministry of Internal Affairs and Communications  
The 2018 Information and Communications White Paper

- The practical application of data science in manufacturing and R&D requires expertise in fields specific to the steel industry
- Data scientists are not easy to be hired outside the company due to increased competition.

- Established an education structure to train in-house data scientists in order to immediately introduce rapidly developing data science technology into the field.
- Establish a hierarchical education system and implement education that meets the needs of each employee.
- Increase the number of in-house data scientists to approximately 350 by the end of fiscal 2020.

Level	Target employees	Methods to develop
<b>DS Level 1</b>	<ul style="list-style-type: none"> <li>• Researchers in Research Dept.</li> <li>• Part of engineers in Manufacturing Dept.</li> </ul>	<ul style="list-style-type: none"> <li>• Education in academic institutions</li> <li>• Engineers to temporarily work in Research Dept.</li> </ul>
<b>DS Level 2</b>	<ul style="list-style-type: none"> <li>• Part of engineers in Manufacturing Dept.</li> </ul>	<ul style="list-style-type: none"> <li>• Problem-solving approach education</li> </ul>
<b>DS Level 3</b>	<ul style="list-style-type: none"> <li>• All engineers</li> </ul>	<ul style="list-style-type: none"> <li>• Basic education regarding Data Science</li> <li>• General education regarding Data Science</li> </ul>
<b>DS Level 4</b>	<ul style="list-style-type: none"> <li>• All employees including white-collar positions</li> </ul>	<ul style="list-style-type: none"> <li>• e-Learning</li> </ul>

Data Scientists



# Measures against COVID-19 to Secure Employees' Health

JFE

## Measures to secure employees' security and health

### Main measures to prevent infection

	Head office and branch office	Steelworks and other works
<b>JFE Steel</b>	<ul style="list-style-type: none"> <li>• Encourage working at home and commute to the office preventing the rush hour by installing core-less flexible working hours.</li> <li>• Provide partitions in the office</li> <li>• Temperature measurement by using thermo cameras at the entrance</li> </ul>	<ul style="list-style-type: none"> <li>• Provide partitions in office and cafeterias.</li> <li>• Reduce meeting participants by holding meetings separately</li> <li>• Keep social distance during breaking time</li> </ul>
<b>JFE Engineering</b>	<p>Head office and branch office</p> <ul style="list-style-type: none"> <li>• More than 50% to take working at home</li> <li>• Measure and record temperature everyday</li> <li>• Must wear facial masks while working</li> <li>• Temperature measurements for guests</li> </ul>	<p>Works, construction sites, and operating plants</p> <ul style="list-style-type: none"> <li>• Provide plastic sheets in resting areas</li> <li>• Access control to the common facilities</li> <li>• Divide into 3 groups to enable staggered commuting of one hour at works.</li> </ul>
<b>JFE Shoji</b>	<p>Head office</p> <ul style="list-style-type: none"> <li>•Commute to the office preventing the rush hour by installing core-less flexible working hours</li> <li>•Hold online meetings with people from outside of the company</li> <li>•Provide partitions in the office</li> <li>•Temperature measurement for guests by thermo camera</li> <li>•Encourage everyday temperature measurement before coming to the office</li> </ul>	<p>Other sites</p>
	<ul style="list-style-type: none"> <li>•Working at home as often as possible (maximum rate of office attendances : 25%)</li> </ul>	<ul style="list-style-type: none"> <li>•Encourage working at home (maximum rate of office attendances : 50%)</li> </ul>

## Measures when an employee is tested positive

- If employees are infected with COVID-19, the JFE Group will immediately take the following measures under the guidance of the public health center. **1: Disinfection of workplaces and communal areas where infected employees worked 2: PCR testing of close contacts.**
- JFE Group places top priority on the safety of its stakeholders' (including employees) and continues to take agile measures to prevent the spread of COVID-19.



# JFE Group's Governance



# Approach to Diversity in Board of Directors

JFE

## ◆ Improvement of Diversity in Board of Directors

- 2007 Added two outside directors
- 2017 Reorganized the Board of Directors
- 2019 Appointed a first female audit & supervisory member
- 2020 Appointed a first female outside director

### <Expansion and Diversity in Board of Directors>

1. Added the presidents of JFE Engineering and JFE Shoji to the Board of Directors
2. Increased two outside members (Director and Audit & Supervisory Board Member)

Percentage of outside executives:46%, 6 outside executives (including 3 directors and 3 audit & supervisory), 7 in-house executives (including 5 directors and 2 audit & supervisory) (as of September, 2020)

<Outside Executive Structure>				Expertise and background						Appointment as members of advisory bodies to the Board of Directors	
Category	Name	Main concurrent positions	Independent executive	Corporate management/ Management strategy	Engineering	Global management	Finance and accounting	Legal	Academic / Public policy	Nomination Committee	Remuneration Committee
Director	Masami Yamamoto	Director and Senior Advisor of Fujitsu Limited	Independent							Chair	Member
	Nobumasa Kemori	Executive Advisor of Sumitomo Metal Mining Co., Ltd.	Independent								Chair
	Yoshiko Ando	Audit & Supervisory Board Member of Kirin Holdings Company, Limited	Independent							Member	
Audit & Supervisory Board Members	Shigeo Ohyagi	Senior Advisor of Teijin Limited	Independent							Member	
	Isao Saiki	Partner Lawyer of Abe, Ikubo & Katayama Law Firm	Independent								Member
	Tsuyoshi Numagami	Professor, Graduate School of Business Administration, Department of Business Administration of HITOTSUBASHI UNIVERSITY	Independent							Member	Member



## Analysis and Evaluation by the Third-party Organization

### 1. Process for analysis

- A third-party organization reviewed and conducted a survey, which in-house group had conducted, and also helped the analysis of the results.
- Main contents of the survey were composition and operations of the Board of Directors, support and cooperation framework of Secretariat, supervision function and status of discussions at the Board of Directors, status of discussions at advisory committees, and relationships with shareholders and stakeholders.
- Discussed by the Board of Directors in light of the survey results and evaluation by the third-party organization.

### 2. Evaluation of the results

- The Board of Directors determined that its overall effectiveness was ensured through more robust discussions at its meetings, as officers attending the Board of Directors meetings, including Outside Directors and Outside Audit & Supervisory Board Members, proactively expressed their opinions.
- The accurate and fair auditing of Directors' execution of their duties by Audit & Supervisory Board Members and their proactive voicing of opinions and questions regarding the management decision-making and reporting at the Board of Directors meetings have vitalized deliberations at the Board meetings. It was thus determined that the Company is functioning effectively as a company with an Audit & Supervisory Board.
- The following issues were extracted for further improvement of effectiveness; should further promote specific ESG initiatives; should enhance the Board of Director's supervision function over risk management of the entire Group; and should improve the Board of Directors' approach to business plans when facing drastic changes in the business environment.



## ◆ Policy on strategic holdings of listed stocks

### **JFE Holdings, Inc. Basic Policy on Corporate Governance**

(updated in June, 2020)

- JFE Steel Corporation, JFE Engineering Corporation and JFE Shoji Corporation, do not hold listed stocks as strategic holdings, in principle.
- However, stocks of a company deemed necessary for maintaining and growing the Group's businesses are exceptionally held as strategic shareholdings.
- Proceeding to sell shareholdings based on the policy above.

## ◆ Regular review of the significance and merits of shareholdings

- The Board of Directors meetings regularly confirm the significance of the strategic shareholdings and whether the benefits and risks of such holdings are commensurate with their capital.
- Selling shareholdings if there is no significance of such shareholdings or there is a risk of damage to shareholders' interest.




# External Recognition in Recent Years








# External Recognition and External Awards

JFE

Name of SRI* Index etc.	Evaluation/ selection period
FTSE4Good Index Series, FTSE Blossom Japan Index	As of July 2020  FTSE Blossom Japan FTSE4Good
CDP2019	[CDP2019 Evaluation] 2019 Climate Change: B Water Security: A- Supplier Engagement: A-
DBJ Environmentally Rated Loan Program	2016 
SOMPO Sustainability Index	2012 ~2020  Sompo Sustainability Index

Name of SRI* Index etc.	Evaluation/ selection period
SQEP (Supplier Quality Excellence Process)	Supplier Quality Excellence Process Gold certification plaque 2017 ~2020 
DX Stocks 2020	2020年  DX銘柄2020 Digital Transformation <small>*JFE Holdings was selected for inclusion in the Competitive IT strategy Company Stock Selection for five consecutive years.</small>

Awards	Description
Environmental Communication Awards 2019	JFE Group's CSR report published in September 2019 was awarded for excellence (first time to win the prize) 
Energy Conservation Grand Prize METI Minister's Award	"Multi-site integrated energy network services "(JFE-METS) developed by JFE Engineering was awarded for METI Minister's Award of Energy Conservation Grand Prize, which is the best prize in the product and business model section of the prize in FY 2019.

# Appendix



# JFE Group's Corporate Vision and Standards of Conduct

JFE

**Contribute to the sustainable development of society by addressing global issues, including the resolution of climate change issues, with the world's most innovative technology**

<b>Corporate Vision</b>	<b>Contributing to society with the world's most innovative technology</b>	
<b>Corporate Value</b>	<b>Challenging Spirit. Flexibility. Sincerity.</b>	
<b>Standard of Conduct</b>	<b>In implementing all corporate activities to realize the corporate vision, comply with the following 10 items of Standard of Conduct</b>	
	<b>1</b>	<b>Provide quality products and services</b>
	<b>2</b>	<b>Be open to society</b>
	<b>3</b>	<b>Work with communities</b>
	<b>4</b>	<b>Globalize</b>
	<b>5</b>	<b>Exist harmoniously with the global environment</b>
	<b>6</b>	<b>Maintain proper relations with governments and political authorities</b>
	<b>7</b>	<b>Maintain crisis readiness</b>
	<b>8</b>	<b>Respect human rights</b>
	<b>9</b>	<b>Provide challenging work environments</b>
	<b>10</b>	<b>Comply with laws and ordinances</b>



# JFE Group's Environmental Management

JFE

**Realize “harmony with the global environment” and “improvement of the global environment” in corporate activities**

## Environmental Philosophy

The JFE Group 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 businesses
- (2) Contribute through technologies and products
- (3) Conserve resources and energy
- (4) Communicate with society
- (5) Facilitate international cooperation

## Environmental Management

- The JFE Group Environmental Committee sets goals for environmental protection, monitors the progress of initiatives
- Key issues for corporate management such as climate change are deliberated at the Group Management Strategy Committee as well and reported to the Board of Directors.
- Acquired ISO 14001 certification at all global production sites of JFE Steel and JFE Engineering, and major offices of JFE Shoji
- Promote environmental auditing, education and accounting



## 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 survives 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

**Based on this policy,  
each operating company promote measures which meets actual circumstances.**



# SGDs Highly Relevant to Material CSR Issues

JFE

## Contributing to the Sustainable Development Goals (SDGs)

In September 2015, a UN Summit adopted 17 SDGs to be addressed through worldwide efforts to achieve sustainable development. The JFE Group is responding to this call through contributions achieved by its business activities.



Material CSR Issues	Relevant SDGs
Stably supply products	7, 9, 10, 11
Ensure quality	
Pursue R&D operations	12, 13, 17
Respond to customer needs	
Develop and provide environmentally friendly products	6, 7, 9, 12
Mitigate climate change	
Protect the global atmosphere	13, 14
Pursue resource recycling	
Prevent workplace accidents	3, 8
Ensure the health of employees and their families	
Pursue diversity and inclusion	4, 5, 8, 9
Strengthen human resource development programs	10
Ensure adherence to Corporate Ethical Standards and compliance	10, 16



# KPIs for Material CSR Issues (1)

JFE

Updated KPIs of the issues below in this Fiscal Year. (Only KPIs updated are extracted.)

Material CSR Issues	Operating Company	KPIs	Results in FY2019	Evaluation	KPIs for FY2020 (Parts colored red are updated from FY2019.)
Provide quality products (customer satisfaction)	ST	1. Stable products supply to customers through steady operations 2. Make steady progress on strengthening its manufacturing bases, starting with blast furnace stabilizing measures	Capital investment of the establishment of manufacturing bases was implemented, which enabled stable operation in each steelworks, resulting in a higher delivery rate than in the same period of the previous fiscal year.	○	1. Agile and flexible production and operation adjustment to the demand change amid business environment changes, stable products supply to customers through steady operations 2. Make steady progress on strengthening its manufacturing bases, starting with blast furnace stabilizing measures
	EN	Secure a stable number of certificated managing engineers	High-level revenue has kept, while the stable number of managing engineers was successfully secured.	○	Secure a stable number of certificated managing engineers
	SH	Make consistent capital investment in processing and distribution operations	All the investment necessary for providing quality products was implemented within this fiscal year. 【Amount of investment (amount adopted)】 Investment in quality enhancement : 1.7 billion yen Renewal and safety investment : 2.0 billion yen System investment : 1.8 billion yen	○	Make consistent capital investment in processing and distribution operations

Material CSR Issues	Operating Company	KPIs	Results in FY2019	Evaluation	KPIs for FY2020 (Parts colored red are updated from FY2019.)
Ensure quality	ST	Implementation of the capital investments for improving the level of quality assurance and product testing established in the Sixth Medium-term Business Plan	In FY2019, Completed almost all the approval of the investment for the full automated quality assurance and product test of four priority areas in the Sixth Medium-term Business Plan. (Tensile test : 96.7%, molten steel analysis : 100%, automotive steel plate thickness measurement : 100%, plating adhesion measurement : 100%)	○	Capital investment will be made to improve the reliability of testing and analysis, aiming to realize 100% automatic quality assurance and product testing in the four priority areas (tensile test, molten steel analysis, automotive steel sheet thickness measurement, plating deposition measurement).
	EN	No major quality problems	No major quality problems	○	No major quality problems
	SH	Continue to conduct quality audits at least once annually on 30 manufacturing affiliate companies (audit executing rate: 100%)	Conducted quality audits 30 domestic and overseas manufacturing affiliate companies as planned. In consideration of the impact on COVID -19, the 6 companies scheduled to be audited at the end of the fiscal year were postponed to fiscal 2020. Audit executing rate : 80% (Domestic : 14, Overseas : 10)	○	Continue to conduct quality audits at least once annually on 32 manufacturing affiliate companies (increased the number of companies audited from 30 to 32)



Material CSR Issues	Operating Company	KPIs	Results in FY2019	Evaluation	KPIs for FY2020 (Parts colored red are updated from FY2019. )
Pursue R&D operations	ST	Conduct R&D operations established in the Sixth Medium-term Business Plan	<ul style="list-style-type: none"> <li>Commercialize new products as planned by paying the same amount of R&amp;D expenses as the previous fiscal year</li> <li>Companywide deployment of optimum operation technology utilizing data science technology</li> </ul>	○	<ul style="list-style-type: none"> <li>Pursue strategic R&amp;D</li> <li>By developing DS technology, establish JDXC in FY2020, introduce Data Science(DS) technology to Blast Furnaces in all districts and No.3 Sintering Machine in Fukuyama district, install J-dscom to all Hot Rolling Lines.</li> <li>More than 20 new products and technologies developed in fiscal 2020 (From FY2015 to FY2020, aim for a total of 135 products and technologies)</li> </ul>
	EN	Make consistent or increased investment in R&D operations	Investment amount is maintained and increased FY2017 3.8 billion yen FY2018 4.1 billion yen FY2019 4.7 billion yen (15% growth from FY2018)	○	Develop technology focus on ICT utilization, measurement for climate change, and plastic recycling as the three priority areas 【Numerical Target】 R&D expenses for the priority area accounts for More than 30%.
Develop and provide environmentally friendly products	ST	Develop new products and technologies established in the Sixth Medium-term Business Plan	Developed and released 16 new environmentally friendly products as planned.	○	Expand line-up of environmentally friendly products and technologies: more than 15 products and technologies in FY2020 (From FY2015 to FY2020, aim for a total of 105 products and technologies)
	EN	-	-	-	Expand and develop more than one new business and new products, or business scale contributing to the global environment conservation or expand business in a year. <ul style="list-style-type: none"> <li>➤ Progress plastic recycling business</li> <li>➤ Progress food waste recycling business</li> <li>➤ Progress consumer electronics and fluorescent light recycling</li> <li>➤ Progress electricity supply business generated by renewable energy</li> <li>➤ Develop and provide new environmentally friendly products</li> </ul>



Material CSR Issues	Operating Company	KPIs	Results in FY2019	Evaluation	KPIs for FY2020 (Parts colored red are updated from FY2019. )
Mitigate climate change	ST	1.CO <sub>2</sub> reduction target defined in the Japan Iron and Steel Federation's "Commitment to a Low Carbon Society" 2.Continue to invest in energy conservation	1.Progressing to the FY2020 target in the Japan Iron and Steel Federation's "commitment to a Low Carbon Society" as planned. 2.Keep investing in energy conservation	○	<ul style="list-style-type: none"> <li>The target for fiscal 2030 is to reduce CO<sub>2</sub> emissions by 20% or more from the fiscal 2013 level.</li> <li>To achieve the target, a project team has been launched within FY2020 and will develop implementation scenario.</li> <li>Join the NEDO technology development for attaining "zero-carbon steel" and develop, in 2020-2021, a roadmap presenting long-term technology development .</li> <li>Start test operation of a pilot ferro-coke plant</li> </ul>
	EN	1.Contribute to global environment conservation through our products and services <ul style="list-style-type: none"> <li>➢ Spread of waste-to-energy plants</li> <li>➢ Spread of woody biomass power generation</li> <li>➢ Energy conservation in water and sewage facilities</li> <li>➢ Spread of sewage sludge energy plants</li> <li>➢ Provide electricity from renewable energy</li> </ul> 2.Reduce CO <sub>2</sub> emissions in factories and offices	1.Installed 3 waste-to-energy plants and 2 biomass power generations, exceeding original yearly plan of 2 installation cases. Our providing plants (in operation) contributed 4.13 million tons/ year of reduction of CO <sub>2</sub> emissions. 2.Reduced 13.7% of Cos emissions, exceeding by more than 1% compared to the previous fiscal year. (FY2018 : 13,100 tons/year, FY2019 : 11,300 tons/year)	○	1.Contribute to global environment conservation through more than two of our products and services <ul style="list-style-type: none"> <li>➢ Spread of waste-to-energy plants</li> <li>➢ Spread of woody biomass power generation</li> <li>➢ Spread of digestion gas power generation plant</li> <li>➢ Spread of geothermal, solar and wind power generation</li> </ul> 2.Reduce CO <sub>2</sub> emissions in factories and offices by 1% and more compared to the previous fiscal year.

Material CSR Issues	Operating Company	KPIs	Results in FY2019	Evaluation	KPIs for FY2020 (Parts colored red are updated from FY2019. )
Protect the global atmosphere	ST	1.Continue to work on keeping NOx and SOx emissions at low levels 2.VOC emissions : maintain at low levels (30% decrease compared to 2000) 3.Benzene emissions : maintain at low levels (80% decrease compared to 1999) 4.Dichloromethane emissions : maintain at low levels (40% decrease compared to 1999)	1.NOx and SOx emissions were kept at low levels through thorough combustion-control. 2.VOC emissions: 51% decrease 3.Benzene emissions: 93% decrease 4.Dichloromethane emissions 68% decrease	○	1.Continue to work on keeping NOx and SOx emissions at low levels 2.VOC emissions : maintain at low levels (30% decrease compared to 2000) 3.Benzene emissions : maintain at low levels (80% decrease compared to 1999) 4.Dichloromethane emissions : maintain at low levels (40% decrease compared to 1999)
	EN	Continue to work on keeping NOx and Sox emissions at low levels	Can maintain the low levels of emissions due to emissions much lower than yearly total amount of regulation NOx 178Nm <sup>3</sup> (18,000Nm <sup>3</sup> ) SOx 40Nm <sup>3</sup> (100Nm <sup>3</sup> )	○	Continue to work on keeping NOx and SOx emissions at low levels <b>[Numerical Target]</b> <b>Lower than the yearly total amount of regulation</b> <b>NOx : 18,000Nm<sup>3</sup></b> <b>SOx : 100Nm<sup>3</sup></b>



# KPIs for Material CSR Issues (6)

JFE

Material CSR Issues	Operating Company	KPIs	Results in FY2019	Evaluation	KPIs for FY2020 (Parts colored red are updated from FY2019. )	
Prevent workplace accident	Group-wide	Workplace fatalities: zero occurrences	ST	Workplace fatalities: four occurrences	X	Group-wide Workplace fatalities: zero occurrences
			EN	Workplace fatalities: two occurrences		ST Lost-work Injuries Ratio: ~0.10 <Crucial measures> 1. Further implementation of safety initiatives in each district based on its weak points 2. Reestablishment of safety management system (installation of ISO) 3. Spread of safety initiatives using ICT (e.g. Installing safety monitoring system, Safety support by using AI-image-analysis etc.)
			SH	—		EN Lost-work Injuries Ratio: ~0.25 <Crucial measures> 1. Installation of working floor/handrail and safety belt for work at height 2. Prevent people from around hanging load/operating range of heavy equipment 3. Turn off the power of equipment, facilities and tools when doing unusual works. 4. Calling and correction during onsite patrolling <Example of advanced measure> Conduct the risk simulation training, using safety-simulation vehicles and VR
					SH <Crucial measures> • Prevention of accidental contact through equipment improvements (Installation of safety sensor equipment, etc.)	

Material CSR Issues	Operating Company	KPIs	Results in FY2019	Evaluation	KPIs for FY2020 (Parts colored red are updated from FY2019.)	
Ensure the health of employees and their families	ST	Provision rate of health guidance (by 2020 : 35%)	ST Actual rate of health guidance : 56.9%	△	ST Provision rate of health guidance (by 2023) : 60%	
	EN	Provision rate of health guidance (by 2020 : 35%)	EN Actual rate of health guidance : 28.9%		EN Provision rate of health guidance (by 2020) : 35%	
	SH	Provision rate of health guidance (by 2020 : 40%)	SH Actual rate of health guidance : 36.8%		SH Provision rate of health guidance (by 2020) : 40%	
	Group-wide	Rate of health examination for dependents: 60% (by 2020)	ST	ST Rate of health examination for dependents : 48.2%	△	Group-wide Rate of health examination for dependents: 60% (by 2020)
			EN	EN Rate of health examination for dependents : 51.7%		
			SH	SH Rate of health examination for dependents : 51.0%		

Material CSR Issues	Operating Company	KPIs	Results in FY2019	Evaluation	KPIs for FY2020 (Parts colored red are updated from FY2019. )
Strengthen human resource development programs	Group-wide	<ul style="list-style-type: none"> <li>Improve technical skills and conduct high-quality human resource development programs</li> </ul>	<b>ST</b> Actual training program hours : 1,197,045Hr	○	<b>ST</b> Training program hours per person: more than 40Hr/year
			<b>EN</b> Human resource development using various types of education system > 389 participants of the level-specific trainings > 2 participants of the human resource development for overseas project		<b>EN</b> Training program hours per person: more than 20Hr/year
			<b>SH</b> Improve technical skills and conduct high-quality human resource development programs (100% attendance from the target audience for level-specific training programs)		<b>SH</b> Training program hours per person: more than 20Hr/year 100% attendance from the target audience for level-specific training programs
		<ul style="list-style-type: none"> <li>100% attendance from the target audience for human rights awareness training</li> </ul>	<b>ST</b> Percentage of attendance for human rights awareness training : 99.98%	△	<ul style="list-style-type: none"> <li>100% attendance from the target audience for human rights awareness training</li> </ul>
			<b>EN</b> Percentage of attendance for human rights awareness training : 100%		
			<b>SH</b> Percentage of attendance for human rights awareness training : 100%		

### Evaluation criteria

\*Group-wide evaluation applies the lowest results in the operating companies as a final result.

Category of targets		○	△	×
Qualitative	Single fiscal year	Achieved more than 100%	More than 80%, less than 100%	Less than 80%
	Mid-/long-term target	Achieved more than 100% of the final target	Progressing toward the final target. Achieved certain level of performance. (more than 80% in linear interpolation)	Progressing toward the target, but not achieved yet. (less than 80% in linear interpolation)
Quantitative		Achieved target. Advanced performance	Progressing toward the final target. Achieved certain level of performance.	Progressing toward the target, but not achieved yet.

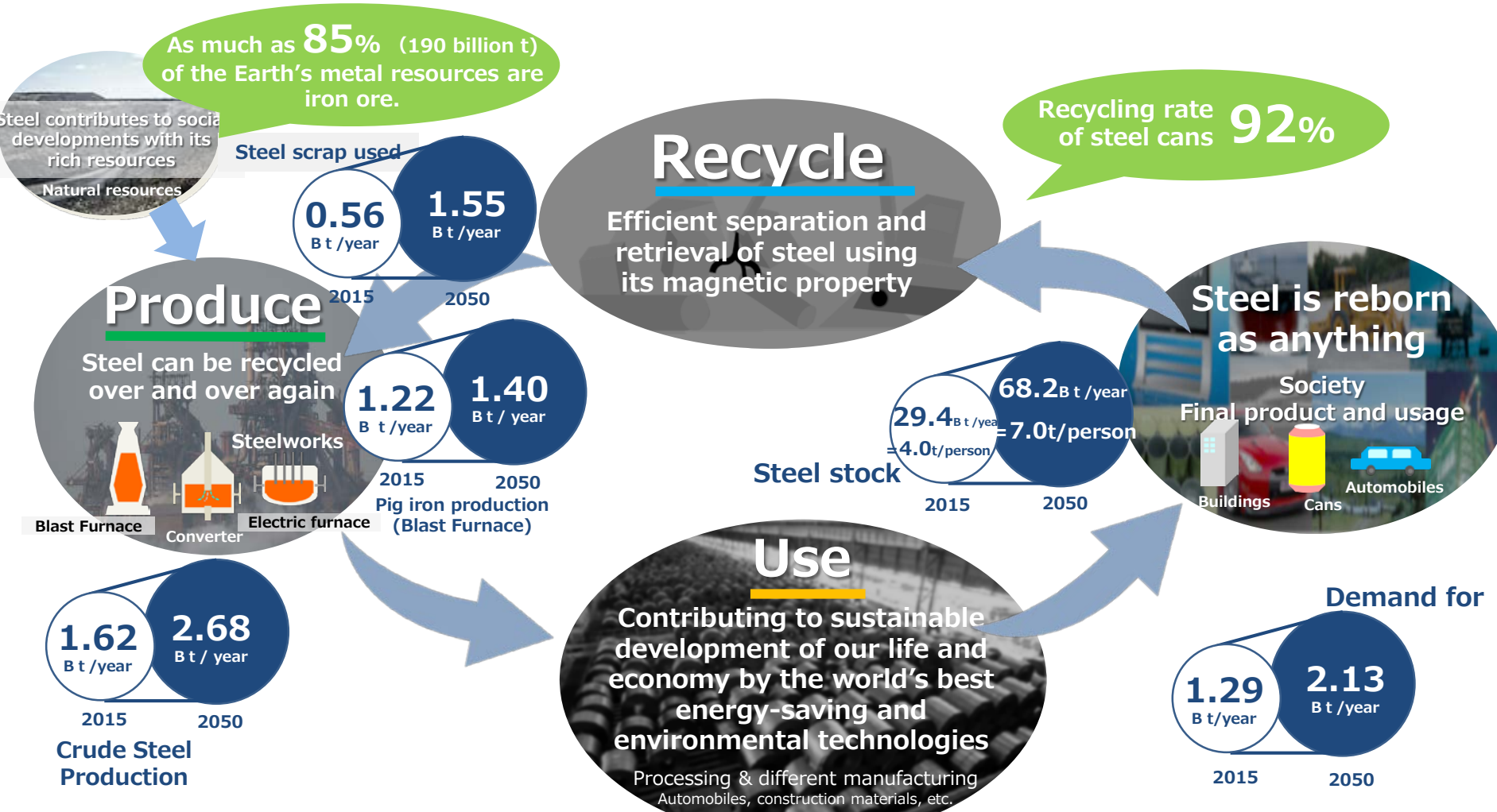


# Steel's LCA (Life Cycle Assessment)

JFE

Steel establishes a highly sophisticated value chain thanks to its excellent recyclability.

When evaluating the entire life cycle including recycling by using Life Cycle Assessment, the environmental impact such as global warming is much smaller for materials with high recyclability.





# Initiatives to Preserve Biodiversity

JFE

- Minimize the ecological impact from business activities by monitoring biodiversity around the steelworks and surrounding areas
- Promote initiatives outside of business such as developing iron and steelmaking slag products that can help restore the marine environment, and conducting environment-related training for local communities

## Replanted a Rare Species of Orchid Found at a Planned Construction Site

- Conducted an environmental prediction and evaluation for the renovation of Plant No.1 in the JFE Ohgishima Thermal Power Plant
- Replanted the Kugenuma orchid, an endangered plant which was discovered at the planned construction site, in a different location of the site that had a similar environment



Kugenuma orchid

## Contributing to biodiversity training for children in local communities

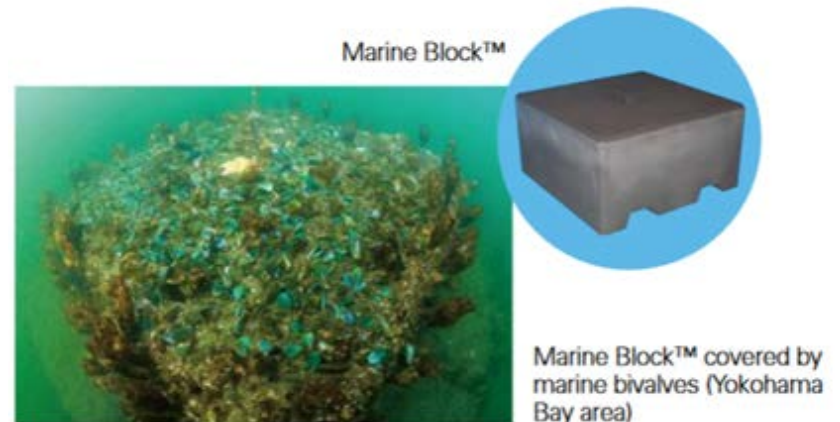
- JFE Steel has opened its Environment Pond at the Chita Works to the community for a firefly festival every year since 2014.
- Since 2009, JFE Engineering has been inviting children in the community to learn about the ecosystem at a biotope, Dragonfly Pond, in the Tsurumi Works.



Participants observing fireflies

## Improving Marine Ecosystems Using Steel Slag Products

- In a joint research project with the City of Yokohama, effectively utilize steel slag product "Marine Block™" as organism clinging base and materials for improvement of seabase
- Continue to work on this project with the City of Yokohama toward improving the marine environment in Yokohama Bay and developing an attractive seaside town.









# External Recognition




JFE

Name of SRI* Index etc.	Description of selection criteria, etc.	Evaluation/ selection period
<p>FTSE4Good Index Series, FTSE Blossom Japan Index</p>	<p>JFE Holdings has, for the first time, been selected as a constituent in the FTSE4Good Index Series<sup>1</sup>, a series of prominent global investment index focused on Environmental, Social, and Governance (ESG) practices, and the FTSE Blossom Japan Index<sup>2</sup>, which tracks Japanese companies with strong ESG practices.</p> <p>JFE Holdings is now a constituent of three ESG investment indices used by the world's largest pension fund, Japan's Government Pension Investment Fund (GPIF), namely the FTSE Blossom Japan Index, the MSCI Japan Empowering Women Index (WIN), and the S&amp;P/JPX Carbon Efficient Index.</p> <p><sup>1</sup>FTSE4Good Index Series Developed by FTSE Russell, a subsidiary of the London Stock Exchange Group, the index comprise companies that are demonstrating strong environmental, social, and governance practices. It is used widely to create and evaluate sustainable investment funds and other financial instruments.</p> <p><sup>2</sup>FTSE Blossom Japan Index Also developed by FTSE Russell, this index measures the performance of Japanese companies that demonstrate strong ESG practices.</p>	<p>As of July 2020</p>   <p>FTSE Blossom Japan      FTSE4Good</p>
<p>CDP2019</p>	<p>CDP, the ESG evaluation organization (NGO) established in the UK in 2000, requires companies to disclose ESG information as CDP questionnaire in order to allow institutional investors to utilize it for ESG investment. CDP's current target areas are "climate change", "water security" and "forest", where companies are evaluated in 8 grades. CDP collects the most information in the world, and more than 300 Japanese companies currently respond to CDP questionnaire. Thus, it is widely used by in institutional investors and for various indices of social responsibility. JFE group responds to two of the target area, "climate change" and "water security", every year, and receives high evaluation for the appropriate information disclosure.</p>	<p>[CDP2019 Evaluation]</p> <p>Climate Change: B Water Security: A- Supplier Engagement: A-</p> <p>2019</p>



# External Recognition


JFE


Name of SRI* Index etc.	Description of selection criteria, etc.	Evaluation/ selection period
DBJ Environmentally Rated Loan Program	This is the first financing system in the world to incorporate special environmental ratings, which uses a screening system developed by the Development Bank of Japan (DBJ) to evaluate environmental management levels and select outstanding companies with three interest stages according to evaluation points. In March 2016, JFE Holdings was rated as a top-ranking company that pursues excellent and advanced environmental initiatives in recognition of our advanced environmental management which JFE has pursued. JFE has received a loan under this program.	2016 
SOMPO Sustainability Index	JFE Holdings has been included in "SOMPO Sustainability Index", which is operated by SOMPO Asset Management Co., LTD., and used to be called "SNAM Sustainability Index", for nine consecutive years. This index includes companies with high-ESG evaluation and aims to contribute to investors' asset building through companies' evaluation from the long-term perspectives.	2012 ~2020  Sompo Sustainability Index
SQEP (Supplier Quality Excellence Process)	In 2019, JFE Steel West Japan Work (Kurashiki District) and JFE Shoji Trade were named for four consecutive years as Gold Level SQEP suppliers for the Supplier quality Excellence Process, a quality certification of the U.S.-based construction equipment manufacturer Caterpillar Inc. The program ranks suppliers for compliance with ISO9001 standards and Caterpillar's own specifications and certifies the top firms as Platinum, Gold, Silver or Bronze. Only a few companies in Japan has received Gold Level certification, and JFE Steel is the world's first blast furnace company to be certified.	Supplier Quality Excellence Process Gold certification plaque  2017 ~2020 



# External Recognition and External Awards

JFE

Name of SRI* Index etc.	Description of selection criteria, etc.	Evaluation/ selection period
DX Stocks 2020	JFE Holdings was selected for inclusion in the Competitive IT Strategy Company Stock Selection for five consecutive years by the Ministry of Economy, Trade and Industry and the Tokyo Stock Exchange. The program which recognizes companies that actively implement competitive IT, deepens investor understanding of the strategic utilization of IT to boost medium-to long-term corporate value and competitiveness. From this year, this program was renamed to "DX Stocks", which focuses on "Digital Transformation (DX)" that can fundamentally revolve the business models to gain further growth and stronger competitiveness. JFE Holdings was again selected for inclusion in "DX Stock 2020" as a company proactively proceeding DX.	2020  DX銘柄2020 Digital Transformation

Awards	Description
Environmental Communication Awards 2019	JFE Group's CSR report published in September 2019 was awarded for excellence in "Environmental Communication Awards 2019" hosted by the Ministry of the Environment and the Global Environmental Forum accorded the Global Environmental Forum Chairman's Award (non-profit organization). This is the first time for JFE Holdings to win this award. "Environmental Communication Awards" aims to encourage environmental communications between companies and their stakeholders and to stimulate environmental initiatives by awarding for excellent environmental reports for multi-stakeholders such as CSR reports, integrated reports and environmental management reports. In this year, 180 applicants for the environmental report area and 118 applicants for the environmental management area. JFE group was selected as one of the 25 excellent prizes in the environmental report area. The award ceremony was held in Shinagawa Prince Hotel in February 19 <sup>th</sup> 2020. 
Energy Conservation Grand Prize METI Minister's Award	"Multi-site integrated energy network services "(JFE-METS) developed by JFE Engineering was awarded for METI Minister's Award of Energy Conservation Grand Prize, which is the best prize in the product and business model section of the prize in FY 2019. JFE-METS, by changing our viewpoint so far, analyzes the actual energy consumption conditions at multiple bases, such as business units and area units, rather than individual bases, and deploys the energy-related facilities as the whole optimum in each base. By implementing energy sharing including remote areas, it provides the energy service that generates energy conservation in a comprehensive manner.



**JFE**

Copyright © 2020 JFE Holdings, Inc. All Rights Reserved