Material Issues of Corporate Management and KPIs

$\underset{T}{S}$ JFE Steel $\underset{N}{E}$ JFE Engineering $\underset{H}{S}$ JFE Shoji

Problematic fields			Priority issues	Operating Company	FY2023 KPIs	Initiatives and Results for FY2023	Assessment	FY2024 KPIs
Business activities	Contribute to resolving climate change issues (initiatives for achieving carbon neutrality by 2050)		Reduce the JFE Group's CO₂ emissions	$\underset{T}{S}$	• Achieve 75% of the CO₂ reduction target from energy conservation and technological development for the target of reducing CO₂ emissions by 18% from FY2013 levels by the end of FY2024 • Complete the approval of capital investment plans for reducing CO₂ emissions by 100% cumulatively for CO₂ reduction targets from energy conservation and technological development for the target of reducing CO₂ emissions by 18% from FY2013 levels by the end of FY2024 • Obtain third-party certification, and build a green steel supply structure in the first half of FY2023	• CO₂ reduction target: Achieved 93% • Total investment budget: 101% approved • Obtained third-party certification in June 2023, commenced supply of green steel 29,000 tons on a certified basis	○ ○ ○	• Achieve at least 18% of CO₂ reduction target by the end of FY2024 compared to FY2013 levels • Achieve 100% of the CO₂ reduction target of 3.06 million tons through energy conservation and technological development, as part of the 18% reduction in CO₂ emissions by the end of FY2024 compared to FY2013 levels • Expand adoption of JGreeX™ by stimulating demand for green steel
				$\underset{N}{E}$	• Reduce CO₂ emissions in its own plants and offices FY2023: 40% reduction from FY2013 levels	• 47% reduction from FY2013 levels (FY2013: 15,600 tons, FY2023: 8,300 tons)	○	• Reduce CO₂ emissions in its own plants and offices FY2024: 40% reduction from FY2013 levels
				$\underset{H}{S}$	• Reduce CO₂ emissions through the procurement of electricity derived from renewable energy FY2023 domestic CO₂ emissions: Reduce by 15% from FY2019 levels (Reduce by 5% per year from FY2019 levels from FY2021 to FY2024)	• 20.7% reduction from FY2019 levels	○	• Reduce CO₂ emissions through the procurement of electricity derived from renewable energy FY2024 domestic CO₂ emissions: Reduce by 20% from FY2019 levels (Reduce by 5% per year from FY2019 levels from FY2021 to FY2024)
			Contribute to reduction of CO₂ across the society	$\underset{T}{S}$	• Launch sales and implement eco-friendly products and technologies*: 15 or more cases in FY2022 (the cumulative total of 60 or more cases for the period from FY2021 to FY2024) * Products and technologies that contribute to saving energy and resources, reduce waste and environmentally hazardous substances, and do not require hazardous substances for manufacturing or use.	• FY2023: 16 (eco-friendly products: 7, technologies: 9) (FY2021–FY2023: 48)	○	• Launch sales and implement eco-friendly products and technologies*: 15 or more cases in FY2024 (cumulative total of 60 or more cases from FY2021 to FY2024) * Products and technologies that contribute to saving energy and resources, reduce waste and environmentally hazardous substances, and do not require hazardous substances for manufacturing or use.
				$\underset{N}{E}$	• Contribute to reduction of CO₂ in society by providing renewable energy power generation facilities and expanding the basis of the recycling business (for plastic, food, etc.) Contribute to reduction in CO₂ emissions (FY2023): 11.5 million tons per year	• Contribute to reduction in CO₂ emissions (FY2023): 11.53 million tons per year	○	• Contribute to reduction of CO₂ in society by providing renewable energy power generation facilities and expanding the basis of the recycling business (for plastics, food, etc.) Contribute to reduction in CO₂ emissions (FY2024): 12 million tons per year
				$\underset{H}{S}$	1. Global resource recycling of steel scrap FY2023 scrap transactions: Above the transaction quantity for FY2020 (FY2024 target: +5% from FY2020) 2. Increase transaction quantity of fuel for biomass power generation plants and create framework for reliable supply of fuel • FY2023 biomass fuel (palm kernel shells and wood pellets) transactions: Above the transaction quantity for FY2020 (FY2024 target: 100% increase from FY2020) • Diversify supply sources to ensure stable supply	1. Global resource recycling of steel scrap • 5% reduction from FY2020 2. Created system for expansion and reliable supply of fuel for biomass power plants • Handling volume: +110% compared with FY2020 • Expanded new suppliers	✕ ○	1. Global resource recycling of steel scrap FY2024 scrap transactions: +5% from FY2020 2. Increase transaction quantity of fuel for biomass power generation plants and create framework for reliable supply of fuel • FY2024 biomass fuel (palm kernel shells and wood pellets) transactions: 100% increase from FY2020 • Diversify supply sources to ensure stable supply

Problematic fields	Priority issues	Operating Company	FY2023 KPIs	Initiatives and Results for FY2023	Assessment	FY2024 KPIs
Business activities	Ensure occupational safety and health	Prevent workplace accidents — Groupwide	**Groupwide** Workplace fatalities: Zero occurrences • Lost-workday injuries rate **ST** 0.10 or less **EN** 0.25 or less **SH** 0.45 or less	**Groupwide** Workplace fatalities: One occurrence • Lost-workday injuries rate **ST** 0.06 **EN** 0.28 **SH** 0.12 (Work-related accidents and frequency rates are tabulated on a calendar year basis.))		**Groupwide** Workplace fatalities: Zero occurrences • Lost-workday injuries rate **ST** 0.10 or less **EN** 0.25 or less **SH** 0.15 or less

		ST	[Key measures]
			(1) Reinforce activities to prevent similar injuries
			   Horizontal Companywide deployment of measures, including for close calls, promote workplace activities so employees view past incidents as lessons to learn from
			(2) Enhance safety
			   Install electromagnetic locks at the secondary mill entrances: 90% by FY2023, 100% by FY2024
				[Key measures]
				(1) Strengthened activities to prevent similar accidents
				   ▸Held Companywide monthly meetings to prevent similar accidents
				   ▸Built an accident reporting database for use at all workplaces
				(2) Strengthened efforts to promote essential safety
				   ▸Installation of electromagnetic locks at secondary mill entrances in FY2023: 100%
				   ▸Formulated plan to expand the number of sites (replace locks with electromagnetic locks)
					×	[Key measures]
						(1) Reinforce activities to prevent similar injuries
						   Horizontal Companywide deployment of measures, including for close calls
						(2) Strengthen efforts to promote essential safety
						   100% installment of electromagnetic locks at secondary mill entrances versus plan by FY2024

		EN	[Key measures]
			(1) Implement 100% of the following key measures to prevent injuries with decisive work plans and proper work instructions in order to eliminate serious injuries
			   ▸Pre-operation checks (curing openings in high locations and edges of work floor, ensuring on-site understanding of work plans, and covering and enclosing/turning off of machinery)
			   ▸Strict adherence during operations (use of safety belts, no entry measures/allocation of worksite guides)
			(2) Multifaceted management of occupational safety and health using IT
			   ▸Monitor worksites, use information communications systems
			   ▸Use safety management operations support system
				[Key measures]
				(1) 100% implementation of key measures to eradicate serious accidents
				   ▸Focused on verifying and advising on work plans, inspecting equipment, and preventing unsafe behavior during site patrols
				   ▸Installed work platforms and handrails for high-altitude work, enforced the use of safety belts, prohibited access near suspended loads and within the operating range of heavy machinery, and checked the covers/guards and power isolation of machinery
				(2) Multifaceted management of occupational safety and health using IT
				   ▸Used work monitoring and information transmission systems Remote patrols, instruction, and information sharing via webcams and large screens
				   ▸Used a safety management support system Promoted introduction of services such as CCUS/site management support Avoided rework in high places by using drones and 3D scanning Verified construction safety through 3D and time-series simulations
						[Key measures]
						(1) To eliminate serious injuries, conduct pre-operation checks of equipment in use, including work floors Decisive work plans (identify and prevent dangerous risks) Through proper work instructions (awareness of work plans and prohibition of unplanned work), raise awareness of occupational safety of related workers and take measures to prevent accidents Implement 100% of the following:
						   ▸Pre-operation checks Pre-operation checks of equipment to be used, curing openings in high locations and edges of work floor, install handrails, ensure on-site understanding of work plans, and cover/enclose/turn off machinery
						   ▸Strict adherence during operations Use of safety belts, prohibit access under suspended loads or within the operating range of heavy machinery, assign worksite guides, disconnect power when equipment or tools are not in use
						(2) Multifaceted management of occupational safety and health using IT
						   ▸Use remote monitoring and information communications systems
						   ▸Use safety management operations support system

		SH	[Key measures]
			(1) 100% implementation of crane operation drills (once a year or more annually at each company)
			(2) Review of past incidents at the Company
			   Finish formulating and executing measures for alternative proposals to address past incidents identified as requiring review
				[Key measures]
				(1) Crane operation drills: 100% implementation at least once annually at each company
				(2) Reviewed our past accidents
				   For all 208 past accidents requiring review, we created and are implementing alternative solutions
						[Key measures]
						(1) 100% implementation of crane operation drills (once a year or more at each company)
						(2) Advance hardware measures (introduce interlocks for coil lifting equipment) Complete measures for 24 applicable machines in FY2024
						(3) Reevaluate and update education system for new employees and reassigned employees

	Ensure the health of employees and their families	Groupwide	1. Provision rates of healthcare guidance **Groupwide** 60% (2023 target)	1. Provision rates of healthcare guidance **ST** 71.1% **EN** 42.7% **SH** 35.0% *FY2022 results for eligible individuals	×	1. Provision rates of healthcare guidance **Groupwide** 60%
			2. Reduce rates of smokers (ensure employee health and prevent exposure to passive smoke) **Groupwide** 1.5% reduction per year (total for operating companies)	2. Reduce rates of smokers (ensure employee health and prevent exposure to passive smoke) **Groupwide** 0.8% reduction per year (total for operating companies)	×	2. Reduce rates of smokers (ensuring employee health and preventing passive smoking) **Groupwide** 1.5% reduction per year (total for operating companies)
	Recruit and nurture diverse human resources	Pursue diversity and inclusion — Groupwide	1. Rates for female recruits **ST** Career-track (white-collar position): Degree of gender parity Career-track (technical position): 10% or more On-site position: 10% or more **EN** Career-track (white-collar position): Degree of gender parity Technical (Career-track, Production/construction position): 15% or more **SH** White-collar position: Degree of gender parity	1. Rates for female recruits **ST** Career-track (white-collar position): 39% Career-track (technical position): 11% On-site position: 7% **EN** Career-track (white-collar position): 50% Technical (career-track, production/construction position): 14% **SH** White-collar position: 47%	△	1. Rates for female recruits **ST** Career-track (white-collar position): Degree of gender parity Career-track (technical position): 10% or more On-site position: 10% or more **EN** Career-track (white-collar position): Degree of gender parity Technical (career-track, production/construction position): 15% or more **SH** White-collar position: Degree of gender parity
			2. Women in managerial positions 10% or more in positions qualified as section manager or above. Of whom, 20% or more to be in management and sales departments (FY2030 target)	2. Women in managerial positions **Groupwide** 3.9% in positions qualified as section manager or above. Of whom, 7.2% in management and sales departments (total for operating companies)	△	2. Women in managerial positions 10% or more in positions qualified as section manager or above. Of whom, 20% or more to be in management and sales departments (FY2030 target)
			3. Rate of male employees taking childcare leave or time off related to child-rearing Aim for all male employees whose spouses have given birth to take such leave or time off	3. Rate of male employees taking childcare leave or time off related to child-rearing **Groupwide** childcare leave or time off related to child-rearing	△	3. Rate of male employees taking childcare leave or time off related to child-rearing Aim for all male employees whose spouses have given birth to take such leave or time off

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Business activities	Recruit and nurture diverse human resources	Strengthen human resources development	Groupwide	1. Training hours per person ST 40 hours or more per year EN 20 hours or more per year SH 20 hours or more per year	1. Training hours per person ST 44.9 hours per year EN 23.4 hours per year SH 22.1 hours per year	○	1. Training hours per person ST 40 hours or more per year EN 20 hours or more per year SH 20 hours or more
				2. Train DX personnel ST Number of internal data scientist trainees: Total of 600 as of the end of FY2023 EN Number of employees who took internal data scientist training: Total of 170 as of the end of FY2023	2. Trained DX personnel ST Cumulative total as of end of FY2023: 610 EN Cumulative total as of end of FY2023: 179	○	2. Train DX personnel ST Number of internal data scientist trainees: Total of 660 as of end of FY2024 EN Number of employees who took internal data scientist training: Total of 210 as of end of FY2024
		Create work environment that motivate employees	Groupwide	1. Groupwide Annual leave acquisition rate of 75% or more (total for operating companies)	1. Groupwide Annual leave acquisition rate: 89% (total for operating companies)	○	1. Groupwide Annual leave acquisition rate: 75% or higher (total for operating companies)
				2. Engagement survey Groupwide Affirmative response to questions about motivation: At least 75%	2. Affirmative response to questions about motivation in engagement survey ST 72% EN 81% SH 80%	△	2. Engagement survey Groupwide Affirmative response to questions about motivation: At least 75%
	Reinforce resilience of production and engineering capabilities (realize worldclass earnings power through DX and other measures)	Increase efficiency and enhance cost competitiveness in production and engineering	S T	1. Improvement in labor productivity Toward improving labor productivity by 20% by the end of FY2024 • Steadily implement FY2024 milestones each fiscal year for improving labor productivity by 20% • Approve and implement FY2023 investments for improving labor productivity, such as automation and remote operations • Steadily relocate facilities in accordance with structural reforms in Keihin district	1. Improvement in labor productivity • Measures underway to reach milestones in each fiscal year toward achieving 20% improvement in labor productivity (81% progress toward 75% target with linear interpolation) • Approved ¥8.5 billion for 64 projects as planned for investments to improve labor productivity through automation and remote operations in FY2023 • Relocated facilities as planned in line with structural reforms in Keihin district in September 2023	○	1. Improvement in labor productivity • Improve labor productivity by 20% by end of FY2024 • Steadily execute investments aimed at improving labor productivity through automation and remote work
				2. Improve yields through DS* activities Stabilize production with DS, improve yields through application of quality prediction Improve yields by 1.5% in FY2023 from FY2020 levels to achieve 2.0% by FY2024 (based on figures after adjustments to the sales mix) * DS: Data science	2. FY2023 yield: +1.3% compared to FY2020 (87.4%)	△	2. Stabilize production with DS, improve yields through application of quality prediction technologies FY2024 yields: +2.0% compared to FY2020 * Adjusted for sales composition
			E N	• Increase the efficiency of engineering operations by introducing DX technologies Engineers for big data analysis utilizing Pla'cello*: 2,200 * Pla'cello: Proprietary data analysis platform using AI	• Big data analysis engineers: Approx. 2,250 (about 1,950 in FY2022)	○	• Increase the efficiency of engineering operations by introducing DX technologies AI and big data analysis engineers utilizing Pla'cello*: 2,400 * Pla'cello: Proprietary data analysis platform using AI
		Raise quality of products and services and ensure reliable supply	S T	1. Ensure quality • Continue implementing activities for raising awareness of quality compliance for the Company and Group companies in accordance with the Japan Iron and Steel Federation's guidelines for strengthening the quality assurance system • Promote automoted transmission of tensile test results at Group companies Target six companies: 67% introduction rate as of FY2024 (100% by FY2025)	1. Quality assurance • Reorganized to strengthen personnel development, budget allocation, and qualification acquisition in the quality assurance department • 74.8% in FY2023	○	1. Ensure quality • Continue implementing activities for raising awareness of quality compliance for the Company and Group companies in accordance with the Japan Iron and Steel Federation's guidelines for strengthening the quality assurance system • Promote automated transmission of tensile test results among Group companies Targeting six companies: 83.5% introduction ratio in FY2024 (100% in FY2025)
				2. Strengthen the manufacturing infrastructures using DX Achieve CPS* installation rate of 60% or more on a companywide basis in FY2023 to implement CPS in all production processes * CPS: Cyber-physical system	2. Strengthened production infrastructure using DX Companywide CPS installation rate: 60%	△	2. Strengthen manufacturing infrastructure using DX Companywide CPS installation rate: 80% or more
			E N	1. Secure a stable number of certificated managing engineers	1. Reliably secured certificated managing engineers amid high level of sales	○	1. Secure a stable number of certified managing engineers
				2. No major quality problems	2. Major quality issues: One incident	×	2. Enhance information sharing and verification functions by improving operation of quality management systems No major quality problem
			S H	1. Make consistent investment in processing and distribution operations	1. Steady capital investment in the distribution and processing operations Selected and executed necessary investments to ensure stable supply of products in FY2023 Investment amount: ¥16.5 billion	○	1. Make consistent investment in processing and distribution operations
				2. Conduct quality audits at Group companies Continue conducting quality audits at 36 Group manufacturing affiliate companies in Japan (same as FY2022 levels) and overseas (audit completed: 100%)	2. Conducted quality audits on Group companies Conducted quality audits at 36 companies (100% audit implementation rate)	○	2. Conduct quality audits at Group companies Continue conducting quality audits at 36 Group manufacturing affiliate companies in Japan and overseas (same as FY2023) (Audits completed: 100%)

Problematic fields		Priority issues	Operating Company	FY2023 KPIs	Initiatives and Results for FY2023	Assessment	FY2024 KPIs
Business activities	Strengthen competitiveness of products and services (promote the growth strategy by providing high-value-added solutions)	Expand business by increasing value added in products and services with advanced technologies	ST	1. Pursue strategic research and development focusing on priority development fields* Develop new products and technologies FY2023: 20 or more cases (80 or more cases in total from FY2021 to FY2024) * Automobiles, energy, infrastructure construction materials, DX technology, and GX technology	1. Advanced strategic research and development in key development areas* New products and technologies developed: 27 (8 new products, 19 new technologies) (Cumulative total from FY2021 to FY2023: 70) * Automobiles, energy, infrastructure construction materials, DX technology, and GX technology	○	1. Pursue strategic research and development focusing on priority development fields Develop new products and technologies: 20 or more * Automobiles, energy, infrastructure construction materials, DX technology, and GX technology
				2. High-value-added product sales volume ratio in FY2023: 48%	2. FY2023 sales ratio of high-value-added products: 50%	○	2. Increase sales ratio of high-value-added products FY2024 high-value-added product sales ratio: 50%
				3. Aiming to triple revenue in solution business by FY2024 compared with FY2020 levels • Develop new products that feature DS technology, facility diagnosis technology, and safety technology, launch sales activities to customers • Double revenue in solution business by FY2023 compared with FY2020 levels	3. Exceeded the goal of doubling revenue in solution business in FY2022 compared to FY2020 by winning orders and steadily executing contracts Developed and began sales activities for new products utilizing digital solution and maintenance technologies	○	3. Expand the solution business • Triple solution business revenue in FY2024 compared to FY2020 • Win three or more orders for new JFE Resolus™ brand products, lay the groundwork for significant growth in JFE Resolus™ during the next medium-term plan
			EN	1. Develop technologies in four priority fields of waste to resources, carbon neutrality, combined utility services, and DX, and 70% or more of R&D expenses on these four fields	1. R&D expense ratio in the four priority fields: 86%	○	1. Develop technologies in four priority fields of waste to resources, carbon neutrality, combined utility services, and DX Ratio of R&D expenses on these four fields: 70% or more
				2. Number of patent applications: 80 or more per year	2. Number of patent applications: 100 per year	○	2. Number of patent applications: 80 or more annually
		Sales strategies for realizing sustainable growth	ST	• Expand the earnings difference between high-value-added products (A-rank products) and commodity products to ¥6,000 per ton (Achieve 150% of FY2024 target)	• Earnings difference between high-value-added products (A-rank products) and commodity products FY2023: +¥8,200 per ton (roughly double the initial target for FY2024)	○	• Expand the earnings difference between high-value-added products (A-rank products) and commodity products Maintain earnings difference of ¥8,000 per ton (double the target for FY2024)
			EN	Expand the stable earnings base Expand the operating businesses • Sales: ¥260 billion • Expand bases: 3 or more bases Recycling business (food, plastics, electronic appliances, etc.), regional electricity retail new power business, and waste processing business	• Sales of operating businesses: ¥262.3 billion • New bases: 6 bases 4 recycling businesses, 2 waste treatment	○	Expand operating businesses to expand the stable earnings base • Sales: ¥265 billion • Base expansion: 3 or more bases Recycling business (food, plastics, electronic appliances, etc.), regional electricity retail new power business, and waste processing business
			SH	• Increase competitiveness of products and services by improving value added in supply chain management through business expansion Make investments to improve value added in supply chain: 5 or more per year	• Investments to improve value added in supply chain: 5 per year	○	• Enhance the competitiveness of products and services by increasing added value in the supply chain through business expansion Make investments to improve value added in supply chain: 5 or more per year
Basis of activity	Thoroughly enforce compliance	Ensure adherence to corporate ethical standards and compliance	Groupwide	1. Steady execution of training to foster and maintain a sense of compliance (100% attendance from the target audience)	1. Participation rate: 100% (rank-based compliance training, training on different laws and regulations, etc.)	○	1. Steady execution of training to foster and maintain a sense of compliance (100% attendance from the target audience)
				2. Improve employee awareness of ethics reflected in the Corporate Ethics Awareness Survey	2. Addressed issues identified in the FY2022 Corporate Ethics Awareness Survey • Revised and enhanced compliance training to prevent harassment • Expanded the multi-angle evaluation system for management • Continued education on proper labor time management	○	2. Affirmative response rate of 75% or higher to questions related to compliance awareness in the Corporate Ethics Awareness Survey
	Respect human rights	Respect human rights across the supply chain	Groupwide	1. 100% attendance from the target audience for human rights awareness training	1. Participation rate: 100%	○	1. Participation rate of targeted attendees in human rights awareness training: 100%
				2. Implement human rights due diligence	2. Conducted human rights due diligence Promoted the following initiatives to ensure respect for human rights throughout the supply chain: [Created a human rights risk management system for suppliers] Conducted a human rights risk survey using the CSR Procurement Self-Assessment Tool of Global Compact Network Japan for approximately 400 high-priority suppliers, including those in countries with a high risk of human rights violations [Expanded human rights due diligence to Group companies] • In FY2023, conducted human rights risk surveys at approximately 100 major domestic Group companies with considerable exposure to human rights risks in terms of revenue size	○	2. Promote human rights due diligence Promote the following initiatives to realize respect for human rights throughout the supply chain: [Build a system for managing human rights risks of suppliers] • Provide feedback on the results of the FY2023 supplier survey, and offer support for improvement to those identified as needing follow-up support [Expand human rights due diligence to Group companies] • Conduct human rights risk surveys at overseas Group companies, prioritizing those located in countries at high risk of human rights violations • Continue to support the correction and improvement of human rights risks at major domestic Group companies that have already been surveyed, while considering regular risk surveys and methods for checking corrective measures