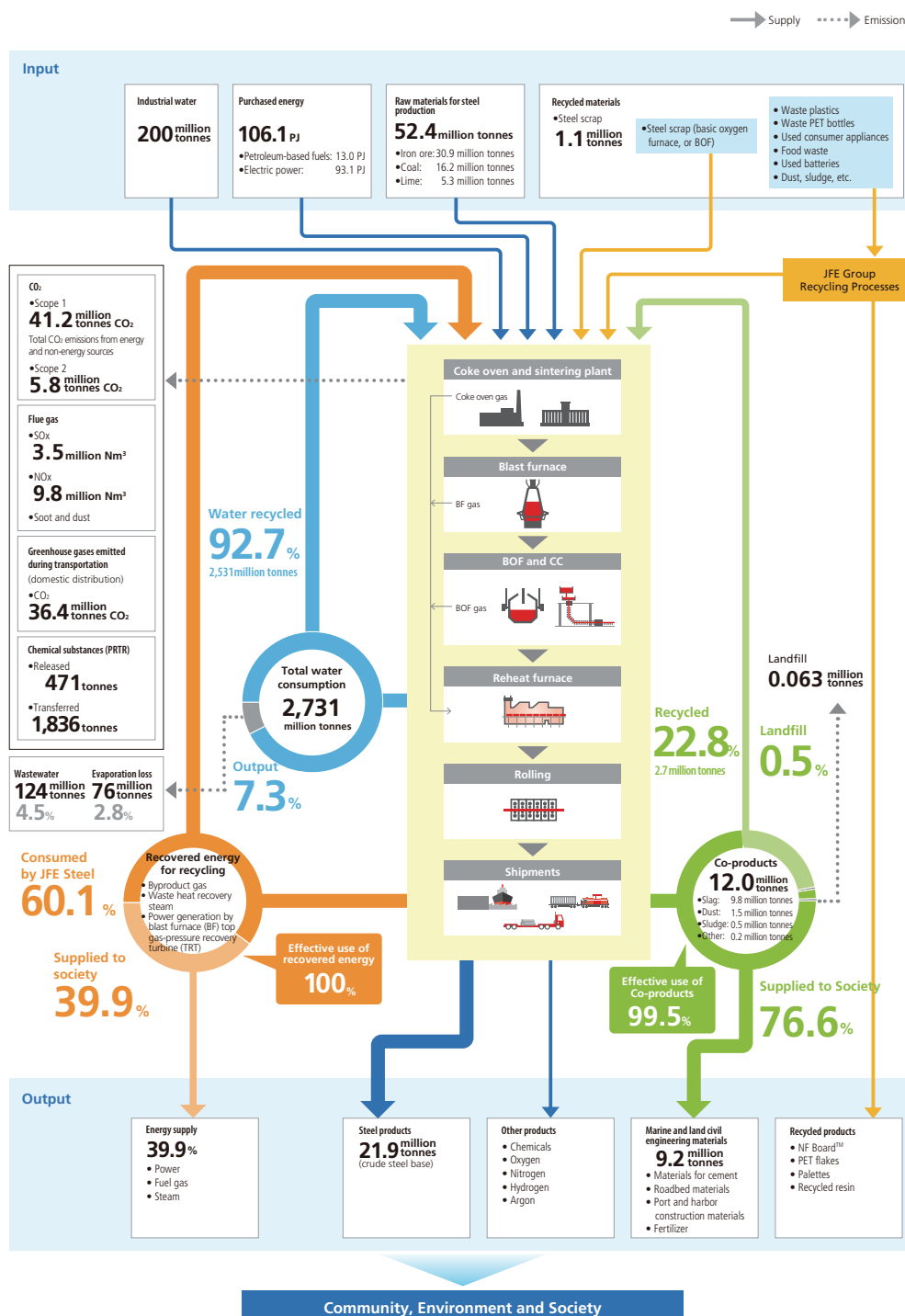


Environmental Data

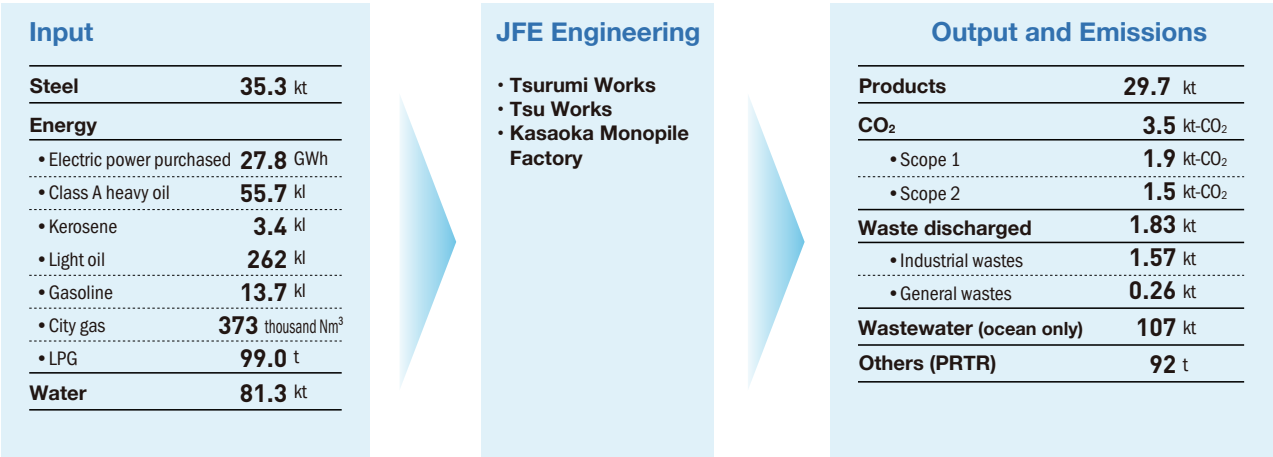
Material Flow

JFE Steel works to reduce the environmental impact of its iron and steelmaking processes, including through the effective use of resources. The company recycles 92.7% of the water it uses for production and uses 99.5% of its co-products, such as iron and steelmaking slag. In addition, 100% of co-product gas generated during production is reused as fuel for reheating slabs, generating power for internal use and supplying power to the public.

JFE Steel's Material Flow (Non-Consolidated)



JFE Engineering’s Material Flow (Head Office and Works)



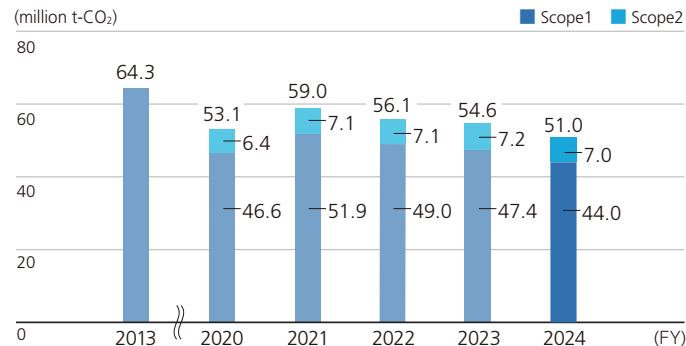
Abbreviations for scope of data: JFE Group (All); JFE Steel Group (ST Gr); JFE Steel (ST); JFE Engineering Group (EN Gr); JFE Engineering (EN); JFE Shoji Group (SH Gr); JFE Shoji (SH)

Environmental Indicators

Area	Operating Company	Target	FY2024 Results and Related Pages
Greenhouse Gas and Energy	ST	Reduce CO₂ emissions by 18% from FY2013 levels by the end of FY2024	P.257-258
	EN	- Reduce CO₂ emissions in its own plants and offices FY2024: 40% reduction from FY2013 levels - Contribute to reduction in CO₂ emissions (FY2024): 12.0 million t per year	P.257-258,260
	SH	- Reduce CO₂ emissions through the procurement of electricity derived from renewable energy - FY2022 domestic CO₂ emissions: Reduce by 10% from FY2019 levels (reduce by 5% per year from FY2019 levels from FY2021 to FY2024)	P.257-258
Chemical Substances	ST	- VOC emissions: –30% from FY2000 (1,078 t or less) - Benzene emissions: –80% from FY1999 (46 t or less) - Dichloromethane emissions: –40% from FY1999 (46 t or less)	P.264
Resource Use	ST	Recycling rate of co-products: 99% or higher	P.266
	EN	Recycling rate at construction sites - Recycling rate of rubble: 99.5% or higher - Recycling rate of sludge: 95.0% or higher - Recycling rate of industrial waste: 85.0% or higher Recycling rate of office recyclable waste - Yokohama head office: 98.0% or higher	P.267-268
	SH	Global recycling of steel scrap Exceed FY2020 scrap trade volume (FY2024 target: +5% from FY2020)	P.266
Water Use	ST	Maintain efficient use of water Recirculated water usage rate: 90% or higher	P.269

Greenhouse Gas and Energy

CO₂ Emissions of the JFE Group (Scope 1, 2)



Items	Scope	Unit	FY2020	FY2021	FY2022	FY2023	FY2024
Scopes 1 and 2 total*1*2	All	million t-CO ₂	53.1	59.0	56.1	54.6	51.0
	ST Gr	million t-CO ₂	52.6	58.6	55.7	54.1	50.8
	ST	million t-CO ₂	49.1	54.7	52.3	50.0	47.0
	ST subsidiaries	million t-CO ₂	3.5	3.9	3.4	4.1	3.8
	EN Gr	million t-CO ₂	0.484	0.387	0.422	0.482	0.234
	EN	million t-CO ₂	0.0141	0.0103	0.0081	0.0081	0.0058
	EN subsidiaries	million t-CO ₂	0.470	0.377	0.414	0.474	0.229
	SH Gr	million t-CO ₂	0.0296	0.0319	0.0316	0.0311	0.0298
	SH	million t-CO ₂	0.0004	0.0004	0.0004	0.0004	0.0004
	SH subsidiaries	million t-CO ₂	0.0292	0.0315	0.0311	0.0307	0.0294
	All	million t-CO ₂	46.6	51.9	49.0	47.4	44.0
	ST Gr	million t-CO ₂	46.2	51.5	48.6	47.0	43.8
Scope 1	ST	million t-CO ₂	43.8	48.8	46.4	44.1	41.2
	ST subsidiaries	million t-CO ₂	2.4	2.7	2.2	2.9	2.6
	EN Gr	million t-CO ₂	0.442	0.345	0.395	0.459	0.215
	EN	million t-CO ₂	0.0024	0.0024	0.0029	0.0038	0.0033
	EN subsidiaries	million t-CO ₂	0.439	0.343	0.393	0.455	0.212

Items		Scope	Unit	FY2020	FY2021	FY2022	FY2023	FY2024	
	Scope2* ³	All	million t-CO ₂	6.4	7.1	7.1	7.2	7.0	
		ST Gr	million t-CO ₂	6.4	7.0	7.0	7.1	7.0	
			ST	million t-CO ₂	5.3	5.8	5.9	5.9	5.8
			ST subsidiaries	million t-CO ₂	1.1	1.2	1.1	1.2	1.2
		EN Gr	million t-CO ₂	0.0424	0.0418	0.0263	0.0232	0.0189	
			EN	million t-CO ₂	0.0116	0.0079	0.0052	0.0043	0.0025
			EN subsidiaries	million t-CO ₂	0.0308	0.0339	0.0211	0.0189	0.0164
		SH Gr	million t-CO ₂	0.0296	0.0319	0.0316	0.0311	0.0298	
			SH	million t-CO ₂	0.0004	0.0004	0.0004	0.0004	0.0004
			SH subsidiaries	million t-CO ₂	0.0292	0.0315	0.0311	0.0307	0.0294
Unit CO ₂ emissions (numerator: Scopes 1 and 2 total; denominator: sales)		All	t-CO ₂ /billion yen	164.4	135.2	106.5	105.5	105.0	
CO ₂ emissions from energy sources* ^{1, 2}	CO ₂ emissions (Scope1 and 2 total)	ST Gr	million t-CO ₂	50.2	55.8	53.1	51.6	48.4	
		ST	million t-CO ₂	47.3	52.6	50.4	48.2	45.2	
			ST subsidiaries	million t-CO ₂	2.9	3.2	2.7	3.4	3.1
		EN Gr	million t-CO ₂	0.0625	0.0614	0.0452	0.0363	0.0288	
		SH Gr	million t-CO ₂	0.0296	0.0319	0.0316	0.0311	0.0298	
	Scope1	ST	million t-CO ₂	41.9	46.8	44.5	42.3	39.5	
	CO ₂ emissions (denominator: crude steel production)	ST	t-CO ₂ / t-steel	2.08	2.03	2.09	2.06	2.06	
CO ₂ emissions from non-energy sources		ST Gr* ⁴	million t-CO ₂	2.40	2.74	2.59	2.48	2.40	
			ST	million t-CO ₂	1.82	2.05	1.93	1.79	1.72
			ST subsidiaries	million t-CO ₂	0.58	0.69	0.66	0.69	0.68
		EN subsidiaries* ⁵	million t-CO ₂	0.42	0.33	0.38	0.45	0.21* ⁶	

*1 Scope of data: 77 companies in total.

- JFE Steel and 26 major subsidiaries in Japan and overseas
- JFE Engineering and 13 major subsidiaries in Japan and overseas
- JFE Shoji and 35 major subsidiaries in Japan and overseas

*2 Since FY2021, the figures include data for an expanded list of JFE Steel, JFE Engineering, and JFE Shoji major subsidiaries.

*3 CO₂ emission factors for purchased electricity in FY2024:

- JFE Steel uses the emission factors of the Carbon Neutrality Action Plan of the Japan Iron and Steel Federation for energy purchased in FY2023 (FY2023 figures were updated based on the emission factor).
- JFE Steel's domestic consolidated subsidiaries, the JFE Engineering Group, and the JFE Shoji Group apply the adjusted emission factors of each electric power company for each fiscal year.
- Overseas: Latest IEA emission factors.

*4 Scope of data: JFE Steel and 4 major subsidiaries in Japan.

*5 Scope of data: J&T Recycling Corporation, a major Japanese subsidiary of JFE Engineering.

*6 Reviewed the handling of CO₂ emissions from non-energy sources from fiscal 2024.

GHG Emissions Based on the GX-ETS Standard

Item	Scope	Unit	FY2020	FY2021	FY2022	FY2023	FY2024
GHG emissions	ST	million t-CO ₂	—	—	—	—	47.8

CO₂ Emissions of the JFE Group (Scope3)

Item	Scope	Unit	FY2020	FY2021	FY2022	FY2023	FY2024
Scope3*1*2	All	kt-CO ₂ e	14,369	20,778	23,184	22,701	21,894
Category 1 Purchased goods and services	All	kt-CO ₂ e	11,026	17,244	19,750	19,118	18,537
Category 2 Capital goods	All	kt-CO ₂ e	1,226	1,221	1,166	1,239	1,127
Category 3 Fuel and energy related activities not included in Scopes 1 or 2	All	kt-CO ₂ e	671	717	736	760	723
Category 4 Upstream transportation and delivery	All	kt-CO ₂ e	419	454	450	440	434
Category 5 Waste generated in operations	All	kt-CO ₂ e	45	58	62	133	147
Category 6 Business travel	All	kt-CO ₂ e	4	5	4	5	5
Category 7 Employee commuting	All	kt-CO ₂ e	51	59	49	14	14
Category 15 Investments	All	kt-CO ₂ e	927	1,022	967	993	906

*1 Scope of data:

(Categories 1, 2, 3, 4, 5) JFE Steel, 21 JFE Steel major domestic subsidiaries, JFE Engineering, 1 JFE Engineering major domestic subsidiary, and JFE Shoji.

(Category 6, 7) JFE Steel, JFE Steel's 21 major subsidiaries in Japan, JFE Engineering, JFE Engineering's 13 major subsidiaries in Japan and overseas, and JFE Shoji.

(Category 15) Japan Marine United, and 9 JFE Steel equity-method affiliates (6 in Japan and 3 overseas).

*2 Sources: Green Value Chain Platform (Ministry of the Environment) and others.

Other Greenhouse Gas

Item	Scope	Unit	FY2020	FY2021	FY2022	FY2023	FY2024	
GHG emissions other than CO ₂	All	kt-CO ₂ e	96.1	103.0	55.2	117.9	205.3	
	Methane (CH ₄)	ST Gr	kt-CO ₂ e	68.3	74.6	35.4	78.5	162.6
		ST	kt-CO ₂ e	68.3	74.6	35.4	78.5	162.5
		ST subsidiaries	kt-CO ₂ e	—	0.005	0.005	0.005	0.103
		EN subsidiaries* ¹	kt-CO ₂ e	—	—	—	—	1.11
	N ₂ O	All	kt-CO ₂ e	27.9	28.5	19.8	39.4	41.6
		ST Gr	kt-CO ₂ e	15.5	17.7	7.8	37.1	39.5
		ST	kt-CO ₂ e	15.5	17.7	7.8	37.1	39.5
		ST subsidiaries	kt-CO ₂ e	—	0.004	0.004	0.004	0.005
		EN subsidiaries* ¹	kt-CO ₂ e	12.4	10.8	12.0	2.3	2.1
GHG emitted during transportation* ²	ST Gr	million t-CO ₂	0.57	0.63	0.61	0.59	0.58	
	ST	million t-CO ₂	0.34	0.38	0.37	0.37	0.36	
	ST subsidiaries	million t-CO ₂	0.23	0.25	0.24	0.22	0.22	
Contribution to CO ₂ emission reductions* ³	EN Gr	million t-CO ₂ /year	9.65	10.57	11.14	11.53	12.00	
	Biomass power generation	EN Gr	million t-CO ₂ /year	2.74	2.86	2.94	2.95	3.12
	Waste power generation	EN Gr	million t-CO ₂ /year	3.37	3.40	3.72	3.80	3.60
	Others (digestion gas, solar power, wind, waste heat recovery, fuel conversion, energy services, biomass silo, logistics products)	EN Gr	million t-CO ₂ /year	3.54	3.57	3.59	3.84	4.43
	Recycling (Includes fluorocarbon recovery and energy creation)	EN Gr	million t-CO ₂ /year	—	0.74	0.89	0.94	0.85

*1 J&T Recycling Corporation, a major Japanese subsidiary of JFE Engineering.

*2 Scope of data: JFE Steel and 9 major subsidiaries in Japan, which are specified consigners designated under the Japanese Energy Saving Act.

*3 Scope of data

- FY2020: Includes JFE Engineering's businesses in Japan and overseas, and its German subsidiary Standardkessel Baumgarte GmbH (SBG).
- From FY2021: Includes JFE Engineering's businesses in Japan and overseas, and J&T Recycling Corporation, JFE Urban Recycle Corporation, and German subsidiary Standardkessel Baumgarte GmbH (SBG).

Energy Consumption

Items		Scope	Unit	FY2020	FY2021	FY2022	FY2023	FY2024
Energy consumption and unit energy consumption	Energy consumption	All	PJ	592	654	627	612	567
		ST Gr	PJ	591	652	625	611	566
		ST	PJ	545	602	581	557	519
		ST subsidiaries	PJ	45.2	49.6	43.9	53.9	46.5
		EN Gr	PJ	1.2	1.3	1.2	1.2	1.1
		SH Gr	PJ	0.6	0.7	0.7	0.7	0.6
	Unit energy consumption (crude steel production)	ST	GJ/t-steel	24.0	23.3	24.1	23.7	23.6
	Energy consumption (Crude petroleum equivalent)	EN	k ̰	8,000	7,636	7,772	7,756	8,146
	YOY ratio of unit energy consumption	EN	%	91.0	95.5	107.9	94.3	85.0
Recovered energy for recycling	Supplied to society	ST	%	38	38	37	39	40
	Consumed internally	ST	%	62	62	63	61	60

Modal Shift

Items		Scope	Unit	FY2020	FY2021	FY2022	FY2023	FY2024
All transportation	Ship and rail	ST	%	58.4	58.3	59.0	57.9	58.7
	Truck	ST	%	41.6	41.7	41.0	42.1	41.3
Transportation of a distance of 500 km or more	Ship and rail	ST	%	91.6	90.0	92.1	93.6	94.8
	Truck	ST	%	8.4	10.0	7.9	6.4	5.2

Scope of calculation: All products and half-finished products transported in Japan.

Greenhouse Gas and Energy (Supplementary Data)

CO₂ Emissions and Energy Consumption of JFE Steel Group Subsidiaries (FY2024)

Company Name	CO ₂ Emissions (unit: kt-CO ₂)	Energy Consumption (unit: PJ)
JFE Mineral & Alloy Company, Ltd.	1,630.4	12.64
JFE Bars & Shapes Corporation	510.0	8.97
JFE Chemical Corporation	236.8	3.68
JFE Logistics Corporation	149.9	2.22
JFE Galvanizing & Coating Co., Ltd.	49.1	0.70
JFE Plastic Resource Corporation	20.8	0.17
Mizushima Riverment Corporation	7.7	0.07
JFE Container Co., Ltd.	9.6	0.14
J-Logitec Co., Ltd.	7.5	0.11
Galvatex Corporation	4.3	0.07
JFE Metal Products & Engineering Inc.	7.0	0.08
JFE Welded Pipe Manufacturing Co., Ltd.	6.6	0.06
JFE Techno-wire Corporation	4.2	0.05
JFE Precision Corporation	3.2	0.04
K-Plasheet Corporation	4.7	0.07
JFE Life Corporation	4.8	0.05
Chiba Riverment and Cement Corporation	6.2	0.08
JFE Steel Pipe Co., Ltd.	1.4	0.02
GECOSS CORPORATION	3.0	0.03
JFE Kozai Corporation	2.6	0.02
JFE Ferrite Corporation	3.5	0.06
5 overseas companies	1,113.8	14.30
Total	3,787.4	43.64

CO₂ Emissions from Energy Sources and Energy Consumption of JFE Engineering Group Subsidiaries (FY2024)

Company Name	CO ₂ Emissions(unit: kt-CO ₂)	Energy Consumption(unit: PJ)
J&T Recycling Corporation	223.6	0.7
Fujikako, Inc.	1.4	0.030
NORTHERN JAPAN MACHINERY Corporation	0.6	0.012
Asuka Soken Co., Ltd.	0.8	0.013
JFE Pipeline Engineering Corporation	0.4	0.006
JFE Technos Corporation	0.2	0.001
JFE Project One Co., Ltd.	0.1	0.003
Myoko Green Energy Co., Ltd.	0.02	0.0003
Kinpai Co., Ltd.	0.7	0.012
J&M Steel Solutions Company Limited	0.7	0.02
Total	228.6	0.774

Chemical substances

Air Emissions

Items	Scope	Unit	FY2020	FY2021	FY2022	FY2023	FY2024
SOx emissions ^{*1}	ST Gr	million Nm ³	3.3	3.5	3.3	3.6	3.5
	ST	million Nm ³	3.3	3.5	3.3	3.6	3.5
	ST subsidiaries	million Nm ³	0.03	0.03	0.04	0.04	0.04
NOx emissions ^{*2}	ST Gr	million Nm ³	10.4	11.4	10.2	10.1	10.0
	ST	million Nm ³	10.3	11.2	10.1	9.9	9.8
	ST subsidiaries	million Nm ³	0.14	0.18	0.15	0.16	0.15

*1 10 JFE Steel's consolidated subsidiaries in Japan.

*2 9 JFE Steel's consolidated subsidiaries in Japan.

Discharge to Waterways

Items	Scope	Unit	FY2020	FY2021	FY2022	FY2023	FY2024
COD (chemical oxygen demand)	All* ¹	t/day	3.1	3.1	3.1	2.6	2.5
	ST	t/day	2.9	2.9	2.8	2.3	2.4
	ST subsidiaries	t/day	0.17	0.23	0.25	0.27	0.09
	EN* ²	kg/day	8.7	8.4	6.6	4.8	5.8

*1 Scope of data:

- JFE Steel and 8 consolidated subsidiaries in Japan.
- JFE Engineering

*2 This report uses the maximum value of each year.

PRTR-Registered Substances

Items		Scope	Unit	FY2020	FY2021	FY2022	FY2023	FY2024
PRTR-registered substances* ^{1, 2}	Amount released	All* ⁴	t	754	827	750	917	960
		ST Gr	t	596	672	609	790	881
		ST	t	341	380	366	510	471
		ST subsidiaries	t	255	292	243	280	410
		EN Gr	t	158	155	141	126	79
		EN	t	121	116	103	64* ³	70
		EN subsidiaries	t	36.7	39.3	37.8	25.1	9.5
	Amount transferred	All* ⁴	t	5,949	9,845	12,809	11,217	11,304
		ST Gr	t	5,910	9,811	12,779	11,193	11,279
		ST	t	1,694	1,378	1,278	1,192	1,836
		ST subsidiaries	t	4,216	8,433	11,501	10,001	9,443
		EN Gr	t	39	34	30	23	25
		EN	t	26	30	26	19	23
		EN subsidiaries	t	12.5	4.4	4.4	3.9	2.5
VOC emissions		ST	t	529	542	513	528	475
Benzene emissions		ST	t	14	16	17	16	11
Dichloromethane emissions		ST	t	22	30	25	25	19

*1 Scope of data:

- JFE Engineering and 3 consolidated subsidiaries in Japan.
- JFE Steel and 16 consolidated subsidiaries in Japan.

*2 Excluding dioxins.

*3 Revised the prior year data to increase accuracy.

*4 JFE Shoji is not included in the scope of the report as the company is not subject to PRTR registration.

Chemical Substances (Supplementary Data)

SOx and NOx Emissions of JFE Steel Group Subsidiaries (FY2024)

Company Name	SOx Emissions (unit: Nm³)	NOx Emissions (unit: Nm³)
JFE Mineral & Alloy Company, Ltd.	13,438	76,640
Chiba Riverment and Cement Corporation	83	792
Mizushima Riverment Corporation	0	830
JFE Precision Corporation	746	186
JFE Plastic Resource Corporation	0	0
JFE Bars & Shapes Corporation	8,210	15,541
JFE Metal Products & Engineering Inc.	34	2,083
JFE Kenzai Fence Co., Ltd.,	0	0
JFE Galvanizing & Coating Co., Ltd.	1,227	8,055
JFE Container Co., Ltd.	115	0
JFE Welded Pipe Manufacturing Co., Ltd.	0	0
JFE Steel Pipe Co., Ltd.	0	0
Galvatex Corporation	0	625
JFE Techno-wire Corporation	0	0
JFE Kozai Corporation	0	0
GECOSS Corporation	0	0
JFE Logistics Corporation	0	0
J-Logitec Co., Ltd.	0	0
JFE Chemical Corp.	11,230	45,569
K-plasheet Corporation	158	0
JFE Life Corporation	0	0
Total	35,241	150,321

Use of Natural Resources

Input and Products Supplied

Items		Scope	Unit	FY2020	FY2021	FY2022	FY2023	FY2024
Input	Raw materials for steel production	ST	million t	56.2	63.4	60.4	56.1	52.4
	Iron ore	ST	million t	32.9	37.6	35.7	33.4	30.9
	Coal	ST	million t	18.1	19.9	19.1	17.5	16.2
	Lime	ST	million t	5.2	5.9	5.6	5.2	5.3
	Recycled materials (steel scrap)	ST	million t	0.8	1.2	0.9	0.8	1.1
	Raw materials	EN	kt	36.9	38.6	27.9	24.0	35.3
Products supplied	Steel products	ST	million t	22.8	25.9	24.2	23.4	21.9
	Engineering	EN	kt	34.7	37.4	27.0	23.0	29.7

Co-Products and Waste

Items		Scope	Unit	FY2020	FY2021	FY2022	FY2023	FY2024
Co-products	Amount generated*1	ST Gr	million t	13.9	14.4	14.1	13.3	12.6
		ST*2	million t	13.4	13.9	13.5	12.7	12.0
		ST subsidiaries	million t	0.5	0.5	0.6	0.6	0.6
	Amount recycled internally	ST	million t	3.3	3.3	2.9	2.9	2.7
	Internal recycling rate	ST	%	24.9	24.0	21.7	22.4	22.8
	Emissions*1	ST Gr	million t	10.2	10.8	10.8	10.1	9.5
		ST	million t	10.1	10.6	10.6	9.9	9.3
		ST subsidiaries	million t	0.1	0.2	0.2	0.2	0.2
	Used by local communities	ST	million t	10.0	10.5	10.5	9.8	9.2
	Rate of local communities use	ST	%	74.8	75.7	77.8	77	76.6
	Landfill amount*1	ST Gr	million t	0.060	0.094	0.167	0.180	0.146
		ST	million t	0.037	0.042	0.073	0.083	0.063
		ST subsidiaries	million t	0.023	0.052	0.094	0.097	0.083
	Recycling rate	ST	%	99.7	99.7	99.5	99.4	99.5

Items		Scope	Unit	FY2020	FY2021	FY2022	FY2023	FY2024
Waste	Emissions* ³	EN Gr	kt	159.1	249.2	223.7	193.1	151.4
	Offices	EN	t	329.2	235.3	259.4	219.4	263.0
		Yokohama HO	t	256.9	156.7	195.0	157.2	203.5
		Tsu works	t	72.3	78.6	64.4	62.2	52.9
		Kasaoka Monopile Factory	t	—	—	—	—	6.6
	Production	EN	t	1,072.3	803.0	821.4	705.8	1,571.7
		Tsurumi works	t	519.8	364.7	461.6	338.3	1,068.4
		Tsu works	t	552.5	438.3	359.8	367.5	399.6
		Kasaoka Monopile Factory	t	—	—	—	—	103.7
	Construction	EN	t	97,387.9	190,242.3	162,747.2	134,157.5	60,269.0
	Subsidiaries	EN subsidiaries	t	60,296.7	57,960.3	59,841.4	57,990.0	89,319.6
	Recycling rate (offices)	EN	%	96.8	96.1	96.4	92.1	93.0
		Yokohama HO	%	99.1	98.5	98.4	97.7	98.3
		Tsu works	%	87.2	88.4	85.7	87.1	86.7
		Kasaoka Monopile Factory	t	—	—	—	—	0.0
	Recycling rate (production)	EN	%	48.8	46.8	54.0	50.4	53.9
		Tsurumi works	%	72.0	68.3	75.9	60.9	73.5
		Tsu works	%	33.8	28.0	25.0	42.3	47.3
		Kasaoka Monopile Factory	t	—	—	—	—	0.0
	Recycling rate (construction)	EN	%	98.3	98.6	99.3	97.5	97.3
	Landfill	EN	t	2,011.6	3,035.6	1,456.7	3,497.5	1,956.9
		EN	t	9.1	7.4	7.7	7.4	13.3
		Yokohama HO	t	2.1	2.2	2.9	3.0	2.9
		Tsu works	t	7.0	5.2	4.8	4.4	3.8
	Offices	Kasaoka Monopile Factory	t	—	—	—	—	6.6
		EN	t	351.2	322.6	287.7	235.2	344.3
		Tsurumi works	t	75.2	89.4	85.9	80.5	96.4
		Tsu works	t	276.0	233.2	201.8	154.7	144.2
	Production	Kasaoka Monopile Factory	t	—	—	—	—	103.7
		EN	t	1,651.3	2,705.6	1,161.3	3,254.8	1,599.3
		EN	t	1,651.3	2,705.6	1,161.3	3,254.8	1,599.3
		EN	t	1,651.3	2,705.6	1,161.3	3,254.8	1,599.3
	Construction	EN	t	1,651.3	2,705.6	1,161.3	3,254.8	1,599.3
	Recycling rate	EN	%	95.9	96.5	97.4	96.1	92.6

*1 Scope of data: JFE Steel and 22 consolidated subsidiaries in Japan.

*2 Byproducts generated by JFE Steel are mostly reused as offshore, land, or construction materials.

*3 Scope of data: JFE Engineering and 9 consolidated subsidiaries in Japan.

Waste at JFE Engineering Construction Sites

Items		Scope	Unit	FY2020	FY2021	FY2022	FY2023	FY2024
Rubble	Amount generated	EN	t	78,100	159,309	141,888	119,708	46,853
	Recycling rate	EN	%	99.4	99.4	99.9	97.8	99.6
	Landfill amount	EN	t	484	940	173	2,632	189
Sludge	Amount generated	EN	t	12,399	24,350	14,806	9,679	4,827
	Recycling rate	EN	%	98.9	96.9	99.0	99.3	97.1
	Landfill amount	EN	t	135	683	130	56	104
Industrial waste excluding rubble and sludge	Amount generated	EN	t	6,678	6,583	6,054	4,771	8,589
	Recycling rate	EN	%	85.4	81.6	84.4	87.1	83.9
	Landfill amount	EN	t	868	1,083	858	566	1,307

Paper Consumption at JFE Shoji

Items	Scope	Unit	FY2020	FY2021	FY2022	FY2023	FY2024
Consumption of copier paper	SH	boxes	3,021	3,033	2,860	2,934	3,089
	Tokyo	boxes	1,333	1,471	1,376	1,396	1,374
	Osaka	boxes	310	337	351	391	679
	Nagoya	boxes	157	154	177	162	165
	Branch	boxes	1,221	1,071	956	985	871

Water Use

Water Intake and Discharge

Items	Scope	Unit	FY2020	FY2021	FY2022	FY2023	FY2024
Amount of water intake* ¹	All	million t	237	246	240	226	228
	ST Gr	million t	236	245	239	224	227
	ST	million t	215	226	220	208	210
	ST subsidiaries	million t	20.9	18.7	18.2	16.1	16.5
	EN Gr	million t	1.296	1.141	1.35	1.24	1.36
	EN	million t	0.072	0.063	0.064	0.073	0.081
	EN subsidiaries	million t	1.223	1.078	1.28	1.17	1.28
	SH Gr	million t	0.160	0.154	0.154	0.145	0.143
	SH	million t	—	—	—	—	—
	SH subsidiaries	million t	0.160	0.154	0.154	0.145	0.143
Amount of water discharged* ²	ST Gr	million t	141	144	143	139	137
	ST	million t	123	128	128	125	124
	ST subsidiaries	million t	18.3	15.6	15.4	13.9	13.3
	EN	million t	0.157	0.132	0.122	0.122	0.107
Amount of water consumption* ²	ST Gr	million t	3,331	3,442	3,475	3,242	2,974
	ST	million t	3,066	3,207	3,242	3,035	2,748
	ST subsidiaries	million t	265	235	233	207	226
Amount evaporated	ST	million t	92	98	92	83	76
Ratio of amount released and evaporated	ST	%	7.0	7.0	6.8	6.9	7.3
Amount recycled* ²	ST Gr	million t	3,096	3,197	3,237	3,017	2,747
	ST	million t	2,851	2,981	3,022	2,826	2,538
	ST subsidiaries	million t	245	216	215	191	209
Recycling rate* ^{2,3}	ST	%	93.0	93.0	93.2	93.1	92.4
	ST subsidiaries	%	92	92	92	92	93

*1 Scope of data:

- JFE Steel and 22 consolidated subsidiaries in Japan.
- JFE Engineering and 6 consolidated subsidiaries in Japan.
- 33 JFE Shoji domestic and overseas consolidated subsidiaries.

*2 Scope of data: JFE Steel and 22 JFE Steel consolidated subsidiaries in Japan.

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

Breakdown of Water Intake and Discharge Areas

Items	Scope	Unit	FY2020	FY2021	FY2022	FY2023	FY2024
Total intake	2 operating companies*	million t	214.8	226.1	220.4	208.4	210.1
River/lake		million t	0	0	0	0	0
Groundwater		million t	0	0	0	0	0
Industrial water/ waterworks		million t	214.8	226.1	220.4	208.4	210.1
Ocean		million t	0	0	0	0	0
Rainwater		million t	0	0	0	0	0
Other intake source		million t	0	0	0	0	0
Total discharge	2 operating companies*	million t	123.6	128.8	128.5	125.8	124.3
Ocean		million t	123.1	128.3	128.1	125.4	123.9
Surface water		million t	0	0	0	0	0
Underground/well		million t	0	0	0	0	0
Off-site water processing		million t	0.4796	0.4709	0.4300	0.4158	0.4168
Beneficial use/other use		million t	0	0	0	0	0
Other discharge destinations		million t	0	0	0	0	0

*Scope of data: JFE Steel and JFE Engineering.

Water Use (Supplementary Data)

Water Intake and Discharge at JFE Steel Group Subsidiaries (FY2024)

Company Name	Amount of Intake (unit: kt)	Amount of Discharge (unit: kt)
JFE Mineral & Alloy Company, Ltd.	5,618	5,154
Chiba Riverment and Cement Corporation	13	13
Mizushima Riverment Corporation	11	11
JFE Precision Corporation	127	127
JFE Plastic Resource Corporation	12	3
JFE Bars & Shapes Corporation	4,842	2,932
JFE Metal Products & Engineering Inc.	152	147
JFE Kenzai Fence Co., Ltd.	21	21
JFE Galvanizing & Coating Co., Ltd.	540	288
JFE Container Co., Ltd.	108	108
JFE Welded Pipe Manufacturing Co., Ltd.	29	17
JFE Steel Pipe Co., Ltd.	2	2
Galvatex Corporation	553	553
JFE Techno-wire Corporation	85	5
JFE Kozai Corporation	13	13

Company Name	Amount of Intake (unit: kt)	Amount of Discharge (unit: kt)
GECOSS CORPORATION	42	37
JFE Logistics Corporation	106	87
J-Logitec Co., Ltd.	3	3
JFE Chemical Corporation	3,557	3,209
JFE Ferrite Corporation	40	40
K-plasheet Corporation	34	35
JFE Life Corporation	560	462
Total	16,468	13,268

Water Intake at JFE Engineering Group Subsidiaries (FY2024)

Company Name	Amount Accepted (unit: kt)
J&T Recycling Corporation	1,277
NORTHERN JAPAN MACHINERY Corporation	0.003
Fujikako, Inc.	0.04
Kinpai Co., Ltd.	0.004
JFE Technos Corporation	0.51
Total	1,277

Environmental Management

Environmental Management System

Items		Scope	Unit	FY2020	FY2021	FY2022	FY2023	FY2024
% covered by ISO 14001 certification	Base	All	%	58	54	52	52	52
		ST Gr	%	21	18	44	44	44
		EN Gr	%	9	8	44	43	43
		SH Gr	%	28	27	64	64	64
	Employees	All	%	70	68	67	72	66
		ST Gr	%	74	72	70	72	71
		EN Gr	%	51	50	50	47	48
		SH Gr	%	89	83	81	80	78
Environmental audit (number of sites)		ST Gr	sites	24	29	28	27	25
		EN Gr	sites	28	52	50	52	53
Environmental education conducted (total participants)		EN Gr	persons	731	1,131	889	897	1282

Environmental Accounting

Breakdown of environmental protection cost		FY2023		FY2024	
		Investment (billion yen)	Cost (billion yen)	Investment (billion yen)	Cost (billion yen)
Management	Impact monitoring and measurement, and EMS expenses and education	1.2	2.4	1.0	2.8
Global warming countermeasures	Saving and efficiently using energy	19.5	36.5	6.3	36.0
	Recycling industrial water	4.9	25.7	2.0	22.6
Conservation of natural resources	Recycling and waste management of internally generated materials, etc.	0	5.7	7.1	5.2
Environmental protection	Air pollution countermeasures	6.9	30.7	6.0	28.2
	Water pollution countermeasures	1.8	11.5	3.3	14.9
	Prevention of soil contamination, noise, vibration, and subsidence	0	0.5	0	0.5
Other	Charges, etc.	—	1.4	—	0.7
R&D	Technologies for protecting the environment, saving energy, and preventing global warming	1.0	9.4	1.2	17.9
Societal activities	Support for nature preservation and forestation, information disclosure, exhibitions, and public relations	—	0.7	—	0.8
Total		35.2	124.4	26.2	129.6

Scope of data: All investment activities of JFE Steel Corporation and R&D activities of JFE Engineering Corporation.

Environmental Accounting (Accumulated)

Items	Scope	Unit	FY2020	FY2021	FY2022	FY2023	FY2024
Energy-saving investment (accumulated)	All	billion yen	546.5	565.4	570.8	590.3	596.6
Environmental protection investment (accumulated)	All	billion yen	742.1	770.9	797.1	811.9	830.6