

# Main Environmental Indicators (5 Years)

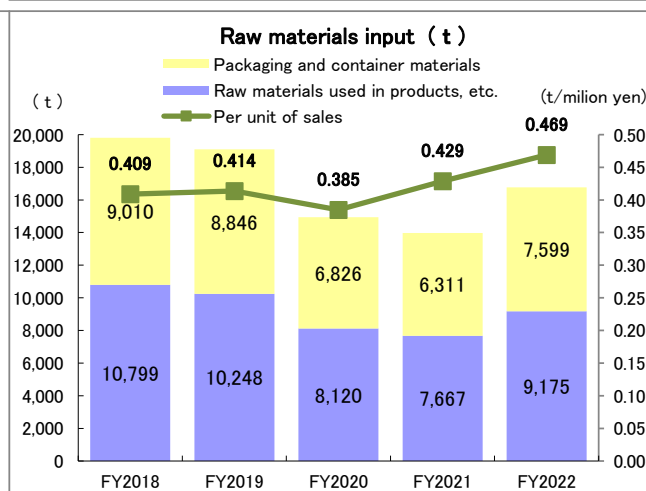
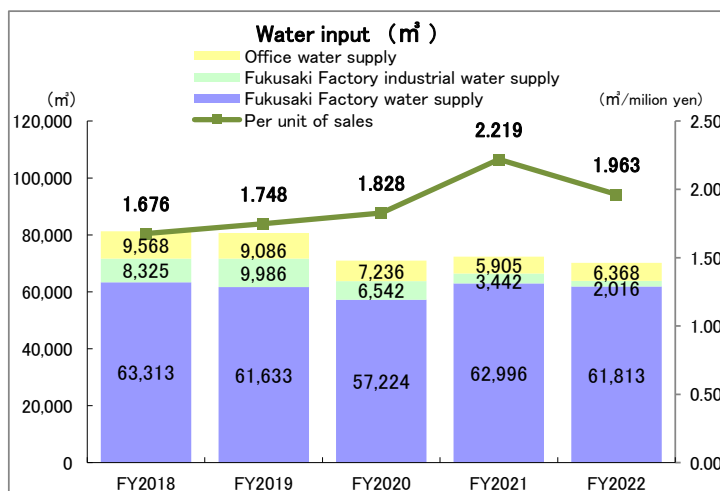
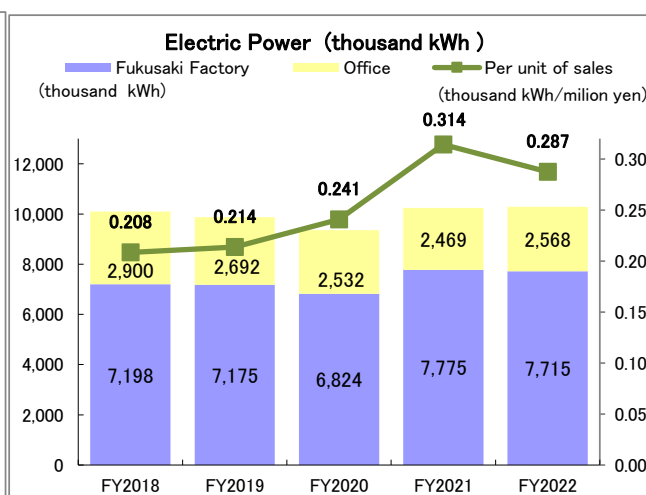
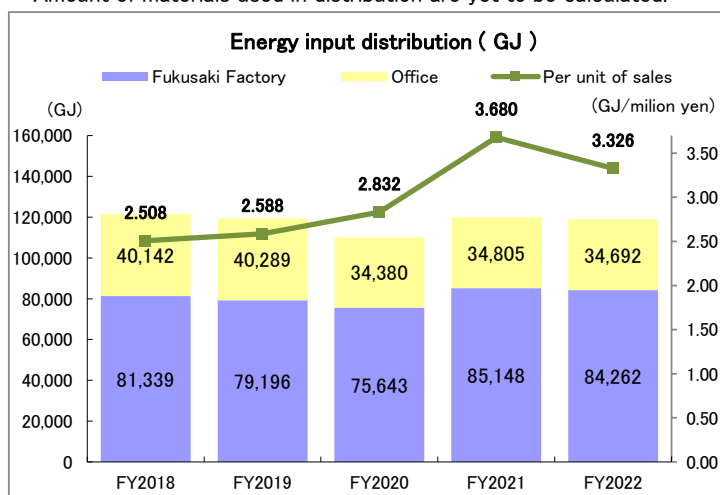
## 1. Environmental Impact of Business Activities by the Mandom Group in Japan

Data gathered from: 1 manufacturing location, 8 non-manufacturing locations, 1 consolidated subsidiary, and 1 non-consolidated subsidiary

Data collection period: April of the year shown to March of the following year

Reporting Content	Unit	Apr. 2018 to	Apr. 2019 to	Apr. 2020 to	Apr. 2021 to	Apr. 2022 to
		Mar. 2019	Mar. 2020	Mar. 2021	Mar. 2022	Mar. 2023
		FY2018	FY2019	FY2020	FY2021	FY2022
<b>INPUT</b>						
Energy input	GJ	121,481	119,485	110,022	119,952	118,954
Electric power	thousand kWh	10,098	9,867	9,356	10,244	10,283
Gas	m <sup>3</sup>	57,824	125,216	99,351	100,936	103,540
LP Gas	m <sup>3</sup>	39,093	107,306	86,985	88,797	85,349
City Gas	m <sup>3</sup>	18,731	17,910	12,366	12,139	18,191
Kerosene	kl	179	0	0	0	0
Gasoline	kl	318	316	261	294	256
Water input	m <sup>3</sup>	81,206	80,705	71,002	72,343	70,197
Water supply	m <sup>3</sup>	72,881	70,719	64,460	68,901	68,181
Industrial water supply	m <sup>3</sup>	8,325	9,986	6,542	3,442	2,016
Raw materials used in products, etc.	t	10,799	10,248	8,120	7,667	9,175
PRTR-listed raw materials in use	t	90	108	82	103	111
Other raw materials in use	t	10,709	10,140	8,038	7,564	9,064
Packaging and container materials	t	9,010	8,846	6,826	6,311	7,599
Materials to which recycling laws apply	t	5,045	5,078	3,717	3,923	4,318
Others *	t	3,965	3,768	3,109	2,388	3,281

\* Amount of materials used in distribution are yet to be calculated.

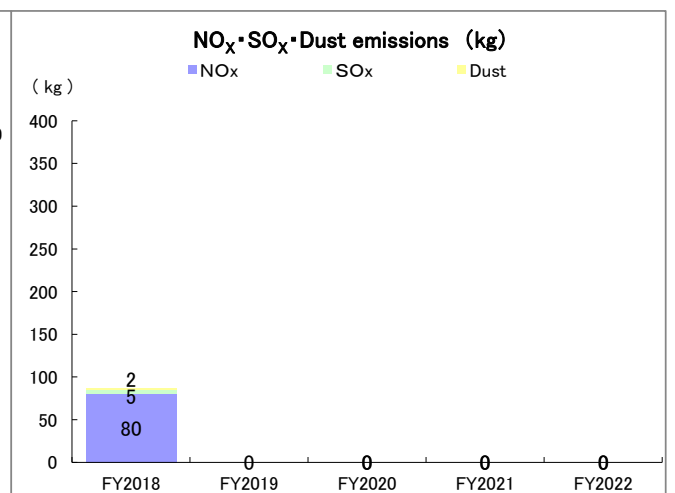
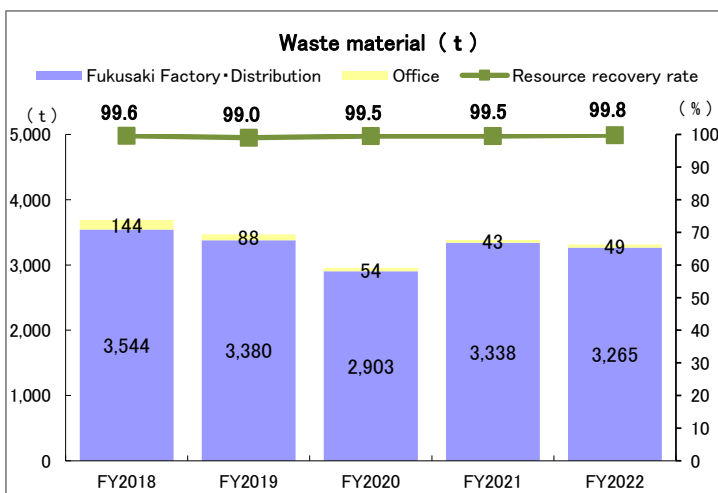
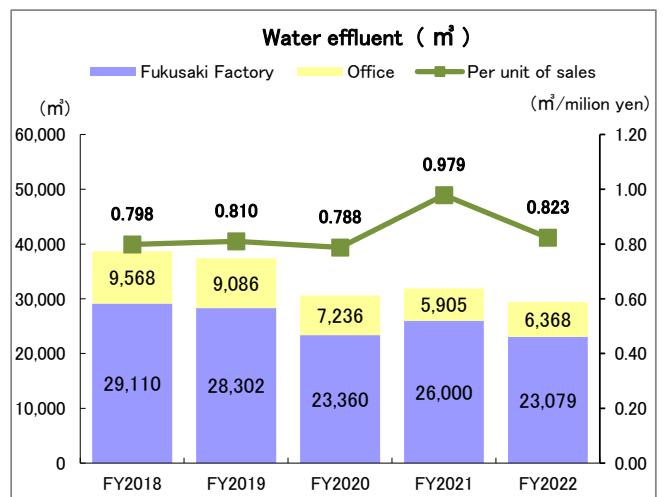
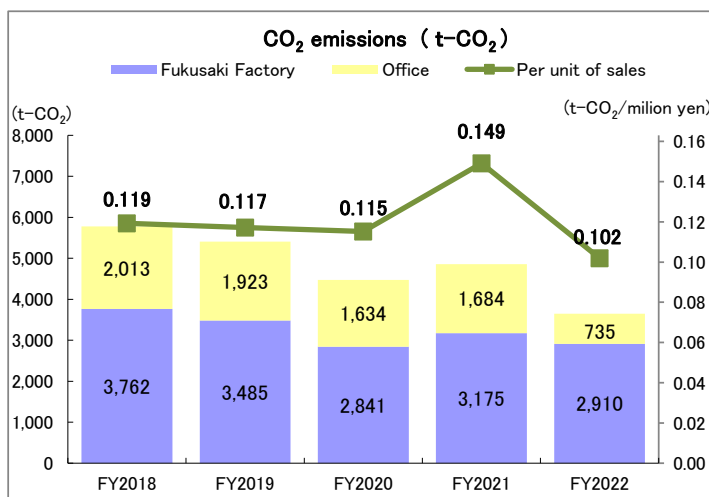


Reporting Content	Unit	Apr. 2018 to Mar. 2019	Apr. 2019 to Mar. 2020	Apr. 2020 to Mar. 2021	Apr. 2021 to Mar. 2022	Apr. 2022 to Mar. 2023
		FY2018	FY2019	FY2020	FY2021	FY2022
<b>OUTPUT</b>						
CO <sub>2</sub> emissions (Scope 1+2)	t-CO <sub>2</sub>	5,776	5,409	4,475	4,859	3,645
Fukusaki Factory	t-CO <sub>2</sub>	3,762	3,485	2,841	3,175	2,910
Office	t-CO <sub>2</sub>	2,013	1,923	1,634	1,684	735
Water effluent	m <sup>3</sup>	38,677	37,388	30,596	31,905	29,447
Fukusaki Factory	m <sup>3</sup>	29,109	28,302	23,360	26,000	23,079
Office	m <sup>3</sup>	9,568	9,086	7,236	5,905	6,368
Waste material *	t	3,688	3,468	2,957	3,381	3,314
Fukusaki Factory, distribution	t	3,544	3,380	2,903	3,338	3,265
Office	t	144	88	54	43	49
Sulfur oxide (SO <sub>x</sub> ) emissions	kg	5	0	0	0	0
Nitrogen oxide (NO <sub>x</sub> ) emissions	kg	80	0	0	0	0
Dust emissions	kg	2	0	0	0	0

\* From FY2017 onward, waste materials for promotional items are included in calculations.

### Per Unit of Sales

Reporting Content	Unit	FY2018	FY2019	FY2020	FY2021	FY2022
Energy input	GJ/million yen	2.508	2.588	2.832	3.680	3.326
CO <sub>2</sub> emissions	t-CO <sub>2</sub> /million yen	0.119	0.117	0.115	0.149	0.102
Water input	m <sup>3</sup> /million yen	1.676	1.748	1.828	2.219	1.963



In FY2019, SO<sub>x</sub>, NO<sub>x</sub> and Dust emissions were reduced to zero due to the operation of the new boiler equipment throughout the year.

**Scope 1+2+3 emissions in Japan**

Reporting Content	Unit	FY2018	FY2019	FY2020	FY2021	FY2022
CO2 emissions	t-CO <sub>2</sub>	252,992	244,124	252,212	208,587	179,498
Scope 1	t-CO <sub>2</sub>	1,452	1,410	1,150	1,236	1,139
Scope 2	t-CO <sub>2</sub>	4,323	3,999	3,325	3,623	2,506
Scope 3	t-CO <sub>2</sub>	248,090	239,610	255,399	202,805	175,852
Category 1 (Purchased goods and services)	t-CO <sub>2</sub>	94,294	90,383	83,025	57,860	70,653
Category 2 (Capital goods)	t-CO <sub>2</sub>	9,691	4,046	36,188	5,709	2,118
Category 3 (Fuel- and energy-related activities not included in Scope 1 or Scope 2)	t-CO <sub>2</sub>	1,000	1,023	936	1,016	837
Category 4 (Upstream transportation and distribution)	t-CO <sub>2</sub>	4,992	4,672	3,466	3,235	3,596
Category 5 (Waste generated in operations)	t-CO <sub>2</sub>	2,839	2,533	2,401	2,697	1,583
Category 6 (Business travel)	t-CO <sub>2</sub>	132	134	138	129	128
Category 7 (Employee commuting)	t-CO <sub>2</sub>	302	309	317	295	285
Category 8 (Upstream leased assets)	t-CO <sub>2</sub>	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
Category 9 (Downstream transportation and distribution)	t-CO <sub>2</sub>	367	350	203	202	197
Category 10 (Processing of sold products)	t-CO <sub>2</sub>	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
Category 11 (Use of sold products)	t-CO <sub>2</sub>	119,844	121,370	115,073	118,289	84,224
Category 12 (End-of-life treatment of sold products)	t-CO <sub>2</sub>	13,914	14,050	12,929	12,364	11,158
Category 13 (Downstream leased assets)	t-CO <sub>2</sub>	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
Category 14 (Franchises)	t-CO <sub>2</sub>	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
Category 15 (Investments)	t-CO <sub>2</sub>	714	739	723	1,009	1,073

**Emissions of PRTR-listed Substances and Movement (FY2022)**

(unit: t)

Class I Designated Chemical Substance	Emissions and Movement
Methyl 4-hydroxybenzoate	6.6
Poly(oxyethylene) alkyl ether	2.0
Sodium poly(oxyethylene) dodecyl ether sulfonate	85.0
Ferric chloride	5.7

Substances used in volume of one ton or more.

## 2. Graphs of Main Environmental Data

Japanese data gathered from: 1 manufacturing location, 8 non-manufacturing locations, 1 consolidated subsidiary, and 1 non-consolidated subsidiary  
 Overseas data gathered from: 2 manufacturing locations, 9 consolidated subsidiaries, and 1 equity method affiliate  
 Data collection period: Japan (April of the year shown to March of the following year)  
 Overseas (January to December of the year shown)

Reporting Content	Unit	Apr. 2018 to Mar. 2019	Apr. 2019 to Mar. 2020	Apr. 2020 to Mar. 2021	Apr. 2021 to Mar. 2022	Apr. 2022 to Mar. 2023
		FY2018	FY2019	FY2020	FY2021	FY2022
<b>INPUT</b>						
Energy input	GJ	455,029	435,024	365,068	374,388	395,513
Japan	GJ	121,481	119,485	110,022	119,952	118,954
Overseas	GJ	333,547	315,539	255,046	254,436	276,559
Electric power	thousand kWh	40,234	38,524	32,239	34,495	35,311
Japan	thousand kWh	10,098	9,867	9,356	10,244	10,283
Overseas	thousand kWh	30,136	28,657	22,882	24,250	25,028
LP Gas/LN Gas	m <sup>3</sup>	61,333	130,950	105,348	136,759	131,775
City Gas	m <sup>3</sup>	18,731	17,910	12,366	12,139	18,191
Gasolin	kl	724	670	602	599	641
Kerosene	kl	179	0	0	0	0
Diesel fuel	kl	401	368	326	276	306
Water input	m <sup>3</sup>	312,997	299,615	236,072	251,752	334,034
Water supply	m <sup>3</sup>	277,016	256,542	202,460	217,067	286,693
Japan	m <sup>3</sup>	72,881	70,719	64,460	68,901	68,181
Overseas	m <sup>3</sup>	204,135	185,823	138,000	148,166	218,512
Industrial water supply	m <sup>3</sup>	35,981	43,073	33,612	34,685	47,341
Japan	m <sup>3</sup>	8,325	9,986	6,542	3,442	2,016
Overseas	m <sup>3</sup>	27,656	33,087	27,070	31,243	45,325

<b>OUTPUT</b>						
CO <sub>2</sub> emissions (Scope 1+2)	t-CO <sub>2</sub>	30,743	28,457	23,162	24,391	24,309
Japan *1	t-CO <sub>2</sub>	5,776	5,409	4,475	4,859	3,645
Overseas *2	t-CO <sub>2</sub>	24,967	23,048	18,687	19,533	20,664
Waste material	t	5,401	5,483	4,807	5,037	4,689
Japan	t	3,688	3,468	2,957	3,381	3,314
Overseas	t	1,713	2,015	1,850	1,656	1,375
Remaining waste after treatment	t	822	869	772	820	792
Japan	t	12	35	15	16	5
Overseas	t	810	834	757	805	787

\*1 Energy consumption calculated based on formulas in the Japanese Act on the Rational Use of Energy.

\*2 Overseas CO<sub>2</sub> emission coefficients by country are drawn from CO<sub>2</sub> Emissions from Fuel Combustion: Highlights, 2013 Edition.

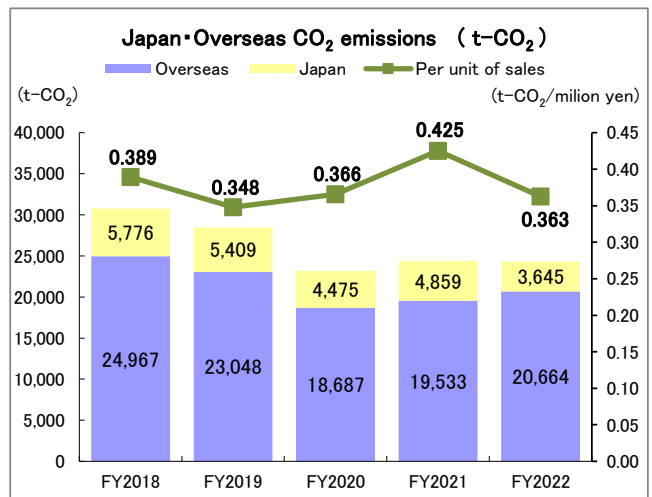
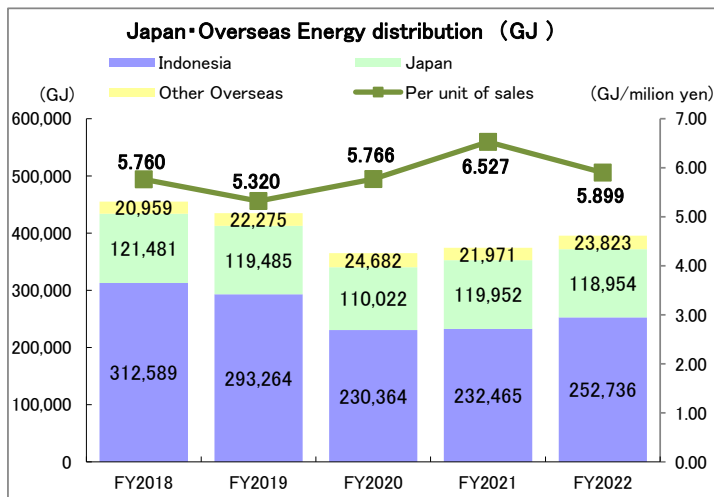
Source: IEA. Fiscal year CO<sub>2</sub> emission coefficients for Japan are based on data from individual electric power producers.

### CO<sub>2</sub> emissions falling under Scope 1 and Scope 2

Reporting Content	Unit	Apr. 2018 to Mar. 2019	Apr. 2019 to Mar. 2020	Apr. 2020 to Mar. 2021	Apr. 2021 to Mar. 2022	Apr. 2022 to Mar. 2023
		FY2018	FY2019	FY2020	FY2021	FY2022
CO <sub>2</sub> emissions	t-CO <sub>2</sub>	30,743	28,457	23,162	24,391	24,309
Scope 1	t-CO <sub>2</sub>	2,995	2,842	2,595	2,491	2,933
Scope 2	t-CO <sub>2</sub>	27,748	25,615	20,566	21,900	21,376

### Per Unit of Sales

Reporting Content	Unit	FY2018	FY2019	FY2020	FY2021	FY2022
Energy input	GJ/million yen	5.760	5.320	5.766	6.527	5.674
CO <sub>2</sub> emissions	t-CO <sub>2</sub> /million yen	0.389	0.348	0.366	0.425	0.363



**Reference: Japanese CO<sub>2</sub> emission calculation coefficient**

Reporting Content	Apr. 2018 to Mar. 2019	Apr. 2019 to Mar. 2020	Apr. 2020 to Mar. 2021	Apr. 2021 to Mar. 2022	Apr. 2022 to Mar. 2023
	FY2018	FY2019	FY2020	FY2021	FY2022
<b>Electric power</b>					
Hokkaido Electric Power Co., Inc.	0.666	0.643	0.445	0.601	0.549
Tohoku Electric Power Co., Inc.	0.521	—	0.445	0.476	0.457
TEPCO Energy Partner, Inc.	0.475	0.468	0.445	0.447	0.441
CHUBU Electric Power Co., Inc.	0.476	0.457	0.445	0.406	0.377
The Kansai Electric Power Co., Inc.	0.435	0.352	0.445	0.362	0.311
The Chugoku Electric Power Co., Inc.	0.669	—	0.445	0.531	0.521
Kyushu Electric Power Co., Inc.	0.438	0.319	0.445	0.365	0.479
ENNET Corp.	0.423	0.426	0.445	0.373	0.372
Tepco Customer Service Corp.	0.578	—	—	0.460	0.558
Kerosene	2.489	—	—	—	—
LP Gas	3.000	3.000	3.000	2.999	2.999
City Gas	2.234	2.234	2.234	2.234	2.234
Gasoline	2.322	2.322	2.322	2.322	2.322
Diesel fuel	2.585	2.585	2.585	2.585	2.585
B・C Heavy oil	39	39	39	39	39

Note: Calculations are based on the Japanese government's Act on the Rational Use, etc. of Energy.

**Reference: Overseas CO<sub>2</sub> emission calculation coefficient**

Reporting Content	FY2018	FY2019	FY2020	FY2021	FY2022
<b>Electric power</b>					
Indonesia	0.755	0.755	0.755	0.755	0.755
China	0.764	0.764	0.764	0.764	0.764
Thailand	0.522	0.522	0.522	0.522	0.522
Philippines	0.492	0.492	0.492	0.492	0.492
Malaysia	0.688	0.688	0.688	0.688	0.688
Singapore	0.500	0.500	0.500	0.500	0.500
Taiwan	0.764	0.764	0.764	0.764	0.764
Hong Kong	0.768	0.768	0.768	0.768	0.768
Korea	0.545	0.545	0.545	0.545	0.545
India	0.856	0.856	0.856	0.856	0.856
Vietnam	0.429	0.429	0.429	0.429	0.429

Note: Overseas CO<sub>2</sub> emission coefficients by country are drawn from CO<sub>2</sub> Emissions from Fuel Combustion: Highlights, 2013 Edition. Source: IEA