

Mandom Group Environmental Data by Production Site

1: Aggregation Area: Japan (Production Site: Fukusaki Factory),

Overseas (Production Sites: Indonesia Factory1・Factory2, China Zhongshan Factory)

2: Aggregation Period: Japan: April of the listed fiscal year to the following March, Overseas: January to December of the listed fiscal year

Production Site Overview

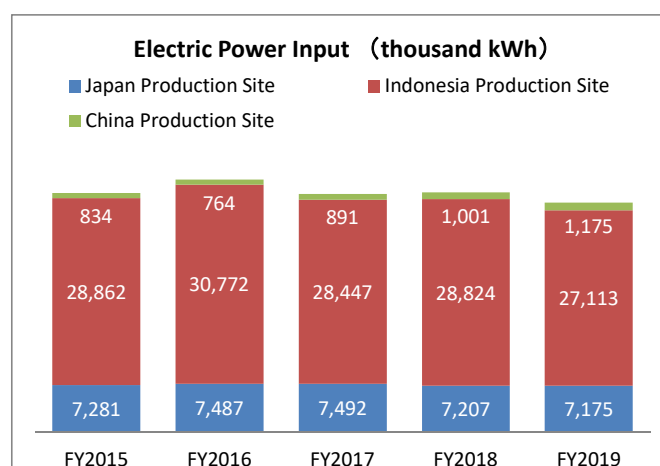
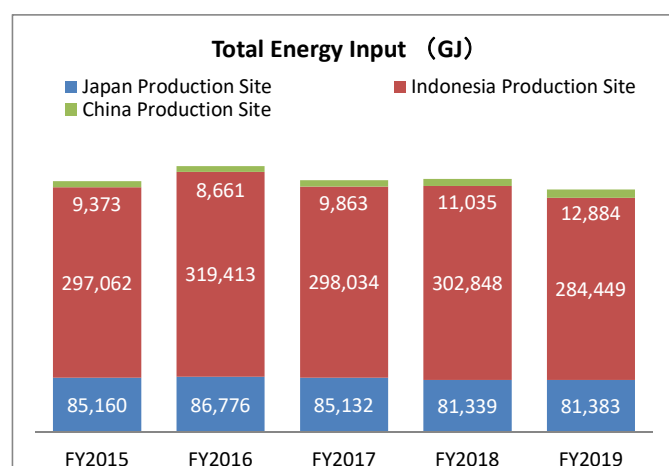
Country	Name of Factory	Site area (m ²)	Floor area (m ²)	Note
Japan	Fukusaki Factory	71,058	37,730	
Indonesia	Head Office / Factory1	147,936	34,183	Only the head office division moved to Jakarta in August 2018.
	Factory2	54,442	39,884	
China	Zhongshan Factory	27,253	5,972	

Net Sales, Production Volume, Eco-efficiency by Production Site

Country	Unit	FY2015	FY2016	FY2017	FY2018	FY2019
Japan						
Net Sales	million yen	44,104	45,945	47,739	48,442	46,175
Per Unit	t -CO ₂ /million yen	0.102	0.092	0.086	0.078	0.075
Production Volume	thousand units	136,706	135,861	132,564	136,102	132,047
Per Unit	t -CO ₂ /thousand units	0.033	0.031	0.031	0.028	0.026
Indonesia						
Net Sales	million Rp	2,344,373	2,556,688	2,742,014	2,673,444	2,804,152
Per Unit	t -CO ₂ /million Rp	0.010	0.009	0.008	0.009	0.008
Production Volume	thousand units	613,238	710,291	526,863	466,477	441,889
Per Unit	t -CO ₂ /thousand units	0.037	0.034	0.043	0.049	0.049
China						
Production Volume	thousand units	12,567	13,445	17,190	19,460	19,956
Per Unit	t -CO ₂ /thousand units	0.060	0.052	0.046	0.047	0.051

Individual Environmental Data by Production Site

Reporting Content	Unit	Business Location / Category	FY2015	FY2016	FY2017	FY2018	FY2019
Total Energy Input	GJ	Total	392,836	414,849	393,030	395,222	378,716
		Japan Production Site	85,160	86,776	85,132	81,339	81,383
		Fukusaki Factory	85,160	86,776	85,132	81,339	81,383
		Indonesia Production Site	297,062	319,413	298,034	302,848	284,449
		Head Office / Factory1	131,471	151,208	155,536	152,276	144,123
		Factory2	165,591	168,205	142,499	150,572	140,326
		China Production Site	9,373	8,661	9,863	11,035	12,884
		Zhongshan Factory	9,373	8,661	9,863	11,035	12,884
Electric Power Input	thousand kWh	Total	36,977	39,023	36,829	37,033	35,463
		Japan Production Site	7,281	7,487	7,492	7,207	7,175
		Fukusaki Factory	7,281	7,487	7,492	7,207	7,175
		Indonesia Production Site	28,862	30,772	28,447	28,824	27,113
		Head Office / Factory1	12,325	13,948	14,189	13,756	13,064
		Factory2	16,537	16,824	14,258	15,068	14,049
		China Production Site	834	764	891	1,001	1,175
		Zhongshan Factory	834	764	891	1,001	1,175



Reporting Content	Unit	Business Location / Category	FY2015	FY2016	FY2017	FY2018	FY2019
Water Input	m ³	Total	276,681	304,413	341,938	302,836	290,010
		Japan Production Site	85,358	80,619	73,352	71,638	71,619
		Fukusaki Factory water supply	74,872	71,789	65,796	63,313	61,633
		Fukusaki Factory industrial water supply	10,486	8,830	7,556	8,325	9,986
		Indonesia Production Site	177,655	207,530	240,412	216,683	204,590
		Head Office/Factory1 water supply	138,101	154,718	150,388	164,137	141,725
		Head Office/Factory1 groundwater	0	0	0	0	0
		Factory2 industrial water supply	39,554	25,016	42,643	24,890	29,778
		Factory2 water supply	0	27,796	47,381	27,656	33,087
		China Production Site	13,668	16,264	28,174	14,515	13,801
Zhongshan Factory water supply	13,668	16,264	28,174	14,515	13,801		
CO ₂ Emissions	t -CO ₂	Total	27,696	29,028	27,374	27,460	25,920
		Japan Production Site	4,486	4,238	4,125	3,762	3,460
		Fukusaki Factory	4,486	4,238	4,125	3,762	3,460
		Indonesia Production Site	22,422	24,093	22,463	22,820	21,437
		Head Office/Factory1	9,894	11,364	11,678	11,423	10,815
		Factory2	12,528	12,730	10,785	11,397	10,622
		China Production Site	751	696	786	878	1,024
		Zhongshan Factory	751	696	786	878	1,024

Please note: The changes of CO₂ emission coefficients

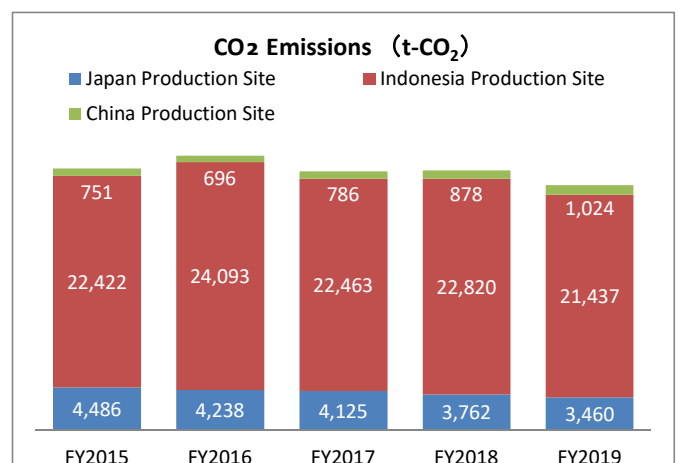
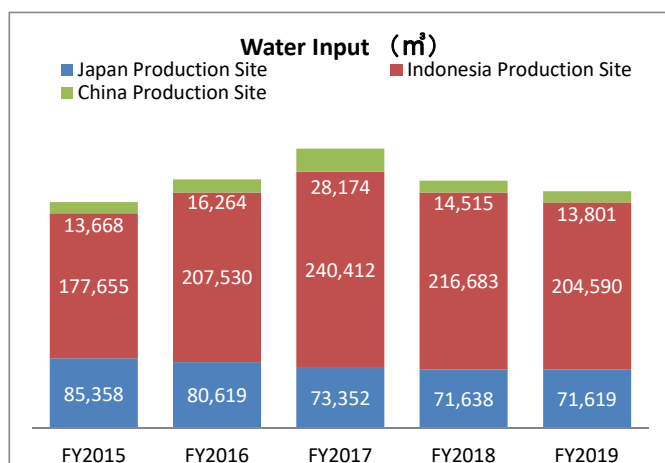
Business Location / Category	FY2015	FY2016	FY2017	FY2018	FY2019
CO₂ Emission Coefficients					
Japan Production Site					
Electric power emission coefficients	0.531	0.509/0.418	0.508/0.405	0.508/0.405	0.352/0.426
Kerosene emission coefficients	2.49	2.49	2.49	2.49	-
Gas emission coefficients	3.00	3.00	3.00	3.00	3.00
Indonesia Production Site					
Electric power emission coefficients	0.755	0.755	0.755	0.755	0.755
Diesel fuel emission coefficients	2.58	2.58	2.58	2.58	2.58
Gas emission coefficients	3.00	3.00	3.00	3.00	3.00
China Production Site					
Electric power emission coefficients	0.764	0.764	0.764	0.764	0.764
Diesel fuel emission coefficients	2.58	2.58	2.58	2.58	2.58
Gas emission coefficients	2.70	2.70	2.70	2.70	2.70

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

* Overseas CO₂ emission coefficients by country are drawn from "CO₂ Emissions from Fuel Combustion: Highlights, 2013 Edition."

Source: IEA. Fiscal year CO₂ emission coefficients for Japan are based on data from individual electric power producers.

* All fuel coefficients other than electricity are drawn from the calorific value and emission coefficients in the Japanese "The Calculating and Reporting Manual for Greenhouse Gas Emissions Ver.4.2".



Reporting Content	Unit	Business Location / Category	FY2015	FY2016	FY2017	FY2018	FY2019
Waste material	t	Total	3,150	2,986	4,390	4,343	4,425
		Japan Production Site	2,370	2,295	2,400	2,684	2,473
		Fukusaki Factory	2,370	2,295	2,400	2,684	2,473
		Indonesia Production Site	771	683	1,965	1,651	1,927
		Head Office/Factory1	474	342	1,670	1,331	1,629
		Factory2	296	341	295	320	298
		China Production Site	10	8	25	8	25
Zhongshan Factory	10	8	25	8	25		
Final Disposal Amount	t	Total	266	345	971	762	778
		Japan Production Site	6	7	6	6	7
		Fukusaki Factory	6	7	6	6	7
		Indonesia Production Site	250	332	952	750	765
		Head Office/Factory1	223	297	923	728	754
		Factory2	26	35	29	22	11
		China Production Site	10	6	13	5	6
Zhongshan Factory	10	6	13	5	6		
Resource Recovery Rate	%	Japan Production Site	99.8%	99.7%	99.8%	99.8%	99.7%
		Indonesia Production Site	67.6%	51.4%	51.5%	54.6%	60.3%
		China Production Site	0.0%	18.2%	46.4%	29.3%	76.7%
Water Effluent (*data not yet available)	m ³	Japan Production Site	38,546	32,235	29,607	29,110	28,302
		Indonesia Production Site	*	*	*	*	*
		China Production Site	*	*	*	*	*
Sulfur Oxide (SOx) Emissions (*data not yet available)	kg	Japan Production Site	25	34	21	5	0
		Indonesia Production Site	*	*	*	*	*
		China Production Site	25	2	2	3	5
Nitrogen Oxide (NOx) Emissions (*data not yet available)	kg	Japan Production Site	141	245	342	80	0
		Indonesia Production Site	*	*	*	*	*
		China Production Site	94	6	6	91	40
Dust Emissions (*data not yet available)	kg	Japan Production Site	3	4	5	2	0
		Indonesia Production Site	*	*	*	*	*
		China Production Site	*	*	*	*	*