

Mandom Group Environmental Data by Production Site

1: Aggregation Area: Japan (Production Site: Fukusaki Factory), Overseas (Production Sites: Indonesia, China)

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

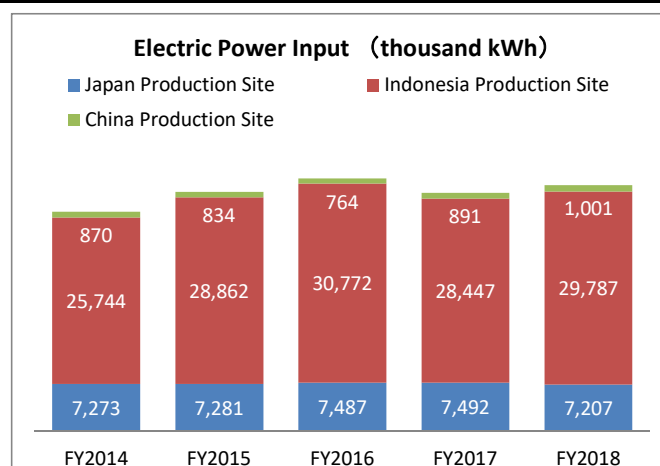
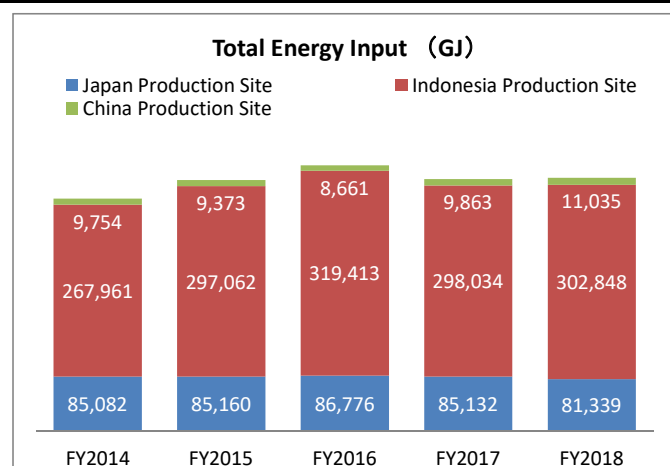
Country	Name of Factory	Site area (m ²)	Floor area (m ²)	Note
Japan	Fukusaki Factory	71,058	37,730	
Indonesia	Head Office / Sunter Factory	36,153	41,939	Head Office / Sunter Factory was relocated in June 2015 and has since been operating under the name Head Office / Factory 1. During the same period, the name of Cibitung Factory was changed to Factory 2.
	Cibitung Factory	54,442	39,884	
	Head Office / Factory1	147,936	59,620	
	Factory2	54,442	39,884	
China	Zhongshan Factory	27,253	5,972	

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

Country	Unit	FY2014	FY2015	FY2016	FY2017	FY2018
Japan						
Net Sales	million yen	41,637	44,104	45,945	47,739	48,442
Per Unit	t -CO ₂ /million yen	0.105	0.102	0.092	0.086	0.078
Production Volume	thousand units	132,159	136,706	135,861	132,564	136,102
Per Unit	t -CO ₂ /thousand units	0.033	0.033	0.031	0.031	0.028
Indonesia						
Net Sales	million Rp	2,330,909	2,344,373	2,556,688	2,742,014	2,673,444
Per Unit	t -CO ₂ /million Rp	0.009	0.010	0.009	0.008	0.009
Production Volume	thousand units	731,054	613,238	710,291	526,863	466,477
Per Unit	t -CO ₂ /thousand units	0.028	0.037	0.034	0.043	0.053
China						
Production Volume	thousand units	12,784	12,567	13,445	17,190	19,460
Per Unit	t -CO ₂ /thousand units	0.061	0.060	0.052	0.046	0.047

Individual Environmental Data by Production Site

Reporting Content	Unit	Business Location / Category	FY2014	FY2015	FY2016	FY2017	FY2018
Total Energy Input	GJ	Total	364,066	392,836	414,849	393,030	395,222
		Japan Production Site	85,082	85,160	86,776	85,132	81,339
		Fukusaki Factory	85,082	85,160	86,776	85,132	81,339
		Indonesia Production Site	267,961	297,062	319,413	298,034	302,848
		Head Office/Sunter Factory	90,918	-	-	-	-
		Cibitung Factory	177,043	-	-	-	-
		Head Office / Factory1	-	131,471	151,208	155,536	152,276
		Factory2	-	165,591	168,205	142,499	150,572
		China Production Site	9,754	9,373	8,661	9,863	11,035
Zhongshan Factory	9,754	9,373	8,661	9,863	11,035		
Electric Power Input	thousand kWh	Total	33,887	36,977	39,023	36,829	37,995
		Japan Production Site	7,273	7,281	7,487	7,492	7,207
		Fukusaki Factory	7,273	7,281	7,487	7,492	7,207
		Indonesia Production Site	25,744	28,862	30,772	28,447	29,787
		Head Office/Sunter Factory	8,066	-	-	-	-
		Cibitung Factory	17,678	-	-	-	-
		Head Office / Factory1	-	12,325	13,948	14,189	14,719
		Factory2	-	16,537	16,824	14,258	15,068
		China Production Site	870	834	764	891	1,001
Zhongshan Factory	870	834	764	891	1,001		



Reporting Content	Unit	Business Location / Category	FY2014	FY2015	FY2016	FY2017	FY2018
Water Input	m ³	Total	290,953	276,681	304,413	341,938	302,836
		Japan Production Site	76,292	85,358	80,619	73,352	71,638
		Fukusaki Factory water supply	63,944	74,872	71,789	65,796	63,313
		Fukusaki Factory industrial water supply	12,348	10,486	8,830	7,556	8,325
		Indonesia Production Site	195,848	177,655	207,530	240,412	216,683
		Head Office/Sunter Factory water supply	157,100	-	-	-	-
		Head Office/Sunter Factory groundwater	0	-	-	-	-
		Head Office/Sunter Factory industrial water supply	2,116	-	-	-	-
		Cibitung Factory water supply	36,632	-	-	-	-
		Head Office/Factory1 water supply	-	138,101	154,718	150,388	164,137
		Head Office/Factory1 groundwater	-	0	0	0	-
		Factory2 industrial water supply	-	39,554	25,016	42,643	24,890
		Factory2 water supply	-	0	27,796	47,381	27,656
		China Production Site	18,813	13,668	16,264	28,174	14,515
		Zhongshan Factory water supply	18,813	13,668	16,264	28,174	14,515
CO ₂ Emissions	t -CO ₂	Total	25,376	27,696	29,028	27,374	29,484
		Japan Production Site	4,352	4,486	4,238	4,125	3,762
		Fukusaki Factory	4,352	4,486	4,238	4,125	3,762
		Indonesia Production Site	20,203	22,422	24,093	22,463	24,844
		Head Office/Sunter Factory	6,810	-	-	-	-
		Cibitung Factory	13,394	-	-	-	-
		Head Office/Factory1	-	9,894	11,364	11,678	13,447
		Factory2	-	12,528	12,730	10,785	11,397
		China Production Site	781	751	696	786	878
		Zhongshan Factory	781	751	696	786	878

Please note: The changes of CO₂ emission coefficients

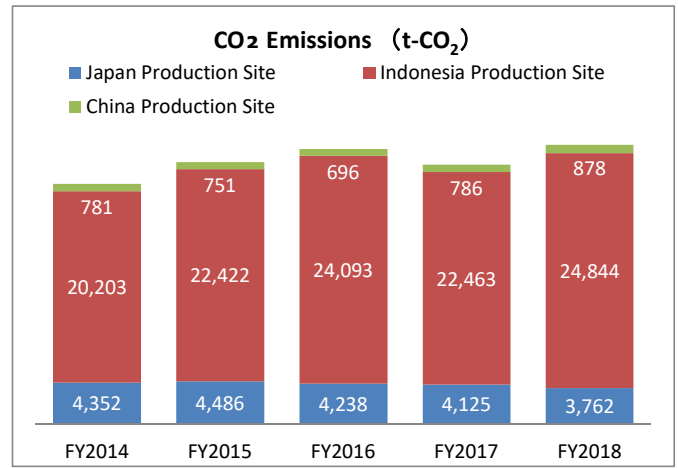
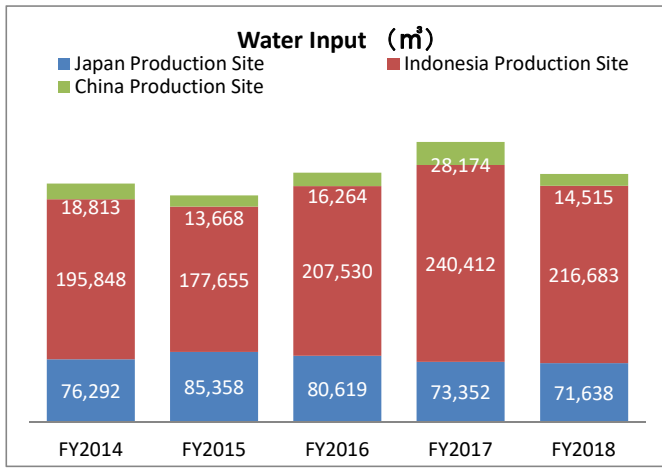
	Business Location / Category	FY2014	FY2015	FY2016	FY2017	FY2018
CO ₂ Emission Coefficients	Japan Production Site					
	Electric power emission coefficients	0.522	0.531	0.509/0.418	0.508/0.405	0.508/0.405
	Kerosene emission coefficients	2.49	2.49	2.49	2.49	2.49
	Gas emission coefficients	3.00	3.00	3.00	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	FY2014	FY2015	FY2016	FY2017	FY2018
Waste material	t	Total	3,267	3,150	2,986	4,390	4,343
		Japan Production Site	2,425	2,370	2,295	2,400	2,684
		Fukusaki Factory	2,425	2,370	2,295	2,400	2,684
		Indonesia Production Site	833	771	683	1,965	1,651
		Head Office/Sunter Factory	423	-	-	-	-
		Cibitung Factory	410	-	-	-	-
		Head Office/Factory1	-	474	342	1,670	1,331
		Factory2	-	296	341	295	320
		China Production Site	9	10	8	25	8
Zhongshan Factory	9	10	8	25	8		
Final Disposal Amount	t	Total	187	266	345	971	
		Japan Production Site	8	6	7	6	6
		Fukusaki Factory	8	6	7	6	6
		Indonesia Production Site	170	250	332	952	750
		Head Office/Sunter Factory	170	-	-	-	-
		Cibitung Factory	0	-	-	-	-
		Head Office/Factory1	-	223	297	923	728
		Factory2	-	26	35	29	22
		China Production Site	9	10	6	13	5
Zhongshan Factory	9	10	6	13	5		
Resource Recovery Rate	%	Japan Production Site	99.7%	99.8%	99.7%	99.8%	99.8%
		Indonesia Production Site	79.6%	67.6%	51.4%	51.5%	54.6%
		China Production Site	0.0%	0.0%	18.2%	46.4%	29.3%
Water Effluent (*data not yet available)	m ³	Japan Production Site	34,732	38,546	32,235	29,607	29,110
		Indonesia Production Site	*	*	*	*	*
		China Production Site	*	*	*	*	*
Sulfur Oxide (SOx) Emissions (*data not yet available)	kg	Japan Production Site	28	25	34	21	5
		Indonesia Production Site	*	*	*	*	*
		China Production Site	13	25	2	2	
Nitrogen Oxide (NOx) Emissions (*data not yet available)	kg	Japan Production Site	210	141	245	342	80
		Indonesia Production Site	*	*	*	*	*
		China Production Site	76	94	6	6	91
Dust Emissions (*data not yet available)	kg	Japan Production Site	14	3	4	5	2
		Indonesia Production Site	*	*	*	*	*
		China Production Site	*	*	*	*	*