

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	

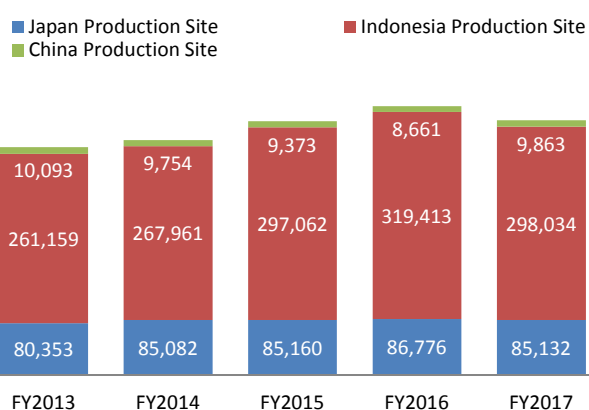
Net Sales, Production Volume, Eco-efficiency by Production Site

Country	Unit	FY2013	FY2014	FY2015	FY2016	FY2017
Japan						
Net Sales	million yen	40,945	41,637	44,104	45,945	47,739
Per Unit	t -CO ₂ /million yen	0.105	0.105	0.102	0.092	0.086
Production Volume	thousand units	122,461	132,159	136,706	135,861	132,564
Per Unit	t -CO ₂ /thousand units	0.035	0.033	0.033	0.031	0.031
Indonesia						
Net Sales	million Rp	1,863,517	2,330,909	2,344,373	2,556,688	2,742,014
Per Unit	t -CO ₂ /million Rp	0.011	0.009	0.010	0.009	0.008
Production Volume	thousand units	740,624	731,054	613,238	710,291	526,863
Per Unit	t -CO ₂ /thousand units	0.027	0.028	0.037	0.034	0.043
China						
Net Sales	thousand yuan	107,624	91,266	92,921	123,331	139,569
Per Unit	t -CO ₂ /thousand yuan	0.007	0.009	0.008	0.006	0.006
Production Volume	thousand units	12,315	12,784	12,567	13,445	17,190
Per Unit	t -CO ₂ /thousand units	0.063	0.061	0.060	0.052	0.046

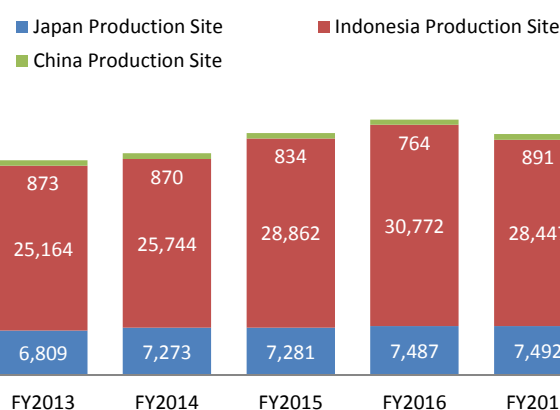
Individual Environmental Data by Production Site

Reporting Content	Unit	Business Location / Category	FY2013	FY2014	FY2015	FY2016	FY2017
Total Energy Input	GJ	Total	351,606	364,066	392,836	414,849	393,030
		Japan Production Site	80,353	85,082	85,160	86,776	85,132
		Fukusaki Factory	80,353	85,082	85,160	86,776	85,132
		Indonesia Production Site	261,159	267,961	297,062	319,413	298,034
		Head Office/Sunter Factory	87,061	90,918	-	-	-
		Cibitung Factory	174,098	177,043	-	-	-
		Head Office / Factory1	-	-	131,471	151,208	155,536
		Factory2	-	-	165,591	168,205	142,499
		China Production Site	10,093	9,754	9,373	8,661	9,863
		Zhongshan Factory	10,093	9,754	9,373	8,661	9,863
Electric Power Input	thousand kWh	Total	32,845	33,887	36,977	39,023	36,829
		Japan Production Site	6,809	7,273	7,281	7,487	7,492
		Fukusaki Factory	6,809	7,273	7,281	7,487	7,492
		Indonesia Production Site	25,164	25,744	28,862	30,772	28,447
		Head Office/Sunter Factory	7,787	8,066	-	-	-
		Cibitung Factory	17,377	17,678	-	-	-
		Head Office / Factory1	-	-	12,325	13,948	14,189
		Factory2	-	-	16,537	16,824	14,258
		China Production Site	873	870	834	764	891
		Zhongshan Factory	873	870	834	764	891

Total Energy Input (GJ)



Electric Power Input (thousand kWh)



Reporting Content	Unit	Business Location / Category	FY2013	FY2014	FY2015	FY2016	FY2017
Water Input	m ³	Total	311,626	290,953	276,681	304,413	341,938
		Japan Production Site	87,040	76,292	85,358	80,619	73,352
		Fukusaki Factory water supply	63,843	63,944	74,872	71,789	65,796
		Fukusaki Factory industrial water supply	23,197	12,348	10,486	8,830	7,556
		Indonesia Production Site	210,575	195,848	177,655	207,530	240,412
		Head Office/Sunter Factory water supply	146,796	157,100	-	-	-
		Head Office/Sunter Factory groundwater	5,914	0	-	-	-
		Head Office/Sunter Factory industrial water supply	12,050	2,116	-	-	-
		Cibitung Factory water supply	45,815	36,632	-	-	-
		Head Office/Factory1 water supply	-	-	138,101	154,718	150,388
		Head Office/Factory1 groundwater	-	-	0	0	0
		Factory2 industrial water supply	-	-	39,554	25,016	42,643
		Factory2 water supply	-	-	0	27,796	47,381
		China Production Site	14,011	18,813	13,668	16,264	28,174
		Zhongshan Factory water supply	14,011	18,813	13,668	16,264	28,174
CO ₂ Emissions	t -CO ₂	Total	24,790	25,376	27,696	29,028	27,374
		Japan Production Site	4,284	4,352	4,486	4,238	4,125
		Fukusaki Factory	4,284	4,352	4,486	4,238	4,125
		Indonesia Production Site	19,695	20,203	22,422	24,093	22,463
		Head Office/Sunter Factory	6,525	6,810	-	-	-
		Cibitung Factory	13,170	13,394	-	-	-
		Head Office/Factory1	-	-	9,894	11,364	11,678
		Factory2	-	-	12,528	12,730	10,785
		China Production Site	770	781	751	696	786
		Zhongshan Factory	770	781	751	696	786

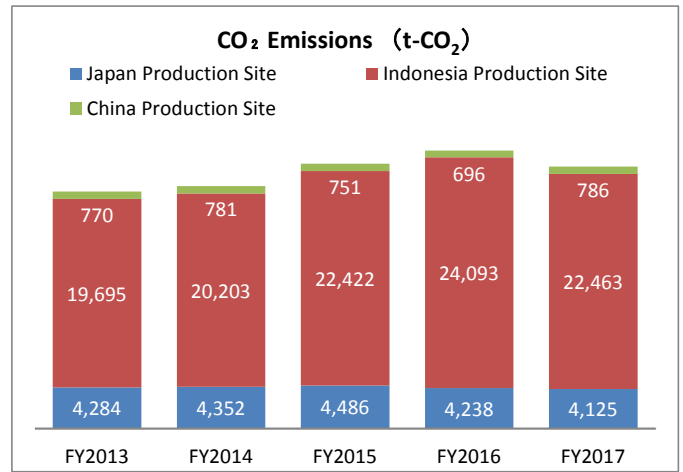
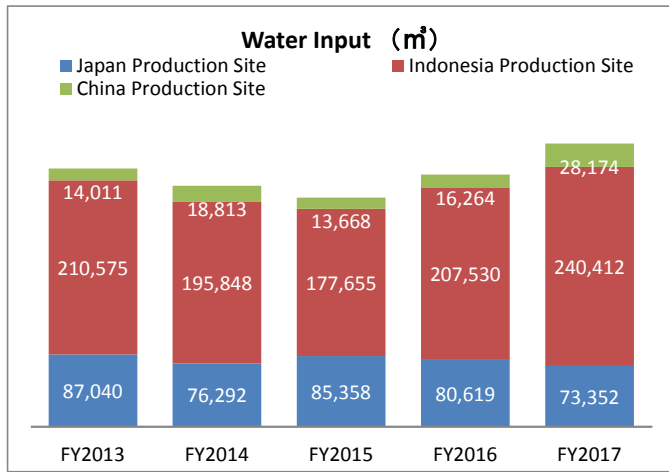
Please note: The changes of CO₂ emission coefficients

	Business Location / Category	FY2013	FY2014	FY2015	FY2016	FY2017
CO ₂ Emission Coefficients	Japan Production Site					
	Electric power emission coefficients	0.514	0.522	0.531	0.509/0.418	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	3.00	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	FY2013	FY2014	FY2015	FY2016	FY2017
Waste material	t	Total	3,796	3,267	3,150	2,986	4,390
		Japan Production Site	3,068	2,425	2,370	2,295	2,400
		Fukusaki Factory	3,068	2,425	2,370	2,295	2,400
		Indonesia Production Site	724	833	771	683	1,965
		Head Office/Sunter Factory	428	423	-	-	-
		Cibitung Factory	295	410	-	-	-
		Head Office/Factory1	-	-	474	342	1,670
		Factory2	-	-	296	341	295
		China Production Site	5	9	10	8	25
Zhongshan Factory	5	9	10	8	25		
Final Disposal Amount	t	Total	140	187	266	345	971
		Japan Production Site	9	8	6	7	6
		Fukusaki Factory	9	8	6	7	6
		Indonesia Production Site	126	170	250	332	952
		Head Office/Sunter Factory	126	170	-	-	-
		Cibitung Factory	0	0	-	-	-
		Head Office/Factory1	-	-	223	297	923
		Factory2	-	-	26	35	29
		China Production Site	5	9	10	6	13
Zhongshan Factory	5	9	10	6	13		
Resource Recovery Rate	%	Japan Production Site	99.7%	99.7%	99.8%	99.7%	99.8%
		Indonesia Production Site	82.6%	79.6%	67.6%	51.4%	51.5%
		China Production Site	0.0%	0.0%	0.0%	18.2%	46.4%
Water Effluent (*data not yet available)	m ³	Japan Production Site	35,279	34,732	38,546	32,235	29,607
		Indonesia Production Site	*	*	*	*	*
		China Production Site	*	*	*	*	*
Sulfur Oxide (SOx) Emissions (*data not yet available)	kg	Japan Production Site	26	28	25	34	21
		Indonesia Production Site	*	*	*	*	*
		China Production Site	5	13	25	2	2
Nitrogen Oxide (NOx) Emissions (*data not yet available)	kg	Japan Production Site	263	210	141	245	342
		Indonesia Production Site	*	*	*	*	*
		China Production Site	15	76	94	6	6
Dust Emissions (*data not yet available)	kg	Japan Production Site	5	14	3	4	5
		Indonesia Production Site	*	*	*	*	*
		China Production Site	*	*	*	*	*