

# Main Environmental Indicators (5 Years)

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

Reporting Period	Unit	Apr. 2011 to Mar. 2012	Apr. 2012 to Mar. 2013	Apr. 2013 to Mar. 2014	Apr. 2014 to Mar. 2015	Apr. 2015 to Mar. 2016
		FY2011	FY2012	FY2013	FY2014	FY2015
Total energy input	GJ	107,622	106,176	112,987	117,236	116,130
Electric power	千kWh	9,482	9,377	10,056	10,471	10,354
Kerosene	kl	375	364	369	368	367
Gas	m <sup>3</sup>	19,469	20,459	20,457	20,175	20,929
Energy input in distribution	GJ	27,237	24,985	28,878	31,111	31,498
Energy input in sales activities *1	GJ	13,890	13,488	13,061	12,113	11,530
Water input	m <sup>3</sup>	92,182	98,248	99,097	86,669	95,416
water supply	m <sup>3</sup>	78,062	75,891	75,900	74,321	84,930
industrial water supply	m <sup>3</sup>	14,120	22,357	23,197	12,348	10,486
Raw materials input	t	15,230	13,644	15,211	15,801	16,856
PRTR-listed raw materials in use	kg	48,020	46,548	68,778	46,315	102,330
CO2 emissions *2	t-CO2	3,996	5,044	5,774	5,803	5,955
CO2 emissions in Distribution	t-CO2	1,846	1,689	1,962	2,121	2,148
Distribution (by truck) *3	t-CO2	1,780	1,612	1,898	2,069	2,096
Distribution (by ship) *4	t-CO2	25	29	28	27	26
Distribution (by railroad) *4	t-CO2	41	47	35	25	26
Business activities CO2 emissions *1	t-CO2	932	905	876	813	774
Wastewater	m <sup>3</sup>	51,560	44,169	47,336	45,109	48,740
Waste	t	3,533	3,548	4,064	3,722	3,620
Recovered resources	t	3,476	3,496	4,005	3,685	3,594
Resource recovery rate	%	98.4%	98.5%	98.5%	99.0%	99.3%
Sulfur oxide (SOx) emissions	kg	17	30	26	28	25
Nitrogen oxide (NOx) emissions	kg	259	281	263	210	141
Dust emissions	kg	5	5	5	14	3

### <Per unit of sales>

energy input	GJ/ million yen	2,764	2,779	2,756	2,816	2,633
Water input	m <sup>3</sup> / million yen	2,367	2,571	2,420	2,082	2,163
CO2 emissions	t-CO2/ million yen	0.103	0.132	0.141	0.139	0.135
Distribution CO2 emissions	t-CO2/ million yen	0.047	0.044	0.048	0.051	0.049

\*1 Includes estimated impact of part-time workers, etc.

\*2 The CO2 emissions coefficient from electricity use is calculated as the actual emissions factor for each fiscal year per electricity supplier.

\*3 Calculation based on revised ton-kilometer method (described in Energy Conservation Act).

\*4 Calculation based on original ton-kilometer method (described in Energy Conservation Act).

## 1—a. Amount and Emissions of PRTR-listed Substances and Movement

Substances used in volume of one ton or more (unit: kg)

Class I Designated Chemical Substance	FY2015	
	Amount Used	Emissions and Movement
Water-soluble zinc compounds	1,093	122
2-aminoethanol	2,803	0
Methyl 4-hydroxybenzoate	5,408	96
Phenylenediamine	1,072	25
Poly(oxyethylene) alkyl ether	2,458	47
Sodium poly(oxyethylene) dodecyl ether sulfonate	69,741	1,234
Xylene※	2,935	15
Ferric chloride	14,735	0

※Xylene indicates emission amount

## 1—b. Graphs of main environmental data

### Mandom Group Domestic Sites

■ Production site ■ Site Name/Address

○Fukusaki Factory

Fukusaki-cho, Kanzaki-gun, Hyogo

■ Office ■ Site Name/Address

○Head Office Building

- Mandom Corporation
- PIACELABO Corporation
- mbs Corporation

Chuo-ku, Osaka

○Tokyo Nihonbashi Building /  
Aoyama Office

Minato-ku, Aoyama/  
Nihonbashi, Chuo-ku, Tokyo

○Sales Sites

▪ East Japan Sales Division Sapporo Sales Office

Kita-ku, Sapporo

▪ East Japan Sales Division Sendai Sales Office

Aoba-ku, Sendai

▪ East Japan Sales Division Saitama Sales Office

Omiya-ku, Saitama

▪ East Japan Sales Division Tokyo Sales Office

Nihonbashi, Chuo-ku, Tokyo

▪ East Japan Sales Division Yokohama Sales Office

Kohoku-ku, Yokohama

▪ West Japan Sales Division Nagoya Sales Office

Naka-ku, Nagoya

▪ West Japan Sales Division Hiroshima Sales Office

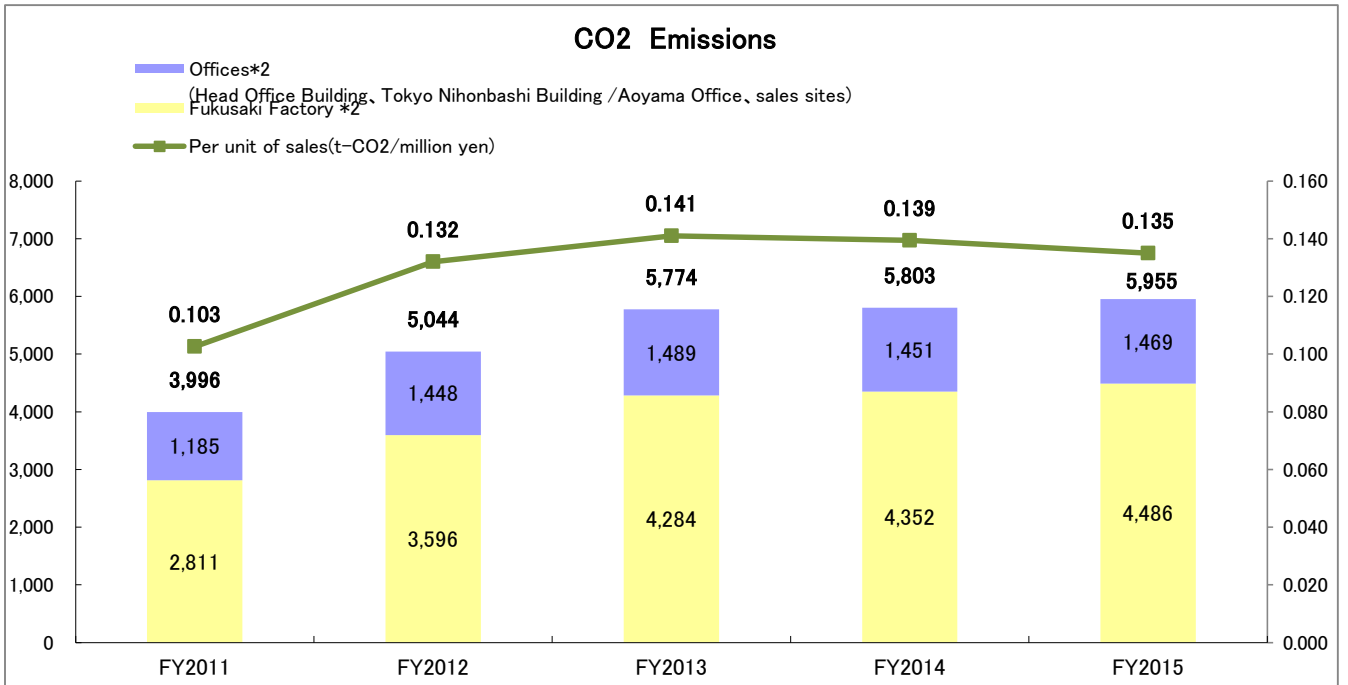
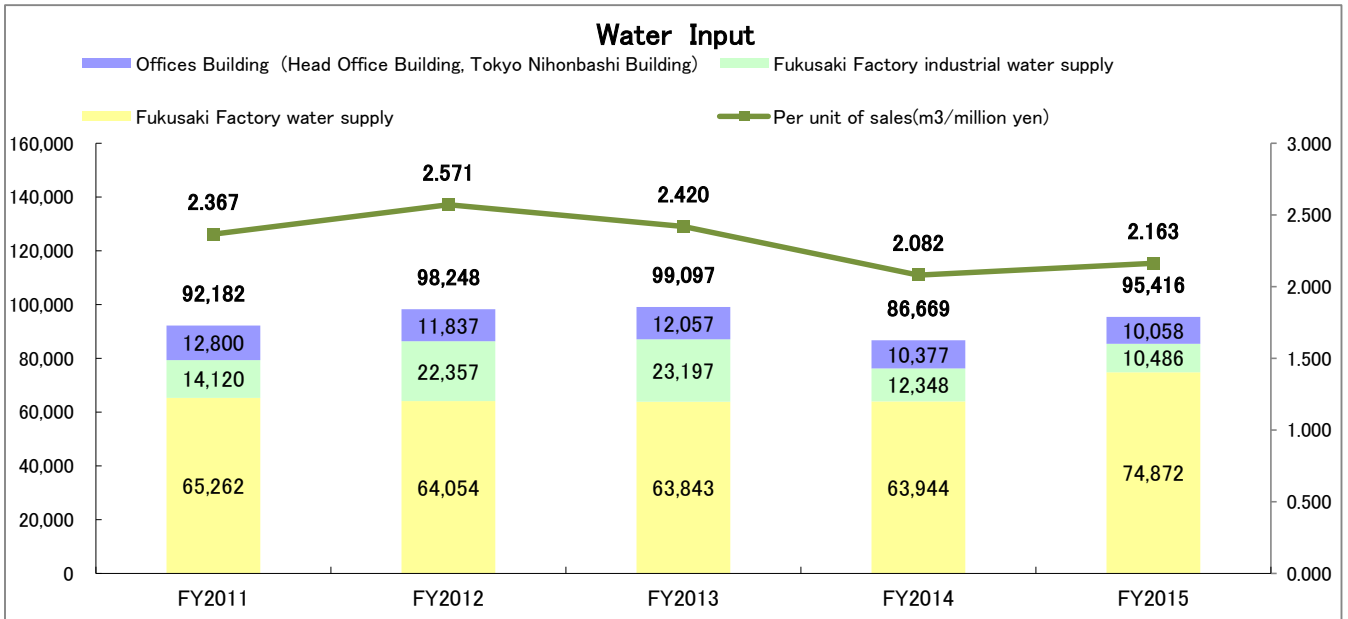
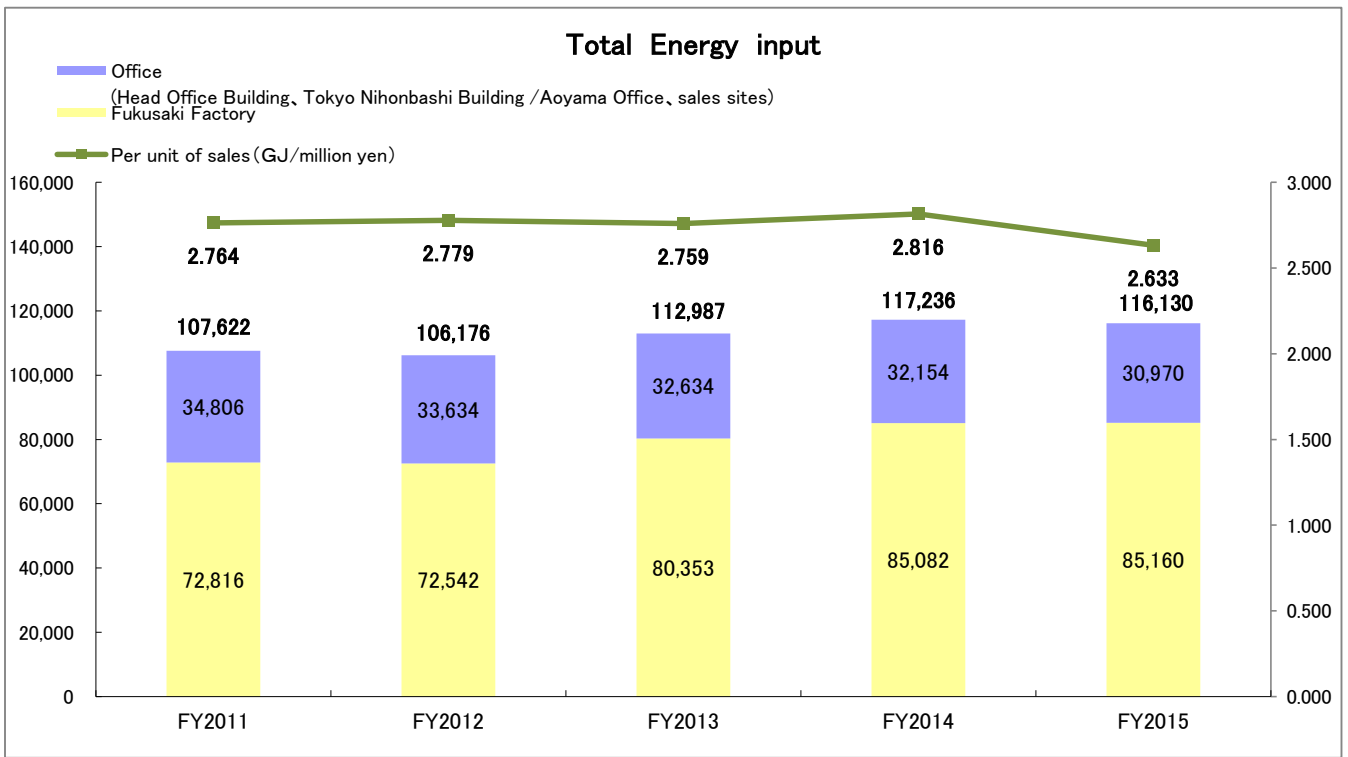
Higashi-ku, Hiroshima

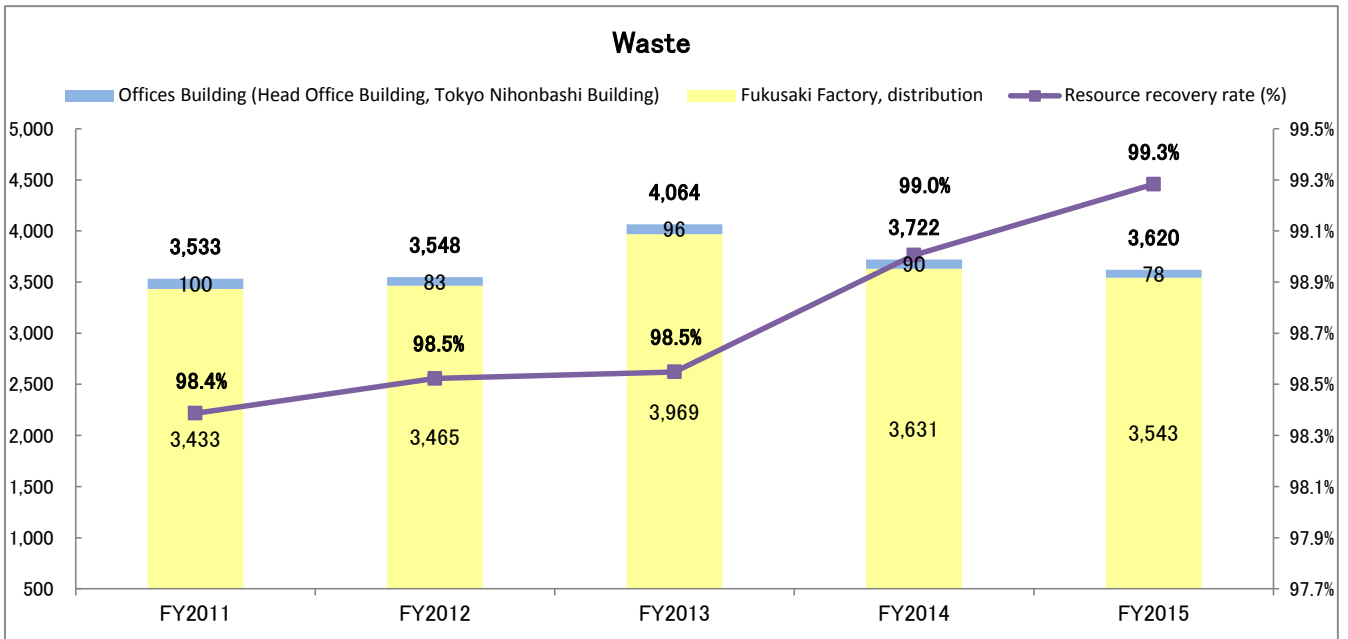
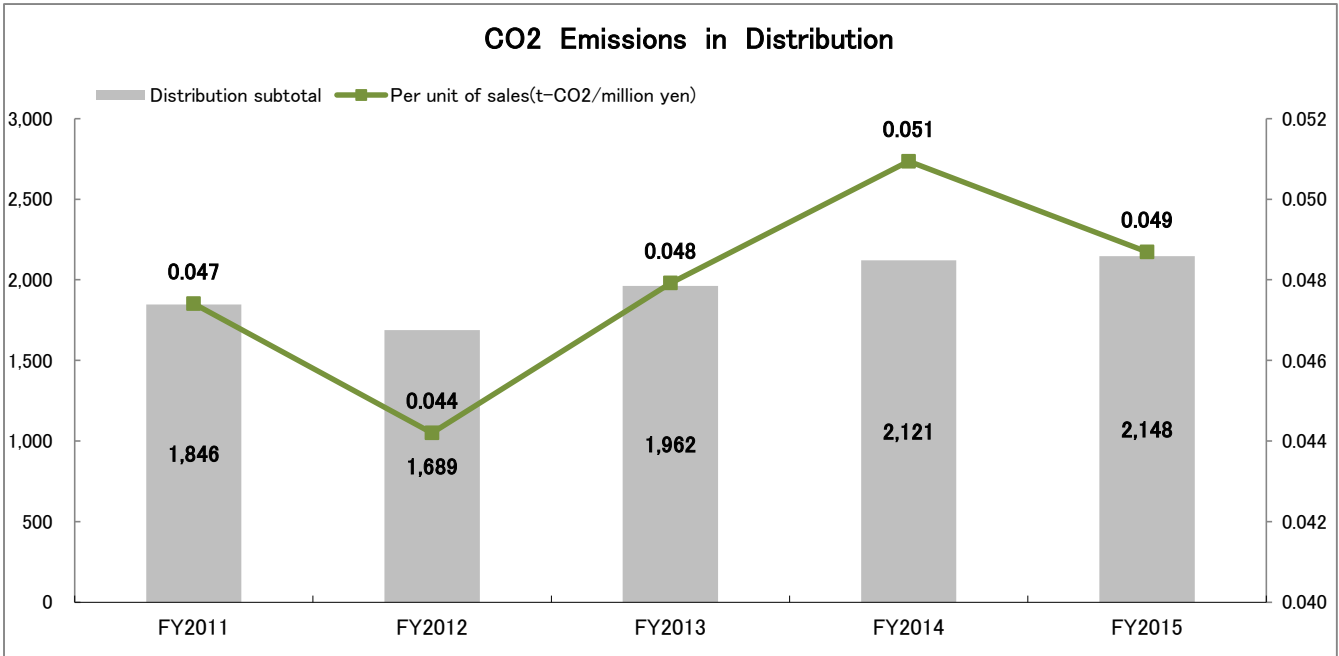
▪ West Japan Sales Division Fukuoka Sales Office

Hakata-ku, Fukuoka

▪ PIACELABO Corporation Tokyo Sales Office

Tsukiji, Chuo-ku, Tokyo





## 2. Environmental Impact of Mandom Group Business Activities (Excluding Distribution, Transport, and Sales)

### Mandom Group Overseas

■ Production site ■		Site Name	■ Office ■		Site Name
○Head Office / Factory1、Factory2		Indonesia	○Mandom Taiwan Corporation		Taiwan
○Zhongshan Factory		China (Zhongshan)	○Sunwa Marketing Co., Ltd.		China
			○Mandom Korea Corporation		Korea
			○Zhongshan City Rida Cosmetics Co., Ltd.		China (Zhongshan)
			○Mandom China Corporation		China (Shanghai/Beijing /Guangzhou)
			○Mandom Vietnam Company Ltd.		Vietnam
■ Office ■		Site Name			
○PT Mandom Indonesia Tbk		Indonesia			
○Mandom Corporation (Thailand) Ltd.		Thailand			
○Mandom Philippines Corporation		The Philippines			
○Mandom (Malaysia) Sdn. Bhd.		Malaysia			
○Mandom Corporation (Singapore) Pte. Ltd.		Singapore			

Reporting Period			Apr. 2011 to Mar. 2012	Apr. 2012 to Mar. 2013	Apr. 2013 to Mar. 2014	Apr. 2014 to Mar. 2015	Apr. 2015 to Mar. 2016
			FY2011	FY2012	FY2013	FY2014	FY2015
Energy input		GJ	369,921	375,403	387,626	399,163	426,709
Japan		GJ	107,622	106,176	112,987	117,236	116,130
Overseas		GJ	262,299	269,227	274,639	281,927	310,579
Type of energy	Electric power	千kWh	34,370	35,179	36,432	37,379	40,342
	LPG/LNG	kg	27,767	31,211	36,327	60,640	58,223
	City gas	m <sup>3</sup>	18,134	18,908	18,786	18,194	18,941
	Kerosene	kl	375	364	369	368	367
	Diesel fuel	kl	340	278	269	279	228
Greenhouse gas emissions		t-CO2	23,711	25,298	26,458	26,979	29,314
Japan		t-CO2	3,996	5,044	5,774	5,803	5,955
Overseas		t-CO2	19,714	20,254	20,684	21,176	23,359

#### <Per unit of sales>

energy input	GJ/ million yen	6.19	6.21	5.68	5.63	5.68
Greenhouse gas emissions	t-CO2/ million yen	0.396	0.419	0.388	0.380	0.390

Note1: Energy consumption calculated based on formulas in the Japanese Act on the Rational Use of Energy.

Note2: Aggregate data for each fiscal year is based on the period April 1 to March 31 for Japan and January 1 to December 31 for overseas sites.

Note3: 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

