

Environmental Data

- [P e r i o d] • April, 2017 to March, 2018
 [A i r] • Units are as follows: NOx = ppm, PM (particulate matter) = mg/Nm³ • ND: below the minimum determination limit (not detected)
 • Values shown in the results column are averages of the results of the measurements.
 [W a t e r] • Units are all in mg/L except for pH • pH: hydrogen ion concentration • BOD: Biochemical Oxygen Demand • SS: concentration of suspended solids in water
 • ND: below the minimum determination limit (not detected) • Values shown in the results column are averages of the results of the measurements.
 [Groundwater] • Units are all in mg/L • ND: below the minimum determination limit (not detected).
 [PRTR*Data] • Units are in kg • Values less than 1kg are rounded up if ≥0.5 and down if 0.5. There are some cases in which values for total volume and volume handled are not in agreement.
 [Data for use of resources /volume emitted] • Units are: t/year for waste, t-CO₂/year for greenhouse gas and 10,000m³/year for water.
 *Pollutant Release and Transfer Register (the registration system monitoring emissions of substances that pollute the environment and moves/transfers of them)

Data on Main Domestic Plants : Toyoda Gosei Co., Ltd.

Haruhi Plant

1 Haruhinagahata
Kiyosu, Aichi, Japan
452-8564

Main Products

• Functional Parts

■ Air (Air Pollution Control Law, prefectural regulations, etc.)

Item measured	Regulation value	Result
Dust	Boilers (city gas)	0.1
	Co-generation (city gas)	0.05
NOx	Boilers (city gas)	150
	Co-generation (city gas)	600

■ Groundwater

Item measured	Environmental Standard	Result
Trichloroethylene	0.03	ND~0.004
Cis-1,2-Dichloroethylene	0.04	ND~0.016

■ No violations of laws, etc. ■ No complaints

■ PRTR Data

Substance name	Substance number (item number)	Amount handled	Volume emitted			Volume moved		Volume recycled	Total removed (processed)	Total consumed (products)
			Into the air	Into bodies of water	Into the ground	Volume moved via sewers	Volume moved as waste			
2-Imidazolidin thionate	42	2,506	0	0	0	0	376	0	0	2,130
Toluene	300	1,370	918	0	0	0	208	244	0	0

■ Data for use of resources/volume emitted

Category	Result	
Waste	Volume generated	1,579
	Volume emitted	1,191
	Final volume disposed	0
Greenhouse gas	CO ₂ emissions	13,000
Water	Volume used	28.9

■ Water (Water Pollution Control Law, prefectural regulations, etc.)

Item measured	Regulation value	Result
pH	5.8~8.6	7.3
BOD (Biochemical Oxygen Demand)	25	6.2
SS	30	2.3
Oil content	5	ND
Total nitrogen	120	1.9
Total phosphorus	16	0.5
Thiram	0.06	ND

Morimachi Plant

1310-128
Mutsumi, Mori,
Shuchi, Shizuoka,
Japan
437-0213

Main Products

• Weatherstrips
• Functional Parts

■ Air (Air Pollution Control Law, prefectural regulations, etc.)

Item measured	Regulation value	Result
Dust	Boilers (heavy oil)	0.1
NOx	Boilers (heavy oil)	150

- A case of environmental regulation violation*
- Water quality tests of plant wastewater indicated that BOD temporarily exceeded the standard in Shizuoka Prefectural environmental protection regulations.
 - After the excess was discovered, wastewater outflow was immediately stopped and measures to prevent recurrence were implemented under the guidance of Shizuoka Prefecture.
 - Afterward, we have continued to maintain levels under the standard.

■ No complaints

■ PRTR Data

Substance name	Substance number (item number)	Amount handled	Volume emitted			Volume moved		Volume recycled	Total removed (processed)	Total consumed (products)
			Into the air	Into bodies of water	Into the ground	Volume moved via sewers	Volume moved as waste			
Water-soluble compounds of zinc	1	1,456	0	0	0	0	58	58	0	1,340
Antimony and its compounds	31	4,129	0	0	0	0	206	41	0	3,881
2-Imidazolidin thionate	42	4,215	0	0	0	0	169	169	0	3,878
Ethylbenzene	53	9,060	6,088	0	0	0	1,123	1,413	0	435
Xylene	80	10,524	7,091	0	0	0	1,324	1,633	0	477
Tetraethylthiuram disulfide (Also known as disulfiram)	259	1,683	0	0	0	0	91	0	0	1,592
Thiuram	268	9,719	0	0	0	0	525	0	0	9,194
Toluene	300	31,920	16,144	0	0	0	5,724	9,196	0	856
Bis (N,N-dimethyl dithiocarbamate) zinc	328	4,772	0	0	0	0	191	191	0	4,390
Phthalic anhydride	413	990	0	0	0	0	46	9	0	935
Methylenbis (4,1-phenylene) = diisocyanate	448	2,976	0	0	0	0	298	0	0	2,678
2-Mercaptobenzothiazole	452	35,917	0	0	0	0	1,940	0	0	33,978

■ Data for use of resources/volume emitted

Category	Result	
Waste	Volume generated	6,105
	Volume emitted	4,658
	Final volume disposed	0
Greenhouse gas	CO ₂ emissions	23,600
Water	Volume used	16.9

■ Water (Water Pollution Control Law, prefectural regulations, etc.)

Item measured	Regulation value	Result
pH	5.8~8.6	7.5
BOD (Biochemical Oxygen Demand)	25	16.9*
SS	50	6.5
Oil content	5	ND
Thiram	0.06	ND
Zinc	2	0.14

※ MAX:92.5

Heiwacho Plant

710 Origuchi,
Shimomiyake,
Heiwa, Inazawa,
Aichi, Japan
490-1312

Main Products

- Functional Parts
- Safety System Products
- Optoelectronic Products

■ Air (Air Pollution Control Law, prefectural regulations, etc.)

Item measured	Regulation value	Result
Dust	Boilers (heavy oil)	0.15
	Boilers (city gas)	0.05
	Co-generation (city gas)	0.05
NOx	Boilers (heavy oil)	140
	Boilers (city gas)	120
	Co-generation (city gas)	200

■ No violations of laws, etc. ■ No complaints

■ PRTR Data

Substance name	Substance number (item number)	Amount handled	Volume emitted			Volume moved		Volume recycled	Total removed (processed)	Total consumed (products)
			Into the air	Into bodies of water	Into the ground	Volume moved via sewers	Volume moved as waste			
2-Aminoethanol	20	8,007	1	0	0	16	7,991	0	0	0
Methylnaphthalene	438	1,883	10	0	0	0	0	0	1,874	0

■ Data for use of resources / volume emitted

Category	Result	
Waste	Volume generated	1,746
	Volume emitted	461
	Final volume disposed	0
Greenhouse gas	CO ₂ emissions	21,200
	PFC emissions	200
	HFC emissions	0
Water	Volume used	18.3

■ Water (Sewerage Law, prefectural regulations, etc.)

Item measured	Regulation value	Result
pH	5~9	7.4
BOD (Biochemical Oxygen Demand)	600	91
SS	600	71.4
Oil content	30	4.4
Total nitrogen	240	18.9
Total phosphorus	32	1.8
Fluorine	8	0.06

Inazawa Plant

1 Komeyasakai,
Kitajima, Inazawa,
Aichi, Japan
492-8542

Main Products

- Interior and Exterior Parts
- Functional Parts

■ Air (Air Pollution Control Law, prefectural regulations, etc.)

Item measured	Regulation value	Result
NOx	Boilers (city gas)	150
	Co-generation (city gas)	600

■ Groundwater

Item measured	Environmental Standard	Result
Trichloroethylene*1	0.03	ND
Cis-1,2-Dichloroethylene*1	0.04	ND ~ 0.004

*1 Substances that have no record of being used.

■ No violations of laws, etc. ■ No complaints

■ PRTR Data

Substance name	Substance number (item number)	Amount handled	Volume emitted			Volume moved		Volume recycled	Total removed (processed)	Total consumed (products)
			Into the air	Into bodies of water	Into the ground	Volume moved via sewers	Volume moved as waste			
Ethylbenzene	53	1,518	853	0	0	0	255	106	0	304
Xylene	80	3,715	2,080	0	0	0	632	260	0	743
Chromium and trivalent chromium compounds	87	4,810	0	39	0	0	3,810	0	0	962
Hexavalent chromium compounds	88	4,810	0	0	0	0	0	0	4,810	0
Copper water-soluble salts (excluding complex salts)	272	10,005	0	100	0	0	0	0	9,905	0
Toluene	300	28,722	15,968	0	0	0	5,553	2,011	0	5,190
Nickel metal	308	133,133	0	0	0	0	0	0	133,133	0
Nickel compounds	309	148,994	0	30	0	0	19,339	0	0	129,625
Bis (2-ethylhexyl) phthalate	355	3,241	0	0	0	0	227	0	0	3,014
Water-soluble salts of peroxodisulfuric acid	395	9,050	0	0	0	0	0	0	9,050	0
Boron compound	405	2,231	0	22	0	0	0	0	2,209	0

■ Data for use of resources / volume emitted

Category	Result	
Waste	Volume generated	4,556
	Volume emitted	2,131
	Final volume disposed	0
Greenhouse gas	CO ₂ emissions	22,300
Water	Volume used	53.1

■ Water (Water Pollution Control Law, prefectural regulations, etc.)

Item measured	Regulation value	Result
pH	5.8~8.6	7.2
BOD (Biochemical Oxygen Demand)	25	8.8
SS	30	1.3
Oil content	5	ND
Total nitrogen	120	24.3
Total phosphorus	16	1.92
Hexavalent chromium	0.5	ND
Total chromium	2	0.15
Copper	1	0.11
Fluorine	15	0.08
Boron	30	4

Bisai Plant

40
Higashishimoshiro,
Meichi, Ichinomiya,
Aichi, Japan
494-8502

Main Products

• Interior and Exterior Parts
• Safety System Products

■ Air (Air Pollution Control Law, prefectural regulations, etc.)

Item measured	Regulation value	Result
Dust	Boilers (city gas)	0.05
	Co-generation (city gas)	0.05
NOx	Boilers (city gas)	150
	Co-generation (city gas)	600

■ No violations of laws, etc. ■ No complaints

■ PRTR Data

Substance name	Substance number (item number)	Amount handled	Volume emitted			Volume moved		Volume recycled	Total removed (processed)	Total consumed (products)
			Into the air	Into bodies of water	Into the ground	Volume moved via sewers	Volume moved as waste			
Ethylbenzene	53	8,193	4,594	0	0	0	1,387	574	0	1,639
Xylene	80	9,557	5,360	0	0	0	1,616	669	0	1,911
1,3,5-Trimethylbenzene	297	1,036	582	0	0	0	174	73	0	207
Toluene	300	21,786	12,396	0	0	0	3,668	1,484	0	4,239
I-Bromopropane	384	1,064	0	0	0	0	0	1,064	0	0
Methylenebis (4,1-phenylene) = diisocyanate	448	170,687	0	0	0	0	624	0	0	170,063

■ Data for use of resources / volume emitted

Category	Result	
Waste	Volume generated	2,418
	Volume emitted	365
	Final volume disposed	0
Greenhouse gas	CO ₂ emissions	17,100
	SF ₆ emissions	2,300
Water	Volume used	10.9

■ Water (Sewerage Law, prefectural regulations, etc.)

Item measured	Regulation value	Result
pH	5.7~8.7	7.1
BOD (Biochemical Oxygen Demand)	300	69.7
SS	300	38.7
Oil content	30	2.7

Seto Plant

141 Sosaku,
Seto, Aichi, Japan
489-0843

Main Products

• Interior and Exterior Parts

■ Air (Air Pollution Control Law, prefectural regulations, etc.)

Item measured	Regulation value	Result
Dust	Boilers (kerosene)	0.2
NOx	Boilers (kerosene)	150

■ No violations of laws, etc. ■ No complaints

■ PRTR Data

Substance name	Substance number (item number)	Amount handled	Volume emitted			Volume moved		Volume recycled	Total removed (processed)	Total consumed (products)
			Into the air	Into bodies of water	Into the ground	Volume moved via sewers	Volume moved as waste			
Xylene	80	8,363	230	0	0	0	60	24	7,980	69
1,2,4-Trimethylbenzene	296	9,254	46	0	0	0	0	0	9,208	0
Methylenebis (4,1-phenylene) = diisocyanate	448	60,720	0	0	0	0	6,072	0	0	54,648

■ Data for use of resources / volume emitted

Category	Result	
Waste	Volume generated	871
	Volume emitted	236
	Final volume disposed	0
Greenhouse gas	CO ₂ emissions	5,700
Water	Volume used	2.7

■ Water (Water Pollution Control Law, prefectural regulations, etc.)

Item measured	Regulation value	Result
pH	5.8~8.6	7.3
BOD (Biochemical Oxygen Demand)	20	0.9
SS	20	0.6
Total nitrogen	10	1.1
Total phosphorus	4	0.04

Kanagawa Plant

19-5 Suzukawa,
Isehara, Kanagawa,
Japan
259-1146

Main Products

• Interior and Exterior Parts
• Functional Parts

■ No violations of laws, etc. ■ No complaints

■ Data for use of resources / volume emitted

Category	Result	
Waste	Volume generated	41
	Volume emitted	23
	Final volume disposed	0
Greenhouse gas	CO ₂ emissions	700
Water	Volume used	0.2

Kitakyushu Plant

1-2 Kitahoraoka
Maeda, Yahata-higashi, Kitakyushu, Fukuoka, Japan
805-0058

Main Products

- Interior and Exterior Parts
- Weatherstrips
- Functional Parts
- Safety System Products

■ No violations of laws, etc. ■ No complaints

■ PRTR Data

Substance name	Substance number (item number)	Amount handled	Volume emitted			Volume moved		Volume recycled	Total removed (processed)	Total consumed (products)
			Into the air	Into bodies of water	Into the ground	Volume moved via sewers	Volume moved as waste			
Ethylbenzene	53	3,209	1,800	0	0	0	542	225	0	642
Xylene	80	3,942	1,786	0	0	0	585	1,020	0	552
Chromium and trivalent chromium compounds	87	4,853	0	39	0	0	3,844	0	0	971
Hexavalent chromium compounds	88	4,853	0	0	0	0	0	0	4,853	0
Toluene	300	26,221	11,869	0	0	0	3,844	6,902	0	3,606
Nickel	308	35,564	0	0	0	0	0	0	35,564	0
Nickel compounds	309	33,167	0	7	0	0	4,305	0	0	28,855

■ Data for use of resources / volume emitted

Category		Result
Waste	Volume generated	2,536
	Volume emitted	1,957
	Final volume disposed	0
Greenhouse gas	CO ₂ emissions	8,100
Water	Volume used	2.2

Fukuoka Plant

2223-1 Kurahisa, Miyawaka, Fukuoka, Japan
823-0017

Main Products

- Interior and Exterior Parts
- Functional Parts
- Safety System Products

■ No violations of laws, etc. ■ No complaints

■ Water (Water Pollution Control Law, prefectural regulations, etc.)

Item measured	Regulation value	Result
pH	5.8~8.6	7.6
BOD (Biochemical Oxygen Demand)	10	0.5
SS	25	0.3
Oil content	2	ND

■ PRTR Data

Substance name	Substance number (item number)	Amount handled	Volume emitted			Volume moved		Volume recycled	Total removed (processed)	Total consumed (products)
			Into the air	Into bodies of water	Into the ground	Volume moved via sewers	Volume moved as waste			
Ethylbenzene	53	6,703	3,796	0	0	0	1,097	469	0	1,341
Xylene	80	7,808	4,423	0	0	0	1,277	547	0	1,562
Toluene	300	25,515	14,421	0	0	0	4,205	1,786	0	5,103

■ Data for use of resources / volume emitted

Category		Result
Waste	Volume generated	1,318
	Volume emitted	157
	Final volume disposed	0
Greenhouse gas	CO ₂ emissions	4,300
Water	Volume used	1.8

Saga Plant

9966-9 Kawako, Wakaki, Takeo, Saga, Japan
843-0151

Main Products

- Optoelectronic Products

■ Air (Air Pollution Control Law, prefectural regulations, etc.)

Item measured	Regulation value	Result
Dust Boilers (city gas)	0.1	ND
NOx Boilers (city gas)	150	35

■ Water (Water Pollution Control Law, prefectural regulations, etc.)

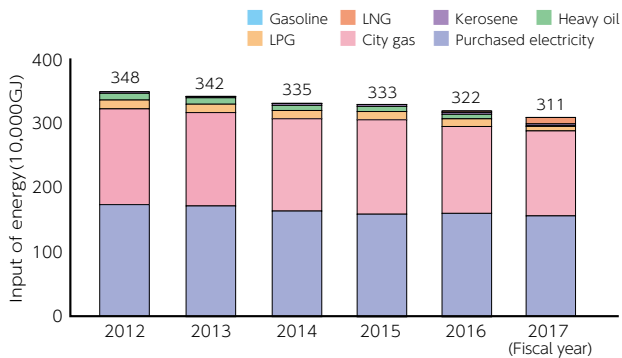
Item measured	Regulation value	Result
pH	5.8~8.6	7.4
BOD (Biochemical Oxygen Demand)	20	0.8
SS	50	1.7
Oil content	5	0.5

■ No violations of laws, etc. ■ No complaints

■ Data for use of resources / volume emitted

Category		Result
Waste	Volume generated	6
	Volume emitted	6
	Final volume disposed	0
Greenhouse gas	CO ₂ emissions	1,400
	PFC emissions	0
Water	Volume used	1.1

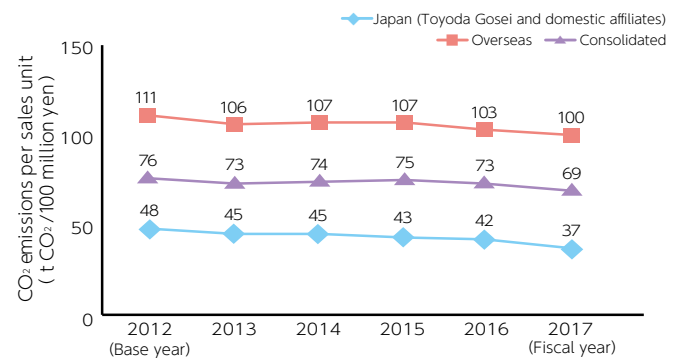
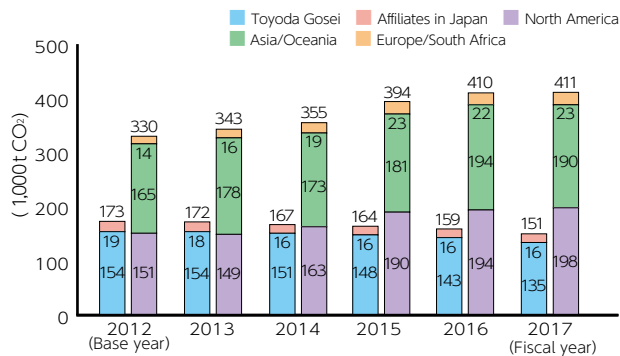
Input of energy : Toyota Gosei Co., Ltd.



Data on Greenhouse Gases, Emissions Volumes and Water Resource Usage

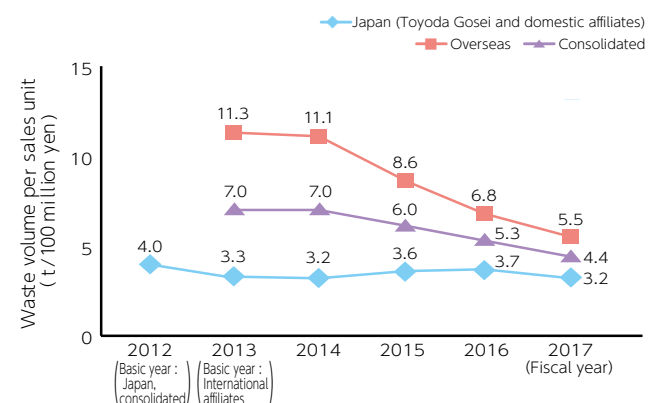
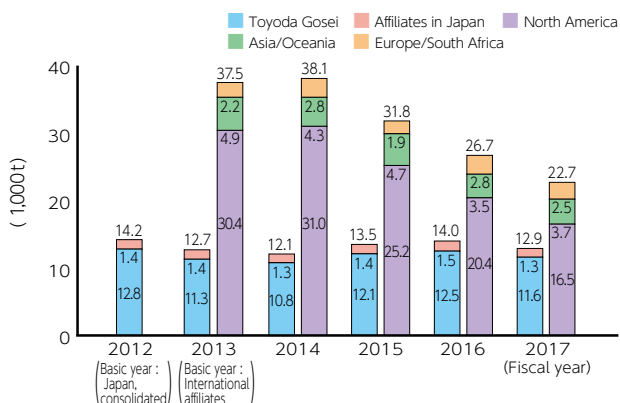
These data may differ in parts from the data in the Toyota Gosei Report, as they include data from a larger number of companies

CO₂ emissions/CO₂ emissions per sales unit trends (attributable to energy)

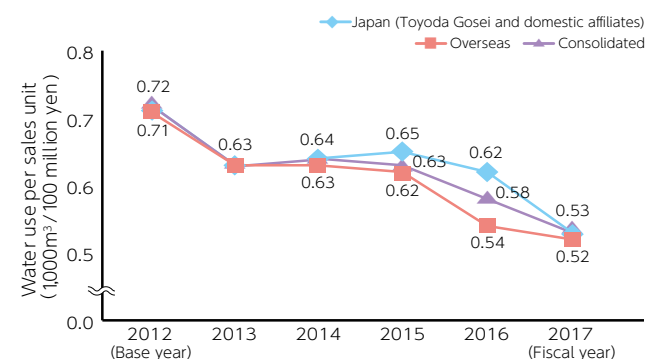
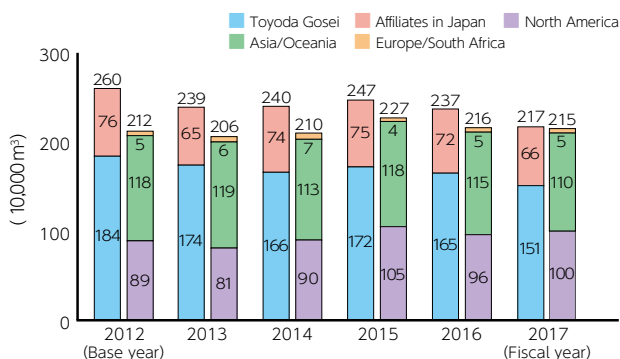


CO₂ conversion calculation: International locations GHG Protocol (2001)
Locations in Japan 1990 Keidanren factor fixed value

Waste volume / Waste volume per sales unit trends



Water use / Water use per sales unit trends



Chemical Substance Handling and Emissions Volumes (Japanese and Overseas Affiliates)

The Toyota Gosei Group manages chemical substance handling volumes, emissions volumes, movement volumes, and VOC emissions volumes based on the laws of each country at our affiliates worldwide.

Affiliates in Japan

Japan, 1 company

Applicable regulations: Laws related to improved monitoring and management of the amounts of specified chemical substances released into the environment
(Unit : kg/year)

Name of chemical substance	Substance number (item number)	Amount handled	Volume emitted			Volume moved	
			Into air	Into water	Into ground	Volume moved via sewers	Volume moved as waste
Thiram	268	1,317	0	0	0	0	40
1,2,4-Trimethylbenzene	296	1,148	0	0	0	0	0

International affiliates

USA, 1 company

Applicable regulation: Toxic Release Inventory

(Unit : lbs/year)

	(8.1a) Own company landfill	(8.1b) Other own company emissions (air, water, etc.)	(8.1c) Another company landfill	(8.1d) Other emissions in another company (air, water, etc.)	(8.2) Own company heat recovery	(8.3) Another company heat recovery	(8.4) Own company recycle	(8.5) Another company recycle	(8.6) Own company disposal	(8.7) Another company disposal
Chrome	0	0	0	0	0	0	0	571,226	0	0
Copper	0	540	0	111,461	0	0	0	29,639	0	0
Manganese	0	0	0	0	0	0	0	41,709	0	0
Nickel	0	461	0	63,310	0	0	0	75,816	0	0
Nitric acid	0	800	0	0	0	0	0	1,366	0	143,971
ammonia	0	0	0	4,793	0	0	0	6	0	7,304
Diisocyanate	0	0	0	0	0	1,200	0	0	0	0

8.1a : Total on-site disposal to Class I Underground Injection Wells, RCRA Subtitle C landfills, and other landfills.

8.1b : Total other on-site disposal or other releases.

8.1c : Total off-site disposal to Class I Underground Injection Wells, RCRA Subtitle C landfills, and other landfills.

8.1d : Total other off-site disposal or other releases.

8.2 : Quantity Used for Energy Recovery Onsite.

8.3 : Quantity Used for Energy Recovery Offsite.

8.4 : Quantity Recycled Onsite.

8.5 : Quantity Recycled Offsite.

8.6 : Quantity Treated Onsite.

8.7 : Quantity Treated Offsite.

Canada, 1 company

Applicable regulations:

National Pollutants Release Inventory

(Unit : t/year)

VOC emissions	54
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Taiwan, 1 company

Applicable regulations:

Air Pollution Control Act

(Unit : t/year)

VOC emissions	91
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Chemical substance reduction targets

We are working toward a target of totally eliminating phthalic acid by 2019 based on overseas law.