

- [P e r i o d] • April, 2016 to March, 2017
 [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

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~0.003
Cis-1,2-Dichloroethylene	0.04	ND~0.005

*Refer to Toyoda Gosei Report P.29

■ 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	3,075	0	0	0	0	461	0	0	2,614
Toluene	300	1,268	860	0	0	0	194	213	0	0

Data for use of resources/volume emitted

Category	Result	
Waste	Volume generated	1,635
	Volume emitted	1,264
	Final volume disposed	0
Greenhouse gas	CO ₂ emissions	13,200
Water	Volume used	24.9

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

Item measured	Regulation value	Result
pH	5.8~8.6	7.4
BOD (Biochemical Oxygen Demand)	25	6.1
SS	30	2.0
Oil content	5	0.1
Total nitrogen	120	1.7
Total phosphorus	16	0.6
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

■ 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			
Water-soluble compounds of zinc	1	1,508	0	0	0	0	60	60	0	1,387
Antimony and its compounds	31	3,934	0	0	0	0	197	39	0	3,698
2-Imidazolidin thionate	42	4,315	0	0	0	0	173	173	0	3,969
Ethylbenzene	53	9,735	6,542	0	0	0	1,207	1,519	0	467
Xylene	80	11,273	7,592	0	0	0	1,414	1,750	0	516
Disulfiram	259	1,643	0	0	0	0	89	0	0	1,555
Thiuram	268	10,035	0	0	0	0	542	0	0	9,493
Toluene	300	37,635	18,797	0	0	0	6,854	11,007	0	977
Bis (N,N-dimethyl dithiocarbamate) zinc	328	5,247	0	0	0	0	210	210	0	4,827
Phthalic anhydride	413	1,136	0	0	0	0	52	11	0	1,073
Methylnaphthalene	438	13,766	69	0	0	0	0	0	13,697	0
Methylenebis (4,1-phenylene) = diisocyanate	448	3,134	0	0	0	0	313	0	0	2,821
2-Mercaptobenzothiazole	452	36,511	0	0	0	0	1,972	0	0	34,540

Data for use of resources/volume emitted

Category	Result	
Waste	Volume generated	6,012
	Volume emitted	4,669
	Final volume disposed	0
Greenhouse gas	CO ₂ emissions	24,800
Water	Volume used	18.6

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

Item measured	Regulation value	Result
pH	5.8~8.5	7.5
BOD (Biochemical Oxygen Demand)	25	5.4
SS	50	5.2
Oil content	5	0.2
Thiram	0.06	ND
Zinc	0.5	0.17

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	ND
	Boilers (city gas)	0.05	ND
	Co-generation (city gas)	0.05	ND
NOx	Boilers (heavy oil)	140	64
	Boilers (city gas)	120	34
	Co-generation (city gas)	200	155

■ 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	22,818	2	0	0	46	22,771	0	0	0
Methylnaphthalene	438	3,353	17	0	0	0	0	0	3,336	0

■ Data for use of resources / volume emitted

Category	Result	
Waste	Volume generated	1,636
	Volume emitted	571
	Final volume disposed	0
Greenhouse gas	CO ₂ emissions	25,900
	PFC emissions	700
	HFC emissions	200
Water	Volume used	25.6

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

Item measured	Regulation value	Result
pH	5~9	7.4
BOD (Biochemical Oxygen Demand)	600	136
SS	600	57.5
Oil content	30	3.4
Total nitrogen	240	32.9
Total phosphorus	32	3.1
Fluorine	8	0.14

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	55
	Co-generation (city gas)	600	170

■ Groundwater

Item measured	Environmental Standard	Result
Trichloroethylene*1	0.03	ND
Cis-1,2-Dichloroethylene*1	0.04	ND~0.008

*1 Substances that have no record of being used. * Refer to Toyota Gosei Report P.29

■ 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	3,212	1,746	0	0	0	533	224	0	707
Xylene	80	5,838	3,285	0	0	0	934	409	0	1,210
Chromium and trivalent chromium compounds	87	5,338	0	43	0	0	4,228	0	0	1,068
Hexavalent chromium compounds	88	5,338	0	0	0	0	0	0	5,338	0
Copper water-soluble salts (excluding complex salts)	272	6,865	0	69	0	0	0	0	6,796	0
Toluene	300	36,550	20,462	0	0	0	6,688	2,559	0	6,842
Nickel metal	308	120,359	0	0	0	0	0	0	120,359	0
Nickel compounds	309	131,445	0	26	0	0	17,062	0	0	114,357
Bis (2-ethylhexyl) phthalate	355	3,081	0	0	0	0	216	0	0	2,866
Water-soluble salts of peroxodisulfuric acid	395	8,525	0	0	0	0	0	0	8,525	0
Boron compound	405	2,183	0	22	0	0	0	0	2,161	0

■ Data for use of resources / volume emitted

Category	Result	
Waste	Volume generated	4,547
	Volume emitted	2,287
	Final volume disposed	0
Greenhouse gas	CO ₂ emissions	21,800
Water	Volume used	57.9

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

Item measured	Regulation value	Result
pH	5.8~8.6	7.1
BOD (Biochemical Oxygen Demand)	25	7.4
SS	30	2.5
Oil content	5	ND
Total nitrogen	120	15.2
Total phosphorus	16	0.85
Hexavalent chromium	0.5	0.003
Total chromium	2	0.16
Copper	1	0.12
Fluorine	15	0.11
Boron	30	5

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	ND
	Co-generation (city gas)	0.05	ND
NOx	Boilers (city gas)	150	66
	Co-generation (city gas)	600	145

■ 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	9,051	5,151	0	0	0	1,456	634	0	1,810
Xylene	80	10,481	5,966	0	0	0	1,685	734	0	2,096
Toluene	300	21,023	12,148	0	0	0	3,376	1,426	0	4,073
I-Bromopropane	384	3,960	0	0	0	0	0	3,960	0	0
Methylenebis (4,1-phenylene) = diisocyanate	448	164,069	0	0	0	0	16,407	0	0	147,662

■ Data for use of resources/volume emitted

Category		Result
Waste	Volume generated	2,994
	Volume emitted	392
	Final volume disposed	0
Greenhouse gas	CO ₂ emissions	17,200
	SF ₆ emissions	3,400
Water	Volume used	11.1

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

Item measured	Regulation value	Result
pH	5.7~8.7	7.1
BOD (Biochemical Oxygen Demand)	300	67.0
SS	300	31.9
Oil content	30	1.4

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	ND
	Boilers (kerosene)	150	66

■ 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	9,839	733	0	0	0	197	85	8,582	243
1,2,4-Trimethylbenzene	296	9,951	49	0	0	0	0	0	9,902	0
Methylenebis (4,1-phenylene) = diisocyanate	448	79,232	0	0	0	0	7,923	0	0	71,309

■ Data for use of resources/volume emitted

Category		Result
Waste	Volume generated	894
	Volume emitted	243
	Final volume disposed	0
Greenhouse gas	CO ₂ emissions	6,000
Water	Volume used	2.9

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

Item measured	Regulation value	Result
pH	5.8~8.6	7.3
BOD (Biochemical Oxygen Demand)	20	1.4
SS	20	0.4
Total nitrogen	10	0.6
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

■ 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			
Toluene	300	1,178	722	0	0	0	143	264	0	49

■ Data for use of resources/volume emitted

Category		Result
Waste	Volume generated	88
	Volume emitted	25
	Final volume disposed	0
Greenhouse gas	CO ₂ emissions	700
Water	Volume used	0.3

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	3,107	1,797	0	0	0	471	217	0	621
Xylene	80	4,294	1,988	0	0	0	593	1,111	0	601
Chromium and trivalent chromium compounds	87	4,461	0	0	0	0	3,569	0	0	892
Hexavalent chromium compounds	88	4,461	0	0	0	0	0	0	4,461	0
Toluene	300	25,438	11,734	0	0	0	3,513	6,690	0	3,502
Nickel	308	34,386	0	0	0	0	0	0	34,386	0
Nickel compounds	309	34,386	0	0	0	0	4,471	0	0	29,915

Data for use of resources / volume emitted

Category		Result
Waste	Volume generated	3,030
	Volume emitted	2,467
	Final volume disposed	0
Greenhouse gas	CO ₂ emissions	8,300
Water	Volume used	3.0

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	7.4
BOD (Biochemical Oxygen Demand)	10	1.03
SS	25	0.6
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	3,471	2,000	0	0	0	534	243	0	694
Xylene	80	3,930	2,264	0	0	0	605	275	0	786
Toluene	300	18,890	10,884	0	0	0	2,906	1,322	0	3,778

Data for use of resources / volume emitted

Category		Result
Waste	Volume generated	1,292
	Volume emitted	155
	Final volume disposed	0
Greenhouse gas	CO ₂ emissions	3,400
Water	Volume used	1.7

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	36

■ No violations of laws, etc. ■ No complaints

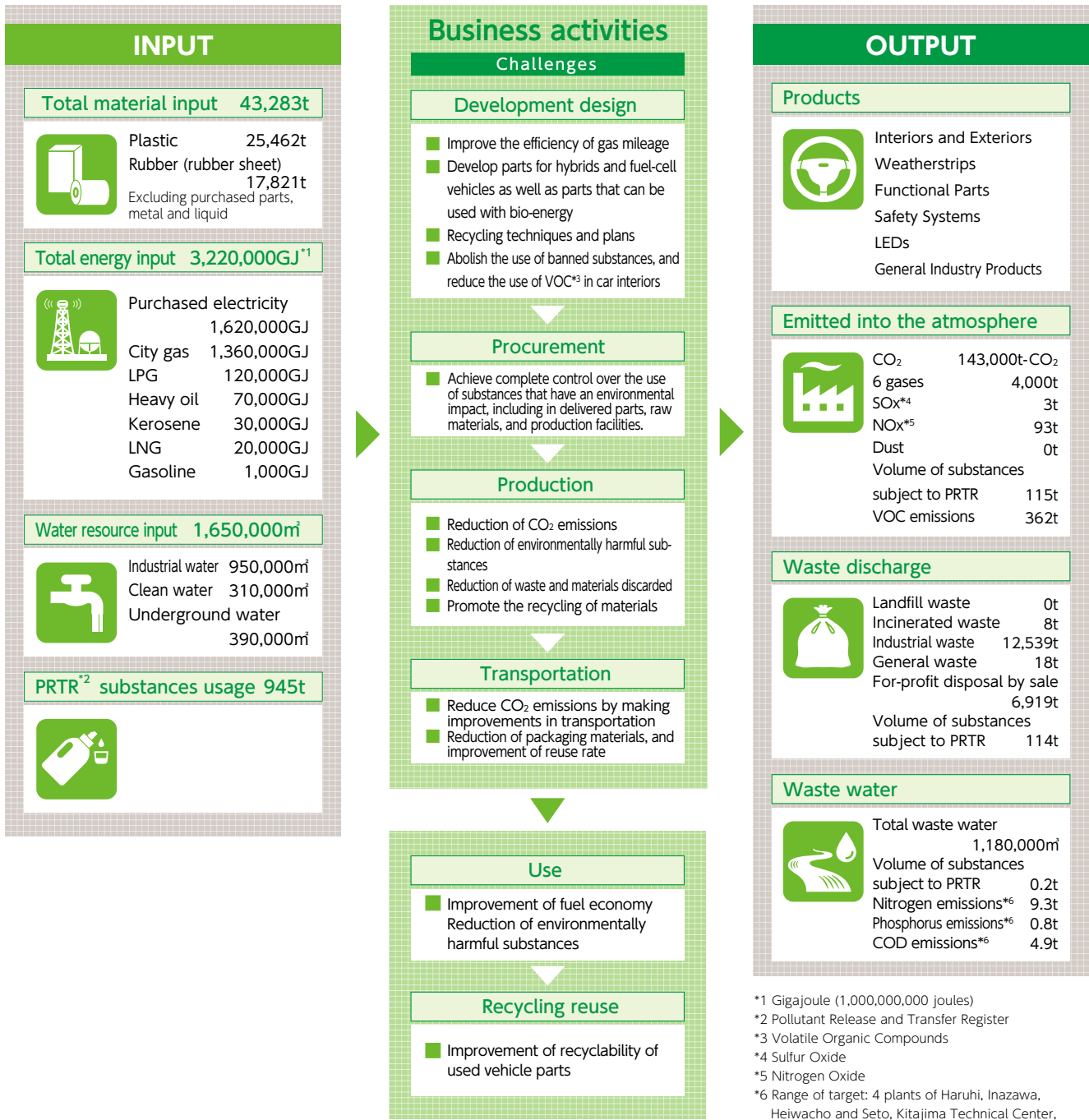
Water (Water Pollution Control Law, prefectural regulations, etc.)

Item measured	Regulation value	Result
pH	5.8~8.6	7.3
BOD (Biochemical Oxygen Demand)	20	2.4
SS	50	0.3
Oil content	5	ND

Data for use of resources / volume emitted

Category		Result
Waste	Volume generated	92
	Volume emitted	19
	Final volume disposed	0
Greenhouse gas	CO ₂ emissions	3,900
	PFC emissions	0
Water	Volume used	4.0

Resource Input and Output to the Environment in Business Activities in Fiscal 2016

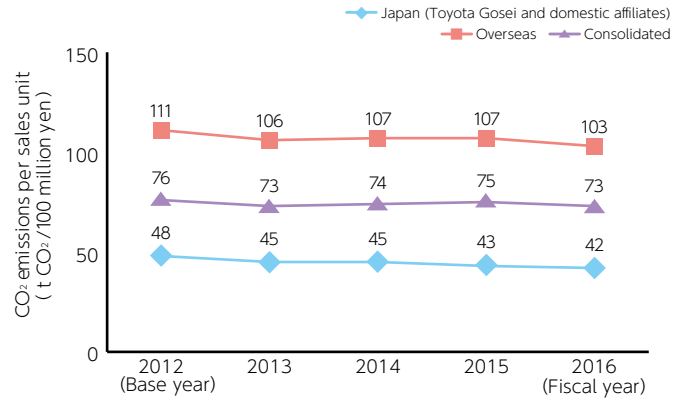
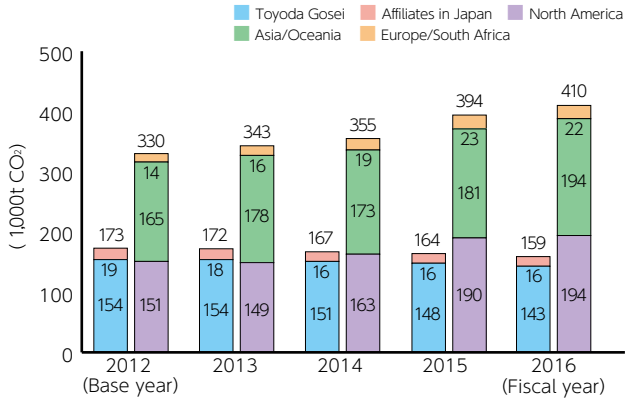


^{*1} Gigajoule (1,000,000,000 joules)
^{*2} Pollutant Release and Transfer Register
^{*3} Volatile Organic Compounds
^{*4} Sulfur Oxide
^{*5} Nitrogen Oxide
^{*6} Range of target: 4 plants of Haruhi, Inazawa, Heiwacho and Seto, Kitajima Technical Center, Miwa Technical Center and Sun-Court Inoguchi

■ Data on Greenhouse Gases, Emissions Volumes and Water Resource Usage

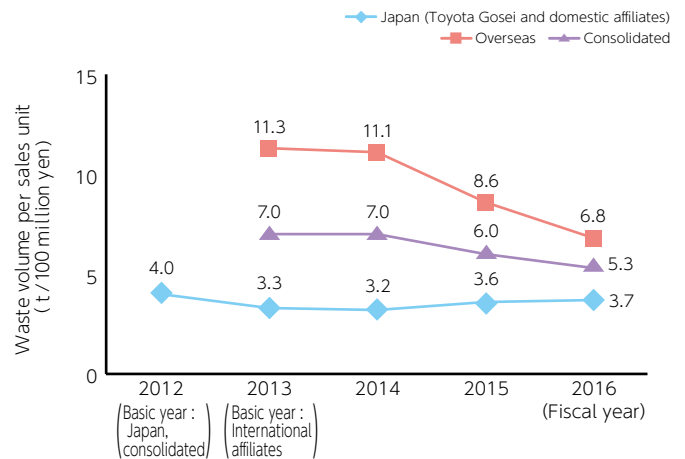
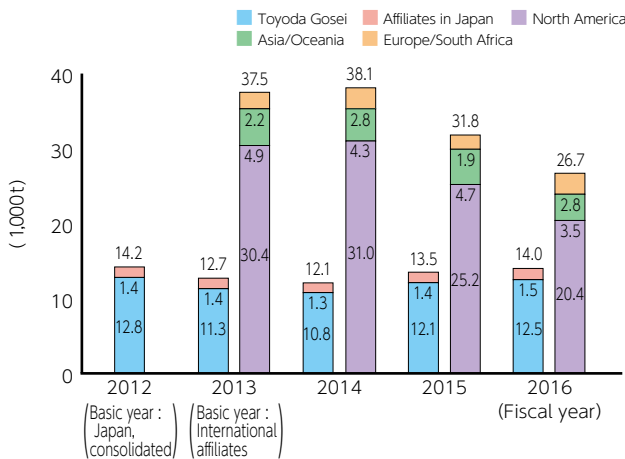
These data may differ in parts from the data in the Toyota Gosei Report, as they include data from a larger number of companies

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

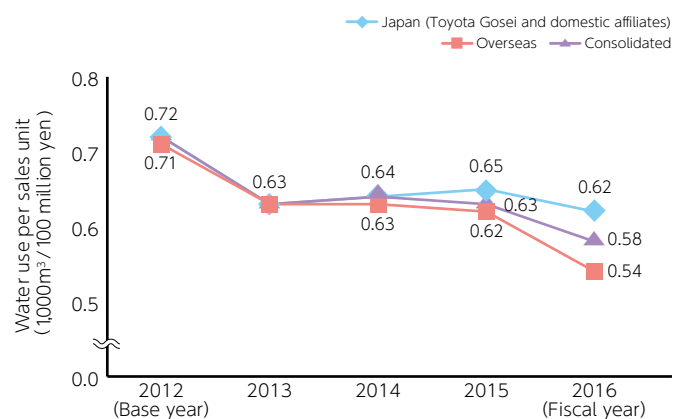
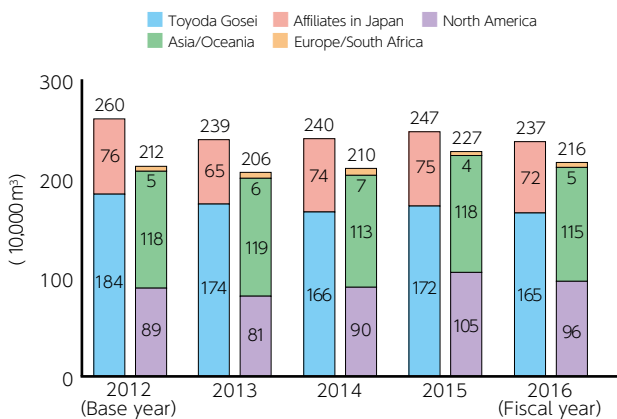


• CO₂ conversion calculation: International locations GHG Protocol (2001)
Locations in Japan 1990 Keidanren factor fixed value

■ 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 : t/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	1.6	0	0	0	0	0.05

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	0.01	0	45,299	0	0	0	292,592	0	0
Copper	0	0.15	0	15,612	0	0	0	317,704	0	0
Manganese	0	0.02	0	613	0	0	0	180,490	0	0
Nickel	0	0.19	0	23,870	0	0	0	947,130	0	0
Nitric acid	0	172.6	0	0	0	0	0	0	0	9,407
Styrene	0	0	0	0	0	0	0	0	0	0
ammonia	0	0	0	1,453	0	0	0	256	0	0
Diisocyanate	0	0	0	0	0	3,850	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	56
---------------	----

Taiwan, 1 company

Applicable regulations:

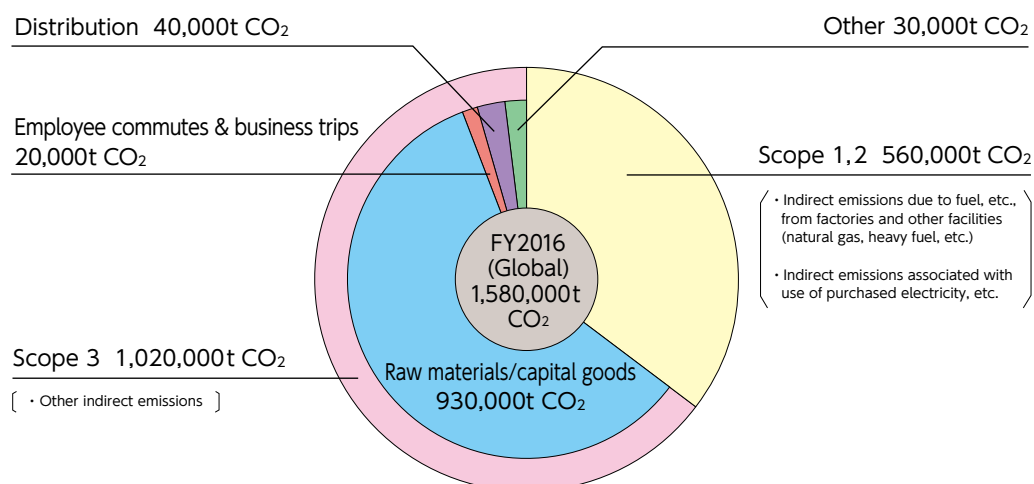
Air Pollution Control Act (Unit : t/year)

VOC emissions	55
---------------	----

Chemical substance reduction targets

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

CO₂ Emissions by Scope Level



Environmental Protection Costs

Environmental Protection Costs (Unit: ¥100 million)

Type of cost	Toyoda Gosei	Affiliates in Japan, total
Research and development costs ^{*1}	8.2	—
Costs within business areas ^{*2}	20.4	1.7
Management activity costs ^{*3}	1.3	0.2
Social activity costs ^{*4}	3.0	0.1
Costs for environmental measures ^{*5}	0.1	0
Total	33.0	2.0

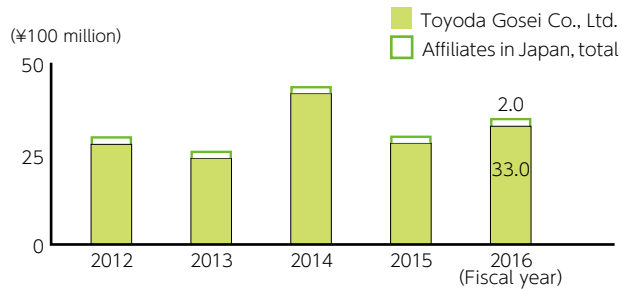
*1 Costs for research and development of products that reduce environmental impact.

*2 Costs to reduce environmental impacts from production, including pollution control, reduced energy consumption, and waste disposal.

*3 Costs for management, including education, maintenance of the environmental management system, and measurements.

*4 Costs for such measures as tree-planting and beautification.

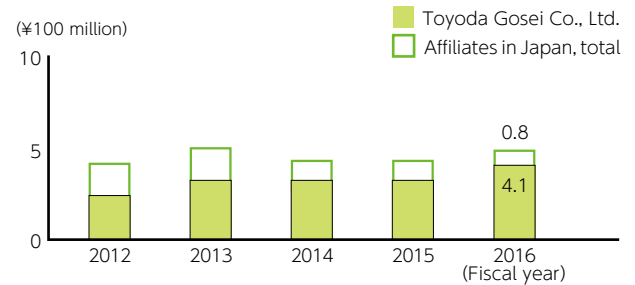
*5 Costs for dealing with environmental impacts from business operations.



Economic effect^{*6} (Unit: ¥100 million)

Item	Toyoda Gosei	Affiliates in Japan, total
Energy expenses	2.5	0.3
Waste-processing expenses	1.6	0.5
Total	4.1	0.8

*6 The economic effects calculated here are those that can be ascertained based on solid evidence.



Quantitative effect^{*7}

Item	Effect
Global warming prevention (CO ₂ reduction)	8,966t-CO ₂
Waste reductions (amount reduced)	716t
Legal compliance	Posted on Toyoda Gosei Report 2017 page29 Japan plant data described on page1-4

*7 Amounts are calculated for Toyoda Gosei alone.



Verification Statement

26 October 2017

Toyoda Gosei Co., Ltd.

Objective

SGS Japan Inc. (hereinafter referred to as "SGS") was commissioned by Toyoda Gosei Co., Ltd. (hereinafter referred to as "the Organization") to conduct independent verification based on Criteria of Verification (ISO14064-3: 2006 and the SGS verification protocol) regarding the data prepared by the Organization on the scope of verification (hereinafter referred to as "the GHG assertion"). The objective of this verification is to confirm that the GHG assertion in the Organization's applicable scope has been correctly calculated and reported in the GHG assertion in conformance with the criteria, and to express our views as a third party.

Scope

The scope of verification is limited to the assertion at the domestic plants, Head office, technical centers, distribution center and overseas plants.

GHG emissions included in this performance data are Scope 1 and 2: CO₂ emissions from energy consumption, excluded the vehicles which run outside of the sites, and Scope 3: category 7.

The period subject to report is from 1 April 2016 to 31 March 2017.

Procedure of Verification

The assertion was verified in accordance with Criteria of Verification, and the following processes were implemented at a limited level of assurance:

- Verification of the calculation system: Interviews on the measurement, tabulation, calculation and reporting methods employed by the Organization as well as review of related documents and records
- Verification of the assertion: On-site verification, review of vouchers at Morimachi Plant and Nishimizoguchi Plant, and analytical procedures and interviews carried out at Kitajima Technical Center included in the scope of verification at all works.

The criteria for this review is based on the calculation procedure of CO₂ emissions specified by the Organization and Basic Guidelines on Accounting for Greenhouse Gas Emissions throughout the Supply Chain Ver. 2.2.

Conclusion

Within the scope of the verification activities employing the methodologies mentioned above, nothing has come to our attention that caused us to believe that the Organization's the GHG assertion (Scope1 : 133,636 t-CO₂, Scope2 : 410,743 t-CO₂, Scope3 : 17,778 t-CO₂) was not calculated and reported in conformance with the criteria.

SGS Japan Inc. affirms our independence from the organization, being free from bias and conflicts of interest with the Organization.

For and on behalf of SGS Japan Inc
Senior Executive & Business Manager
Certification and Business Enhancement

Yuji Takeuchi

Signed:

