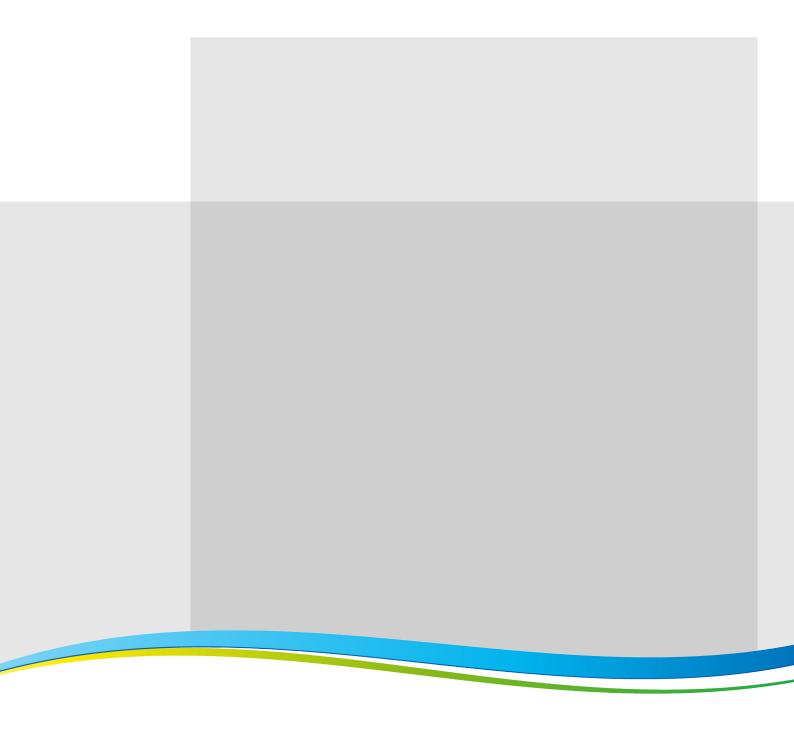


Daiichi Sankyo Group Environmental Data Book 2016



Position of This Book

The information of this book complements Daiichi Sankyo Group Value Report 2016 and the environmental data on our website. Please see them in addition.

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Basic Environmental Management Policy

Safeguarding the environment is the foundation of all Group operational management. We pursue environmental management that contributes to a sustainable society and enhances our good corporate citizenship.

We implement the respective items listed below.

- Confirm the environmental impacts of each business process, from R&D to production, distribution, usage and consumption, and disposal, and reduce environmental loads.
- 2. Comply strictly with environmental laws and ordinances, regional covenants, and voluntary standards.
- 3. Construct, operate, evaluate, and enhance an environmental management system.
- 4. Use resources and energy efficiently, reduce greenhouse gas emissions, and recycle and reduce waste.
- 5. Protect the environment and respect biodiversity by helping preserve the ecosystem.
- 6. Address environmental risks.
- 7. Educate and enlighten about the environment.
- 8. Communicate with internal and external stakeholders about environmental issues.



Environmental Management System

1-1 Our Stance on Environment Management

Environmental issues such as global warming and extreme weather could be seen as very closely related to our lifestyles and work. We are practicing environmental management on a global scale in accordance with the Daiichi Sankyo Group Corporate Conduct Charter and the Basic Environment Management Policy, which sets forth rules for these management practices. We thereby aim to address such environmental issues through responsible corporate activities.

1-2 Promoting Environmental Management

To appropriately address environmental issues, we regard response to climate change, chemical substances management, water consumption control, waste management, and consideration for biodiversity as our main CSR challenges, while taking into account the societal demand and expectation for environmental conservation as well as the relationship with medium- and long-term business activities. Taking these CSR challenges into consideration, we promote environmental management by establishing the Fourth Medium-term Environmental Management Policy.

Fourth Medium-Term Environmental Management Policy and Goals (Numerical Targets and Main Activities)

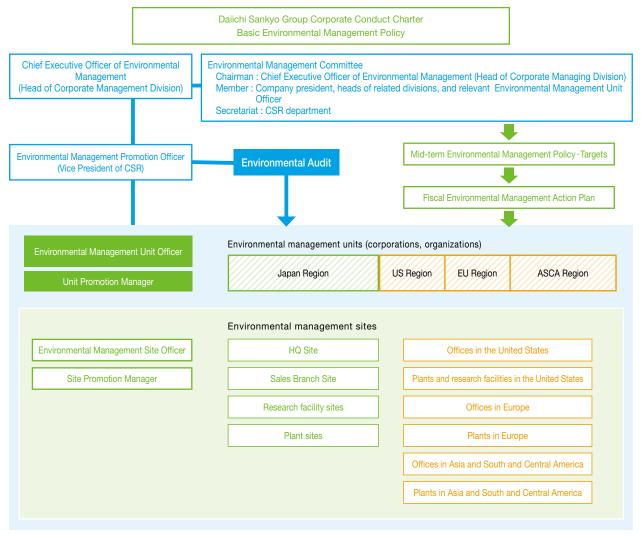
Fourth Medium-Term Environmental Management Policy		Numerical Targets and Main Activities
Lower the environmental impact of all operations by conserving energy and resources, or reducing greenhouse gas	Entire group	 • CO₂ emissions: 5.6% reduction compared to fiscal 2015 • Total waste generated: 5% reduction compared to fiscal 2015 • Water consumption: 5% reduction compared to fiscal 2015 • Recycle waste • Utilize renewable energy
emissions and waste.	Group companies in Japan	Maintain 1% or less of the final disposal rate Office paper consumption: 5% reduction compared to fiscal 2015 Cooperate with suppliers to reduce environmental burdens
Lower environmental risks by continuously improving our environmental management systems in such areas as environmental compliance,	Entire group	Comply with environment-related laws and regulations through environmental audit and compliance evaluation Prevent environmental accidents and minimize pollution risks Identify and continuously reduce pollutant emissions to the atmosphere and waters
pollution prevention, and chemical substances management.	Group companies in Japan	Optimize the environmental management system Prevent improper waste treatment
Manage the external risks that have the potential to generate a change in business operations, such as climate change and water risks.	Entire group	Identify and address climate change and water risks
Ensure that operations reflect the need to preserve biodiversity	Entire group	Facilitate environmental conservation activities in cooperation with business partners and pursue procurement that takes environmental burdens and biodiversity into account Take proper care of the environment around business facilities
and use ecosystem services sustainably.	Group companies in Japan	Evaluate environmental impacts by water discharged from plants and research facilities Identify and minimize environmental burdens by utilizing biodiversity indicators Contribute to a biodiversity-friendly society
Enhance environmental disclosure, improve the	Entire group	Improve the reliability of discloser data through third-party verification Enhance environmental awareness
reliability of information, and engage in environmental communications with stakeholders.	Group companies in Japan	Provide environmental education throughout the entire company and professional education Communicate with communities, suppliers, NPOs, and other entities

1-3 Environmental Management Promotion System

The head of the Corporate Management Division of Daiichi Sankyo serves as the chief executive officer of environmental management and oversees environmental management on a Group basis, while the vice president of the CSR Department promotes environmental management. As for the Group's environmental management promotion system, we have set up environmental management units based on the corporations and internal companies that manage businesses. Each environmental management unit defines environmental management sites as necessary out of consideration for their region and function.

In addition, we have established an Environmental Management Committee chaired by the chief executive officer of environmental management as part of our corporate governance structure. This committee discusses the formulation of environmental management policies and other important matters.

Diagram of the Daiichi Sankyo Group Environmental Management Promotion System



1-4 ISO 14001 Certification

Business facilities with production functions that have high environmental burdens have acquired ISO 14001 certification.

List of ISO 14001 Certified Plants (As of the End of August 2016)

Company	Site	ISO 14001 Acquisition Period	
Daiichi Sankyo Propharma Co., Ltd.	Hiratsuka Plant*1	November, 2000	
Dalichi Sankyo Propharma Co., Ltd.	Takatsuki Plant	June, 2001	
	Onahama Plant	January, 1998	
Daiichi Sankyo Chemical Pharma Co., Ltd.	Tatebayashi Plant*2	April, 2012	
Dalicili Salikyo Chemical Filamia Co., Ltd.	Hiratsuka Plant	November, 1999	
	Odawara Plant	January, 2001	
Daiichi Sankyo Brasil Farmacêutica	Alphaville Plant	February, 2012	

^{*1} Includes Daiichi Sankyo, Daiichi Sankyo Chemical Pharma, and Daiichi Sankyo Happiness

Furthermore, we conduct environmental management in other research centers using a system in accordance with ISO14001.

1-5 Environmental Supply Chain Management

Main Efforts	Details
Setting of CSR procurement standards	We request our business partners to make efforts based on the CSR procurement standards of our group. The environment-related items in the CSR procurement standards are shown below: (1) Reinforcement of the environmental management system (2) Consideration for product safety (3) Enhancement of green procurement (4) Response to biodiversity conservation
Supplier questionnaires	We carry out a CSR self-check survey every three years to further promote CSR procurement. In fiscal 2015, we implemented a self-check based on the following six perspectives: (1) complying with laws and regulations and social norms, (2) promoting sound business operations, (3) taking proper environmental care, (4) securing optimal quality and cost, (5) ensuring stable supply, and (6) handling confidential information properly. Based on the survey results, we are planning to have discussions with our main business partners to improve CSR procurement.
Cooperation with logistics partners	We request our logistics partners to strive to reduce greenhouse gas emissions, such as by sharing the transportation weight and distance data of product transportation, stopping excessive idling on the premises of logistics centers, and practicing eco-driving.
Cooperation for environment audit	Partner companies storing and delivering our products and promotional goods cooperate for the environment audit on environment-related laws and regulations including waste management.

1-6 Environmental Auditing

Business Facilities Subject to Environment Audit in Fiscal 2015

	Onahama Plant
Dalichi Sankyo Chemical Pharma	Tatebayashi Plant
	Hiratsuka Plant
Kitasato Daiichi Sankyo Vaccine	Kitamoto Office
Luitpold (U.S.)	Shirley Office

^{*}There were no findings that might cause serious environmental risks.

^{*2} Includes Daiichi Sankyo

1-7 Response to Accidents and Other Emergencies

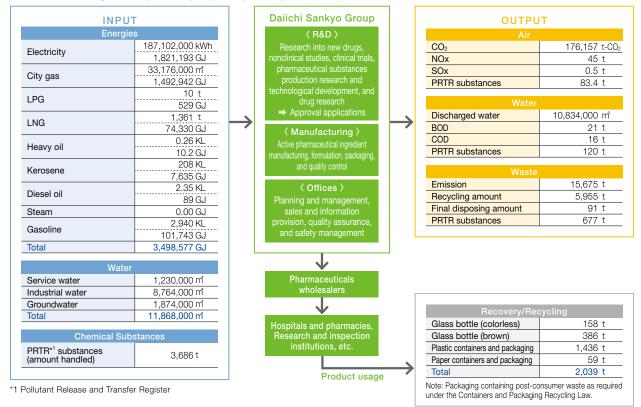
Plants and research facilities with particularly high environmental risks have protocols to prepare for and respond to emergencies, including prevention and mitigation of environmental pollution due to disasters and accidents. They also conduct periodic education and emergency drills while maintaining necessary equipment.

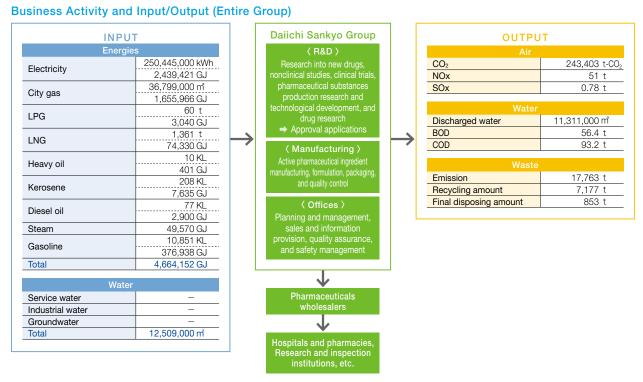
Emergency Drills Conducted (Plants and Research Facilities)

Company	Business Facility	Details of Main Emergency Drills (Possible accidents/incidents)	Number of Emergency Drills	Total Number of Participants
Daiichi Sankyo	Shinagawa R&D Center	Large-scale earthquake and fire	6 drills	1,335
Daliciii Sarikyo	Kasai R&D Center	Large-scale earthquake and fire	11 drills	1,623
	Hiratsuka Plant	Large-scale earthquake, fire, and leakage	36 drills	1,765
Daiichi Sankyo Propharma	Takatsuki Plant	Large-scale earthquake, fire, leakage, power outage, oxygen deprivation, and tank pressure rise	12 drills	231
	Onahama Plant	Large-scale earthquake, fire, and leakage	19 drills	787
Daiichi Sankyo Chemical Pharma	Tatebayashi Plant	Large-scale earthquake, fire (including genetically modified organisms), leakage (including genetically modified organisms), and loss of poisonous substances	12 drills	1,021
	Hiratsuka Plant	Large-scale earthquake, fire, leakage, and power outage	15 drills	487
	Odawara Plant	Large-scale earthquake and fire	33 drills	963
Kitasato Daiichi Sankyo Vaccine	Kitamoto Office	Large-scale earthquake and fire	3 drills	1,041
Asubio Pharma	(Kobe)	Large-scale earthquake, fire, and flood	4 drills	280

1-8 Business Activity and Environmental Performance

Business Activity and Input/Output (Group in Japan)





1-9 Environmental Accounting

Environment Conservation Cost (Group in Japan)

Unit: million yen

Environmental Item	FY2	014	FY2015		
Environmental Item	Investment	Cost	Investment	Cost	
Pollution Prevention Cost	63	144	884	183	
Global Environmental Conservation Cost	2,366	468	3,183	649	
Resource Circulation Cost	0	598	0	415	
Upstream / Downstream Costs	0	65	0	56	
Administration Cost	5	939	74	880	
R&D Cost	0	33	0	33	
Social Activity Cost	0	3	0	3	
Environmental Remediation Cost	0	63	0	885	
Total	2,434	2,313	4,140	3,102	

Economic Benefit (Group in Japan)

Unit: million yen

	FY2014	FY2015
Value of sales of valuables	26	32

Environmental Conservation Benefit (Group in Japan)

	Unit	FY2014	FY2015	Increase/Decrease Compared to the Previous Year	Increase/Decrease Rate Compared to the Previous Year
Total volume of energy consumed	GJ	3,609,892	3,498,577	△111,315	△ 3.1
Water used	1,000m³	13,454	11,868	△ 1,586	△11.8
PRTR substances used	t	2,725	3,686	961	35.3
CO₂ emission	t-CO2	178,510	176,157	△ 2,353	△ 1.3
Total volume of waste	t	24,120	19,676	△ 4,444	△ 18.4
Waste emissions (= Outsourced treating volume)	t	16,250	15,675	△ 575	△3.5
Volume of recycled waste	t	8,625	5,955	△2,670	△31.0
Final disposing amount of waste	t	143	91	△ 52	△ 36.4
Recycling rate	%	53.1	38.0	_	9.4
Recovered or recycled volume of containers and packages	t	2,263	2,270	7	0.3
SOx emissions	t	0.9	0.5	△0.4	△ 44.4
NOx emissions	t	59.1	45	△14	△23.1

1-10 Environmental Efficiency (Group in Japan)

Environmental Efficiency Index	Index Definition	FY2011	FY2012	FY2013	FY2014	FY2015
CO2	Sales/CO ₂ emissions	100	96	100	97	106
Waste	Sales/Total waste emissions	100	108	124	183	235
Water	Sales/Water consumption	100	110	125	124	147

^{*} The figures as of fiscal 2011 have been set to 100. Higher index shows higher level of efficiency.

^{*}Does not include depreciation

Efforts for Saving Energy and Combatting Global Warming

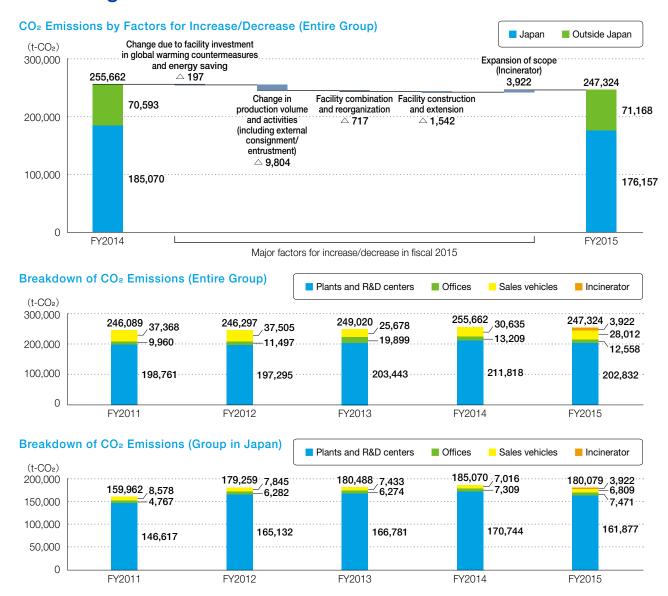
2-1 Our Basic Stance

As a corporate activity responsible for climate change, based on the approach of Science Based Targets,* we looked ahead to the long-term CO₂ emissions target until 2030 and set -5.6% compared to fiscal 2015 as a CO₂ emissions target in fiscal 2020, which is the final fiscal year of the Fourth Medium-Term Management Plan.

Possible climate change impacts include tightened controls on CO₂ emissions in accordance with the international framework for greenhouse gas emissions reduction, physical effects such as a rise in average temperature, drought, flood, change in disease structure, and health impacts. The Medium-Term Environmental Management Policy of our group includes "Manage the external risks that have the potential to generate a change in business operations, such as climate change and water risks". By doing so, we facilitate the efforts not only to mitigate the emissions of CO₂ and other substances, but also to adapt to climate change-driven impacts as well as influences that are inevitable in the medium- and long-term.

*An international initiative that encourages companies to set CO₂ reduction targets based on scientific evidence in order to help accomplish the goal of the Paris Agreement of keeping the average increase in global temperature below 2°C

2-2 Target and Result of CO2 Emissions Reduction





2-3 CO₂ Emissions by Scope

Total CO₂ Emissions by Region (Scope 1 and Scope 2)

(t-CO2)

	SCOPE1	SCOPE2	Total
In Japan	88,967	91,112	180,079
Outside Japan	30,199	37,047	67,246
Total	119,165	128,159	247,324

2-4 Supply Chain GHG Emission (Scope 3) (Group in Japan)

Sources	CO₂ emissions (t-CO₂) FY2015	CO ₂ emissions (t-CO ₂) FY2014	Increase/Decrease Rate Compared to the Previous Year (%)	Emissions Calculation Methodology	Explanation
Purchased goods and services	497,843	474,824	4.8	The figures are calculated by multiplying the emission basic unit based on guidelines' by the weight or purchase amount of raw materials, ingredients, and stock goods.	Geographic scope is Japan.
Capital goods	53,541	85,705	△37.5	It computed based on the amount of money for acquisition of the fixed assets and CO ₂ emission coefficients of the guidelines* issued by Ministry of Environment and Ministry of Economy, Trade and Industry.	Geographic scope is Japan.
Fuel-and-energy-related activities (not included in Scope 1 or 2)	6,623	6,332	4.6	It computed based on the usage of electricity and steam and CO₂ emission coefficients of the guidelines* issued by Ministry of Environment and Ministry of Economy, Trade and Industry.	Geographic scope is Japan.
Upstream transportation and distribution	10,569	11,039	△4.3	In accordance with guidelines*, etc., the figures are calculated with the transportation distance between the logistics centers of our group and the destinations (pharmaceutical wholesalers, etc.) based on the fuel consumption method.	Geographic scope is Japan.
Waste generated in operations	8,974	10,764	△ 16.6	It computed based on the weight of each waste discharged from the plants and R&D center and CO₂ emission coefficients of the guidelines* issued by Ministry of Environment and Ministry of Economy, Trade and Industry.	Geographic scope is Japan.
Business travel	15,348	17,410	△11.8	It computed based on the travel and accommodation expenses and CO₂ emission coefficients of the guidelines* issued by Ministry of Environment and Ministry of Economy, Trade and Industry. For travel expenses, CO₂ emission coefficients for aircraft were adopted.	Geographic scope is Japan. The amount of emissions on business trips using company vehicles is included in Scope 1.
Employee commuting	3,225	2,867	12.5	The figures are calculated by multiplying the emission basic unit based on guidelines* by the commutation expenses of public transportation systems used by employees. The amount of emissions from the commuter cars of employees is calculated based on the amount of gasoline used.	Geographic scope is Japan.
Upstream leased assets	_	_	_	_	It is irrelevant because all emissions form the leased assets are counted in Scopes 1 and 2.
Downstream transportation and distribution	15,231	15,574	△2.2	The emission basic unit of sales at wholesalers is estimated based on the sales of major pharmaceutical wholesalers and the CO₂ emissions. The figures are calculated based on the total sales of the pharmaceutical wholesalers and our ratio of the sales volume.	Geographic scope is Japan.
Processing of sold products	_	_	_	_	_
Use of sold products	_	_	_	_	There is no energy use for product use, because of the characteristic of medical supplies. Therefore, it is estimated irrelevant.
End of life treatment of sold products	2,896	3,207	△9.7	It computed based on the weight of each materials for the containers of the sold product and CO₂ emission coefficients of the guidelines* issued by Ministry of Environment and Ministry of Economy, Trade and Industry.	Geographic scope is Japan. Recycling is included.
Downstream leased assets	7,451	7,712	△3.4	It computed based on the floor area according to the purpose of using the rented assets and CO ₂ emission coefficients of the guidelines* issued by Ministry of Environment and Ministry of Economy, Trade and Industry.	Geographic scope is Japan.
Franchises	_	_	_	_	Since we have no franchise, it is irrelevant.
Investments	_	_	_	_	_

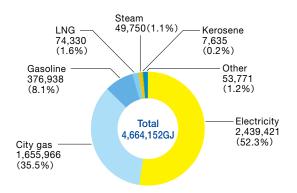
^{*}Basic Guidelines on Accounting for Greenhouse Gas Emissions Throughout the Supply Chain (Ver. 2.2), Policy on Emissions Unit Values for Accounting of Greenhouse Gas Emissions, etc., by Organizations Throughout the Supply Chain (Ver. 2.2), and the Emissions Unit Value Database (Ver. 2.2)

2-5 Breakdown of Energy Use

Breakdown of Energy Use (Group in Japan)

LNG 74,330 (2.1%) City gas 1,492,942 (42.7%) Contact of the contac

Breakdown of Energy Use (Entire Group)



2-6 Using Renewable Energy

Renewable Energy Usage and Breakdown

Types of Renewable Energy	Power Supply (MWh)	Remarks
Solar energy generation	36	Electricity generated by solar energy equipment installed in plants and research facilities. Not included in energy consumption.
Hydroelectric power generation	8,788	Purchased by our group companies in Germany. Not subtracted from the amount of emissions in Scope 2.
Biomass power generation	500	Purchased by group companies in Japan. Not subtracted from the amount of emissions in Scope 2.
Biomass heat	5,369	Purchased by our group companies in Germany. Not subtracted from the amount of emissions in Scope 2.

2-7 Emissions Trading

Carbon Offset

Offset Amount	Project Type	Project ID	Certification Standards
30t-CO2	Fuel shift from coal	Clean and Efficient Cooking and Heating Project, China [GS949]	Gold Standard

2-8 Supplementary Notes

Conversion factors and their sources

The conversion factors used in this data book are as follows:

Conversion factors of the Accounting and Reporting System under the Act on Promotion of Global Warming Countermeasures (the Global Warming Countermeasures Act) are used for the CO₂ conversion factor and the energy conversion factor.

Regarding the countries outside Japan, the factors commonly used in such countries or the factors based on GHG protocol are used in this data book.

List of conversion factors in Japan

Energy Source		Conversion Factor				
		Unit Calo	rific Value	CO₂ Emission		
	General electricity utility (Day time)	9.97	GJ/1,000 kWh	Emission factor for each electric power company for fiscal 2014	t-CO₂/1,000 kWh	
Electricity	General electricity utility (Night time)	9.28	GJ/1,000 kWh	Emission factor for each electric power company for fiscal 2014	t-CO₂/1,000 kWh	
	Other	9.76	GJ/1,000 kWh	Emission factor for each electric power company for fiscal 2014	t-CO₂/1,000 kWh	
A-type heavy oil		39.1	GJ/kL	2.71	t-CO₂/kL	
Diesel oil		37.7	GJ/kL	2.58	t-CO₂/kL	
Kerosene		36.7	GJ/kL	2.49	t-CO₂/kL	
LPG		50.8	GJ/t	3.00	t-CO2/t	
City gas (13	A)	44.8	GJ/1,000 m ³	2.23	t-CO₂/1,000 ㎡	
LNG		54.6	GJ/t	2.70	t-CO ₂ /t	
Gasoline		34.6	GJ/kL	2.32	t-CO₂/kL	
Steam for industry 1.02		1.02	GJ/GJ	0.060	t-CO2/GJ	

2 Emissions not subject to accounting

The emission data does not include emissions in Scope 1 or Scope 2 from small offices outside Japan, and it also does not include emissions of GHGs other than CO₂, as they are small in quantity.

6 GHG emissions from sold products

Any use of sold products will not help reduce GHS emissions.



4 Third-party verification

An external examining organization verified Scopes 1 and 2 (fuel, gas, electricity, etc.) for all domestic sites of Daiichi Sankyo Group (14 production and nonproduction sites in Japan) and the calculated amount of CO2 in Scope 3, Category 1 (products and services purchased). (Verification period: April 1, 2015, to March 31, 2016)





Effective Use of Resources and Reduction of Environmental Burdens

3-1 Waste Reduction Targets and Achievements



3-2 Efforts to Reduce Waste

Name of Business Facility, etc.	Main Efforts
Hiratsuka Plant, Daiichi Sankyo Chemical Pharma	Reduce liquid waste containing highly concentrated nitrogen compound by utilizing biological denitrification treatment (reduced 1,345 tons of emissions)
Business facilities, branches, etc.	Reduce office paper consumption in business facilities
Headquarters, R&D centers, etc.	Promote reuse efforts in business facilities
Plants, etc.	Reuse collected organic solvents
Cooperation between plants/research facilities and waste disposal contractors	Promote recycling

3-3 Appropriate Use of Water Resources

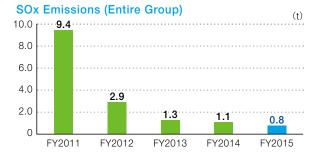


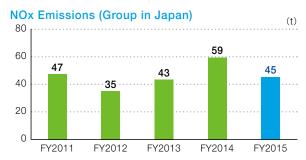


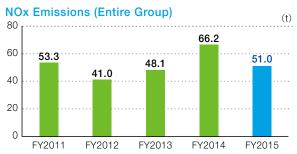
Reduction of Environmental Risks

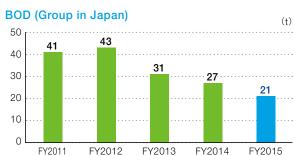
4-1 Preventing Air and Water Pollution



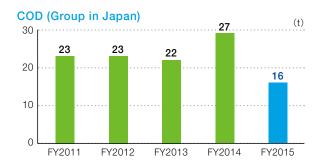


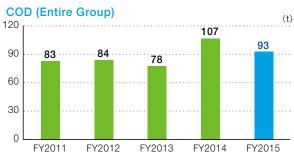












4-2 Preventing Soil and Groundwater Contamination and its Countermeasures

Progress of Measures for Soil Purification

Office	Overview
Shinagawa R&D Center (Shinagawa-ku, Tokyo)	We performed a soil investigation associated with the construction of new research facilities according to Tokyo municipal ordinance. As a result, contamination was found in a part of soil. Thus we performed purification work appropriately on discussion with the governmental offices.
Takatsuki Plant Daiichi Sankyo Propharma Co., Ltd. (Takatsuki, Osaka)	We continue to perform groundwater monitoring and to take countermeasures after purification work of soil contaminated with VOC* and arsenic in 2004.

^{*}Volatile Organic Compounds



4-3 Prevention of Noise, Vibration, and Offensive Odor

We conduct appropriate measures and continuous monitoring to comply with the laws and regulations related to noise, vibration, and offensive odor.

4-4 Usage Reduction and Emission/Transfer Control of Chemical Substances

Emission/Transfer of PRTR Substances (Group in Japan)

(Unit: metric ton; mg-TEQ for dio					ng-TEQ for dioxins)	
Substance (Annual handling	Handling	Emission (except fo	or emission into soil)	Transfer Amount		
amount of 1 or more metric tons)	Amount	Air	Public Water	Sewage	Out of Offices (Recycling)	Out of Offices (Other)
Sodium azide	33.3	0.0	0.0	0.0	0.0	0.0
Acetonitrile	1,262.9	3.4	0.0	119.1	392.6	374.7
Ferric chloride	19.6	0.0	0.0	0.0	0.0	0.0
Xylene	0.6	0.0	0.0	0.0	0.0	0.5
Chloroform	14.7	1.1	0.0	0.0	0.0	13.6
Chloromethane	57.6	3.9	0.0	0.0	0.0	0.0
Dichloromethane (Also known as methylene chloride)	21.7	2.2	0.0	0.0	0.0	19.6
N,N-Dimethylacetamide	115.2	0.9	0.0	0.0	3.9	24.1
Dimethylamine	2.5	0.0	0.0	0.0	0.0	2.4
N,N-Dimethylformamide	299.2	0.1	0.0	0.0	36.9	1.9
Triethylamine	12.5	0.3	0.0	0.0	0.0	9.7
Toluene	1,822.5	69.2	0.0	0.6	1,522.0	209.8
N-hexane	23.2	2.3	0.0	0.0	0.0	20.9
Formaldehyde	0.7	0.0	0.0	0.0	0.0	0.0
Total	3,686	83.4	0.0	119.7	1,955.4	677.3
Dioxins	_	0.072	0.072	0.000	0.000	0.000

PCB Usage

Types of PCBs	Quantity
Capacitors	3 units
Fluorescent lamp ballasts, etc.	67 units

PCB Storage

Types of PCBs	Quantity			
Types of POBS	Heavy PCB	Light PCB	Total	
Capacitors	342 units	_	342 units	
Fluorescent lamp ballasts, etc.	4,622 units	_	4,622 units	
PCB-containing oil	_	400 liters	400 liters	
PCB-adhering materials	_	2 kg	2 kg	
Other polluted products	3 units	2 units	5 units	



5-1 Climate Change Risks

Climate Change Risks That Have the Potential to Affect Our Business

Risk Driver		Description	Potential Impact
Risks driven by	Cap and trade schemes	If it is subject to the greenhouse gas cap and trade scheme, an emissions credit must be purchased when the required reduction volume is not satisfied.	Increased operational cost
changes in regulation International agreements		If regulations in each country are strengthened in accordance with the ratification of the Paris Agreement, necessary measures must be taken to ensure compliance with the regulations.	Increased operational cost
Risks that are driven by change in physical et	Change in highest and lowest temperatures	Temperature control costs will rise at research facilities and plants of our group.	Increased operational cost
	Increase in the number of typhoons, etc.	An increase in the number of localized torrential rainfall and large- scale typhoons will hamper the supply chain of our group's business operations.	Increased operational cost
climate parameters	Change in disease structure, etc.	A change in disease structure, etc. due to climate change will cause quantitative and qualitative impact to the humanitarian assistance activities of our group, including providing access to medical care and pharmaceutical products.	Increased operational cost
Reputation-driven risks	Evaluation by external stakeholders	Evaluation by external stakeholders on our group's efforts to mitigate and adapt climate change will adversely affect our stock price.	Drop in our stock price (market valuation)

Climate Change Opportunities that Have the Potential to Affect Our Business

Opportunity Driver		Description	Potential Impact
Opportunities that are	Emission reporting obligations	Energy costs will be reduced by taking various measures to mitigate greenhouse gases and energy.	Reduced operational costs
driven by changes in regulation	Cap and trade schemes	Appropriate response to the emissions trading scheme will provide scheme-based incentives.	Reduced operational costs
Opportunity that are driven by changes	Change in disease structure	Development and sales of pharmaceutical products in response to an increased number of tropical infectious diseases or regional changes in disease patterns will augment revenue.	New products/ business services
in physical climate parameters Increase in the number of floods		Taking appropriate measures against flood damage in plants will ensure stable supply of products.	Increase in demand for existing products
Reputation-driven opportunities	Evaluation by external stakeholders	Evaluation by external stakeholders of our group's efforts to mitigate and adapt to climate change will positively affect our stock price.	Increased stock price (market valuation)

5-2 Water Risk

We carry out comprehensive risk evaluations based on the results of analysis of local water risks using the WWF-DEG Water Risk Filter and the survey results on water risks due to plants and research facilities. The evaluations indicate that the business facilities with the highest water risks among our group are two plants in China, one in Brazil, and one research facility in India. Water withdraw restrictions and other strengthened regulations are considered to be major risk factors.

Volume of Water Used at the Offices at the Highest Water Risk in Group

	Volume of Water Used (Withdrawn)	Volume of Water Discharged	Volume of Water Actual Used
FY2015	287,000㎡	208,000m²	79,000㎡



Initiatives for Biodiversity Conservation

6-1 Our Basic Stance

Basic Biodiversity Principles and Action Guidelines

Basic Policy

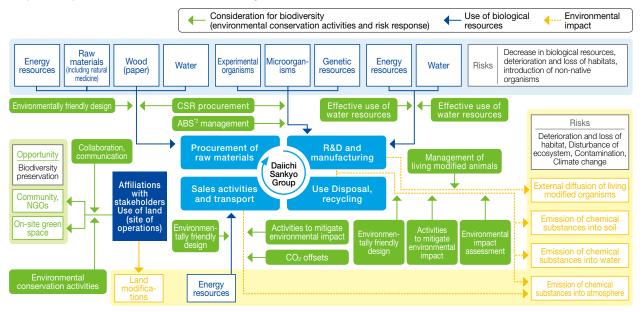
- Our Basic Environmental Management Policy states that, "Safeguarding the environment is the bedrock of all Group operational
 management." We have therefore acted to prevent pollution and global warming and contribute to recycling. Through our initiatives,
 we have used biological resources properly to minimize the impacts of our operations on biodiversity and have sustainably reduced
 chemical and other discharges.
- We will continue striving to preserve biodiversity and respect the principles of the Convention on Biological Diversity by adhering to the following Biodiversity Action Guidelines, thereby enhancing social sustainability.

Action Guidance

- Actively promote to address biodiversity conservation in all business activity
- Identify the biodiversity impacts of ecosystem services, using those services sustainably
- Use genetically modified organisms responsibly
- Equitably obtain and use profits arising from the utilization of genetic resources and share their benefits fairly
- 5. Communicate with stakeholders and improve in-house awareness

- Under take ongoing endeavors to avoid or reduce operational impacts on biodiversity, devoting particular attention to lowering the environmental burdens of air and water emissions and wastes.
- Recognize the operational importance of ecosystem services while understanding and minimizing their impacts on biodiversity, using those services sustainably.
- Maintain biosafety by continuing to responsibly use genetically modified organisms in drug discovery and production in keeping with the Cartagena Protocol on Biosafety and national laws and ordinances
- In line with the Convention on Biological Diversity, the Bonn Guidelines and other related national laws and ordinances, equitably obtain, use and share profits from the utilization of genetic resources. Additionally, take into account the Nagoya Protocol.
- $\bullet \ \, \text{Foster biodiversity preservation by communicating and liaising better with public and private entities}. \\$
- Educate employees to better understand how operations affect biodiversity and encourage internal and external efforts to safeguard biodiversity.

Map of Corporate Activities and Biodiversity11



- *1 Prepared with reference to the "Map of Corporate Activities and Biodiversity" developed by the Japan Business Initiative for Conservation and Sustainable Use of Biodiversity (JBIB)
- *2 Access to genetic resources and benefit sharing

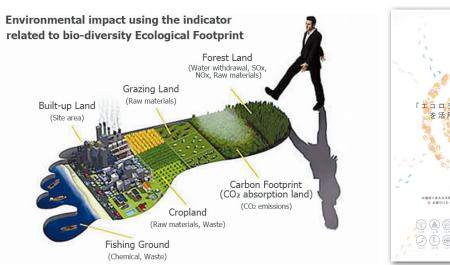


6-2 Initiatives for Biodiversity Conservation

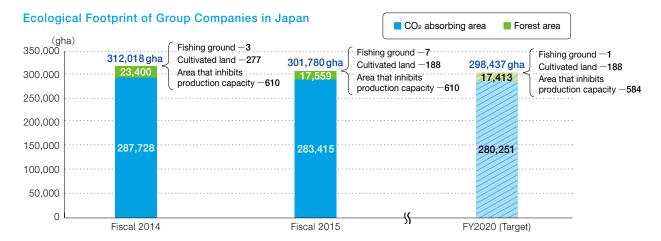
Assessment of the biodiversity indicator called ecological footprint

Jointly with experts from the NGO, Global Footprint Network, we assessed ecological footprint (EF), an indicator of biodiversity, in fiscal 2015 to examine all environmental burdens in business activities of group companies in Japan. The assessed EF will be utilized as a comprehensive indicator of environmental burdens, including biodiversity, by checking and monitoring the long-term change in the relationship between the reduction of environmental burdens and biodiversity conservation (trade-off) of our group.

In addition, assessing EF has been recognized as an action for achieving the Aichi Target (20 targets) that was adopted at COP10 (the 10th Meeting of the Conference of the Parties to the Convention on Biological Diversity, in Nagoya) and registered on the Nijyu-Maru Project as well.







Implementation of WET testing

In fiscal 2015, WET test*s were conducted as environmental impact assessments to examine water discharged from all plants and research facilities in Japan, confirming that the discharged water has no serious impact on river ecosystems.

^{*}A testing method that utilizes the biological responses of fish, Daphnia, and seaweed to determine the whole toxicity of discharged water.



7-1 Main Efforts

Efforts	Details
Environmental managers workshop	Theme: Explanation of ISO 14001:2015 Date: February 5, 2016 Number of participants: 31 people
Breakout session for global warming countermeasures	Theme: New trend in energy-saving strategies Date: November 20, 2015 Number of participants: 24 people
Environmental e-learning	Theme: Basic knowledge of environmental problems and water risks Period: June 8 to July 10, 2015 Target: 9,303 people, Participants: 9,051 people (Participation rate: 97.3%)
Environmental Art Contest	Image category: 317 works from group companies in Japan/207 works from group companies outside Japan Senryu category: 771 works from group companies in Japan
Daiichi Sankyo Group Eco Action Program	Period: June 15 to August 31, 2015 Enrollment: 1,054 people
Posters for raising environmental awareness	430 posters displayed in business facilities in and outside Japan
Beach cleanup activity in the United States	Number of participants: 28 people
Planting activity in China	Number of participants: 15 people
Beach cleanup activity in Hong Kong	Number of participants: 9 people

7-2 Environment-related Awards

Kasai R&D Center, Daiichi Sankyo Co. Ltd.	Fiscal 2015: Semi-top level place of business (place of business recognized for outstanding countermeasures taken against global warming) (Tokyo)
CMC Planning Department, Pharmaceutical Technology Division, Daiichi Sankyo Co. Ltd.	Fiscal 2015: The top prize of the Hiratsuka City Green Curtain Contest
Kitamoto Office, Kitasato Daiichi Sankyo Vaccine	The 7th Sainokuni Green Plan Award (Saitama Prefecture)
Daiichi Sankyo Europe	Business Travel Award 2015



Business Activity and Input/Output in fiscal 2015 (Group in Japan: Plants and R&D Centers)

INPUT		Unit	Shinagawa	Kasai	PP Hiratsuka (1)	PP Takatsuki (1)	CP Onahama (2)
	Electricity	1,000 kWh	27,756	17,557	37,532	15,189	7,548
	Liectricity	GJ	268,872	171,358	366,099	147,359	73,668
	City gas	1,000ന്	2,078	4,068	9,644	4,967	_
	City gas	GJ	93,532	183,074	433,987	223,514	0
	LPG	t	-	-	-	-	3
	LFG	GJ	0	0	9	3	149
	LNG	t	-	_	-	-	1,361
	LIVO	GJ	0	0	0	0	74,330
	Heavy oil	KL	-	-	-	-	-
Energies	rieavy oii	GJ	10	0	0	0	0
Lifelgles	Kerosene	KL	-	-	-	-	-
	Refoserie	GJ	1	0	0	0	0
	Diesel oil	KL	-	-	-	-	-
	Diesei oii	GJ	0	0	0	0	0
	Steam	GJ	0	0	0	0	0
	Gasoline	KL	1	-	2	1	-
		GJ	44	0	79	47	11
	Diesel	KL	-	-	3	-	-
		GJ	0	0	94	8	4
	Total	GJ	93,588	183,074	434,170	223,572	74,494
Water	Service water	1,000m³	122	144	391	34	83
	Industrial water	1,000m³	0	0	0	1,030	7,686
	Groundwater	1,000m³	46	0	1	0	0
	Total	1,000m³	169	144	392	1,064	7,769
Chemical substances	PRTR substances (amounts handled)	t	32	21	31	0	92
OUTPUT		Unit	Shinagawa	Kasai	PP Hiratsuka (1)	PP Takatsuki (1)	CP Onahama (2)
	CO ₂	t-CO2	18,406	17,184	38,036	19,024	7,641
	NOx	t	4	5	12	7	2
Air pollution	SOx	t	0	0	0	0	0
	PRTR substances	t	3	2	0	0	0
Water	BOD	t	5	1	3	0	5
	COD	t	0	0	0	5	8
pollution	PRTR substances	t	0	0	0	0	0
	Emission	t	827	298	2,266	350	309
	Recycling amount	t	684	261	552	341	23
Waste	Final disposing amount	t	5	1	0	2	0
	I mai disposing amount						

(1) PP: Daiichi Sankyo Propharma (2) CP: Daiichi Sankyo Chemical Pharma



Business Activity and Input/Output in fiscal 2015 (Group in Japan: Plants and R&D Centers)

INPUT		Unit	CP Ttebayashi (2)	CP Hiratsuka (2)	CP Odawara (2)	ASB (3)	KDSV (4)
	Electricity.	1,000 kWh	3,185	4,201	10,007	6,369	44,163
	Electricity	GJ	31,081	41,015	97,570	61,663	428,293
	City and	1,000m [®]	2,231	474	1,620	1,151	6,800
	City gas	GJ	100,391	21,316	72,897	51,793	306,010
		t	-	2	6	-	_
	LPG	GJ	0	81	287	0	0
		t	-	-	-	-	_
	LNG	GJ	0	0	0	0	0
		KL	-	-	-	-	_
	Heavy oil	GJ	0	0	0	0	0
Energies		KL	-	-	-	-	208
	Kerosene	GJ	0	0	0	0	7,633
		KL	-	-	2	-	_
	Diesel oil	GJ	0	4	85	0	0
	Steam	GJ	0	0	0	0	0
	Gasoline	KL	-	-	-	-	_
		GJ	0	9	3	0	0
	Diesel	KL	-	_	-	-	
		GJ	0	0	0	0	0
	Total	GJ	100,391	21,409	73,271	51,793	313,644
Water	Service water	1,000㎡	28	38	31	31	327
	Industrial water	1,000㎡	49	0	0	0	0
	Groundwater	1,000m³	0	121	1,705	0	0
	Total	1,000m³	77	159	1,736	31	327
Chemical substances	PRTR substances (amounts handled)	t	5	2,615	858	5	20
OUTPUT		Unit	CP Ttebayashi (2)	CP Hiratsuka (2)	CP Odawara (2)	ASB (3)	KDSV (4)
	CO2	t–CO2	6,446	3,464	8,191	5,897	37,587
	NOx	t	8	1	3	0	5
Air pollution	SOx	t	0	0	0	0	C
	PRTR substances	t	0	73	4	1	C
	BOD	t	0	2	3	0	1
Water	COD	t	0	0	1	0	1
pollution	PRTR substances	t	0	121	0	0	C
	Emission	t	117	7,076	3,326	77	1,029
				3,566	20	75	333
	Recycling amount	t	99				
Waste	Recycling amount Final disposing amount	t	0	23	59	0	1

⁽²⁾ CP: Daiichi Sankyo Chemical Pharma (3) ASB: Asubio Pharma (4) KDSV: Kitasato Daiichi Sankyo Vaccine



Environmental Performance Data

Goal Reference	Classification	Breakdown	Scope	Unit	FY2011	FY2012	FY2013	FY2014	FY2015
			Outside Japan	t-CO2	28,790	29,660	18,245	23,619	21,204
		Sales vehicles *1	In Japan	t-CO2	8,578	7,845	7,433	7,016	6,809
			Entire group	t-CO2	37,368	37,505	25,678	30,635	28,012
			Outside Japan	t-CO2	5,193	5,215	13,625	5,900	5,087
		Offices	In Japan	t-CO2	4,767	6,282	6,274	7,309	7,471
	Energy-originated CO ₂		Entire group	t-CO2	9,960	11,497	19,899	13,209	12,558
	emissions		Outside Japan	t-CO2	52,143	32,163	36,662	41,074	40,955
		Plants and R&D centers	In Japan	t-CO2	146,617	165,132	166,781	170,744	161,877
			Entire group	t-CO2	198,761	197,295	203,443	211,818	202,832
			Outside Japan	t-CO2	86,127	67,038	68,532	70,593	67,246
		Total	In Japan	t-CO2	159,962	179,259	180,488	185,070	176,157
			Entire group	t-CO2	246,089	246,297	249,020	255,662	243,402
	Non-energy oriented CO ₂ emissions	Incinerator	Entire group	t-CO2					3,922
	Total of CO₂ emissions	Total	Entire group	t-CO2	246,089	246,297	249,020	255,662	247,324
			Outside Japan	t-CO2	36,256	37,602	37,520	33,165	30,199
		Scope 1	In Japan	t-CO2	88,540	92,678	98,444	90,795	88,967
CO2		'	Total	t-CO2	124,796	130,279	135,964	123,960	119,165
002	CO₂ emissions by		Outside Japan	t-CO2	49,870	29,436	31,012	37,428	37,047
	Greenhouse Gas	Scope 2	In Japan	t-CO2	71,422	86,582	82,044	94,274	91,112
	Protocol	000pc 2	Total	t-CO2	121,293	116,018	113,056	131,702	128,159
		Scope 3	In Japan	t-CO2	,	643,017	695,335	635,434	621,701
		Scopes 1 + 2 + 3	Total in Japan	t-CO2		822,276	875,823		801,780
		Shinagawa	In Japan	t-CO2	13,455	17,535	15,290		18,406
		Kasai	In Japan	t-CO2	15,007	17,708	17,920	17,761	17,184
		Fukuroi *2	In Japan	t-CO2	4,338	4,956	1,326	,	,
		Daiichi Sankyo Propharma (Hiratsuka)*3	In Japan	t-CO2	38,944	43,229	38,907	41,337	38,036
		Daiichi Sankyo Propharma (Takatsuki)*4	In Japan	t-CO2	11,580	17,100	19,006	20,072	19,024
	Emissions by group site	Daiichi Sankyo Chemical Pharma (Onahama)	In Japan	t-CO2	13,046	14,636	11,610		7,641
	Emissions by group site in Japan	Daiichi Sankyo Chemical Pharma (Tatebayashi)*5	In Japan	t-CO2	5,697	6,245	6,373	7,068	6,446
	·	Daiichi Sankyo Chemical Pharma (Hiratsuka)	In Japan	t-CO2	4,068	5,047	4,055	2,353	3,464
		Daiichi Sankyo Chemical Pharma (Odawara)	In Japan	t-CO2	3,398	3,462	9,652	8,969	8,191
		Daiichi Sankyo Propharma (Odawara)*6	In Japan	t-CO2	8,548	5,375	2,222	2,222	-,
		Asubio Pharma (Kobe)	In Japan	t-CO2	4,693	5,450	5,733	5,987	5,897
		, ,	In Japan	t-CO2	16,742	17,896		29,209	37,587
		Electricity	In Japan	1,000 kWh	185,424	187,561	188,971	184,002	187,102
		Electricity	In Japan	GJ	1,814,249				
	Energy consumption by group companies in Japan	City gas	In Japan	1,000m²		32,217			33,176
		City gas	In Japan	GJ	1,385,548	1,449,759	1,649,705	1,526,948	1,492,942
		LPG	In Japan	t	21	21	18		10
		LPG	In Japan	GJ	1,072	1,052	889		529
		LNG	In Japan	t	2,366	2,944	2,357		1,361
		LNG	In Japan	GJ	129,210	160,748	128,709	125,986	74,330
		Heavy oil	In Japan	KL	19	1	2		0
Energy		Heavy oil	In Japan	GJ	756	23	92		10
		Kerosene	In Japan	KL	926	1,040	886	726	208
		Kerosene	In Japan	GJ	33,998	38,161	32,520		7,635
		Diesel oil	In Japan	KL	41	3			2
		Diesel oil	In Japan	GJ	1,542	120	116	95	89
		Steam	In Japan	GJ	31,675,557	28,892,539	31,387,370		0
			In Japan	KL	8	20,092,009	6	20,310,100	5
		,		GJ	257	267	220	214	186
		Gasoline (Plants and R&D centers)	In Japan	KL	3,697	3,382	3,204	2,920	2,935
		,	In Japan						
		Gasoline (Sales vehicles)	In Japan	GJ	127,934	117,002	110,855	101,039	101,557
		Total	In Japan	GJ	3,498,905	3,659,268	3,805,502	3,609,892	3,498,577

9 Environmental Performance Data

		Electricity	Entire group	0.1	0.047.004				
			Little group	GJ	2,247,961	2,334,599	2,365,396	2,370,592	2,439,421
		City gas	Entire group	GJ	1,514,213	1,597,064	1,862,323	1,709,822	1,655,966
		LPG	Entire group	GJ	6,469	3,898	5,379	3,325	3,040
		LNG	Entire group	GJ	129,265	161,151	128,709	125,986	74,330
F	Energy consumption by	Heavy oil	Entire group	GJ	19,937	4,690	92	15	401
Energy	the entire group	Kerosene	Entire group	GJ	33,998	38,161	32,520	26,652	7,635
		Diesel oil	Entire group	GJ	3,526	2,034	2,355	2,708	2,900
		Steam	Entire group	GJ	31,676	28,893	31,387	87,023	49,750
		Gasoline	Entire group	GJ	555,101	563,312	405,366	451,214	376,938
		Total	Entire group	GJ	4,486,829	4,683,680	4,905,186	4,748,243	4,664,152
			Outside Japan	1,000㎡	394	454	450	603	641
	Water used		In Japan	1,000㎡	14,861	14,616	13,460	13,454	11,868
Water			Total	1,000㎡	15,255	15,070	13,910	14,058	12,509
resources			Outside Japan	1,000㎡	364	306	369	447	477
	Water discharged		In Japan	1,000㎡	15,134	14,305	12,363	12,371	10,834
			Total	1,000㎡	15,498	14,611	12,732	12,817	11,311
Water	BOD		In Japan	t	41	43	31	27	21
pollution	COD		In Japan	t	23	23	22	29	16
	Waste generated		In Japan	t	39,437	39,421	35,925	24,120	19,676
	Outsourced waste treatment		In Japan	t	18,833	26,824	23,412	16,250	15,675
	Recycled waste		In Japan	t	11,347	12,894	12,324	8,625	5,955
Waste	Recycling rates		In Japan	%	60.3	48.1	52.6	53.1	38.0
	Final disposal volume		In Japan	t	365	158	165	143	91
	Final disposal rate		In Japan	%	0.93	0.40	0.46	0.59	0.46
	Amount of office paper consumed		In Japan	10,000 pieces	7,364	7,581	7,305	5,950	5,469
			Outside Japan	t	8.5	2.2	0.2	0.3	0.3
	SOx		In Japan	t	0.9	0.6	1.1	0.9	0.5
A: II ::			Total	t	9.4	2.9	1.3	1.1	0.8
Air pollution	NOx		Outside Japan	t	7	6	5	7	5
			In Japan	t	47	35	43	59	45
			Total	t	53	41	48	66	51
	Amounts handled		In Japan	t	5,704	6,087	6,249	2,726	3,686
	Amounts discharged and transferred (Air)		In Japan	t	122	113	109	37	83
2072	Amounts discharged and transferred (Water)		In Japan	t	4	3	4	4	0
PRTR substances	Amounts discharged and transferred (Sewer)		In Japan	t	44	48	48	23	120
	Amounts discharged and transferred (Water + sewer)		In Japan	t	48	51	0	27	87
	Amounts discharged and transferred (Waste)		In Japan	t	3,238	2,495	1,958	594	667
	04-1	Glass bottle (colorless)	In Japan	t	171	188	207	202	158
Containers	Containers, packing materials, and recycle quantity (required amount of recycled products)	Glass bottle (brown)	In Japan	t	484	454	567	474	386
		Plastic containers and packaging	In Japan	t	1,601	1,678	1,419	1,557	1,436
	DS (self-assessment) + DSHC (simplified assessment)	Paper containers and packaging	In Japan	t	65	60	30	30	59
		Total	In Japan	t	2,321	2,380	2,222	2,263	2,039
			Outside Japan	Sites	6	6	8		
Management	Acquisition of ISO		In Japan	Sites	7	8	7		
wanagemeni	14001 certification		Total	Sites	13	14			

^{*1:} Carbon of offfset-type sales vehicles were leased so that CO₂ emissions from sales vehicles were entirely offset from FY 2008 to FY2012.

^{*2:} Includes the data by the end of September, 2013

^{*3:} Includes Daiichi Sankyo Research Center and Daiichi Sankyo Happiness Co., Ltd.

^{*4:} Includes Daiichi Sankyo Logistics Co., Ltd.

^{*5:} Includes Daiichi Sankyo Research Center

^{*6:} The data of Daiichi Sankyo Propharma (Odawara) is integrated into the data of Daiichi Sankyo Chemical Pharma (Odawara).

^{*}There were no fines, etc. with respect to the environment.



DAIICHI SANKYO CO., LTD CSR Department October, 2016

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