



# Daiichi Sankyo Group Environmental Data Book 2021



## Position of This Book

The information of this book complements Daiichi Sankyo Group Value Report 2021 and the environmental data on our website. Please see them in addition.

## Contents

<b>1</b>	Environmental Management System .....	P 1
<b>2</b>	Conserving Energy and Combating Global Warming .....	P 7
<b>3</b>	Effective Use of Resources and Reduction of Environmental Impacts .....	P 11
<b>4</b>	Reduction of Environmental Risks .....	P 13
<b>5</b>	Climate Change and Water Risks .....	P 15
<b>6</b>	Initiatives for Biodiversity Conservation .....	P 19
<b>7</b>	Environmental Communication .....	P 21
<b>8</b>	Site Data .....	P 22
<b>9</b>	ESG Data (Environment) .....	P 23

### 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.

1. Confirm the environmental impacts of each business process, from R&D to production, distribution, usage and consumption, and disposal, and reduce environmental impacts.
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.

# 1 Environmental Management System

## 1-1 Our Stance on Environmental Management

Environmental issues such as global warming and extreme weather are very closely related to our lifestyles and work. We are practicing environmental management on a global scale in accordance with the Daiichi Sankyo Group EHS Policy and Basic Environmental Management Policy. We thereby aim to address such environmental issues through responsible corporate activities.

## 1-2 Promoting Environmental Management

The Daiichi Sankyo Group seeks to appropriately address environmental issues through our medium- and long-term business activities with due consideration for what society demands and expects from us. Our sustainability issues are reducing environmental impact primarily through energy and resource conservation; contributing to a sustainable society by addressing environmental issues such as climate change, water risks and biodiversity; and mitigating environmental risks by practicing legal compliance and operating an environmental management system. We have designated KPIs and environmental targets for these issues and implement appropriate communication and information disclosure both in and outside the Group to promote environmental management. The following quantitative and qualitative targets have been designated as our environmental goals under the fifth five-year business plan.

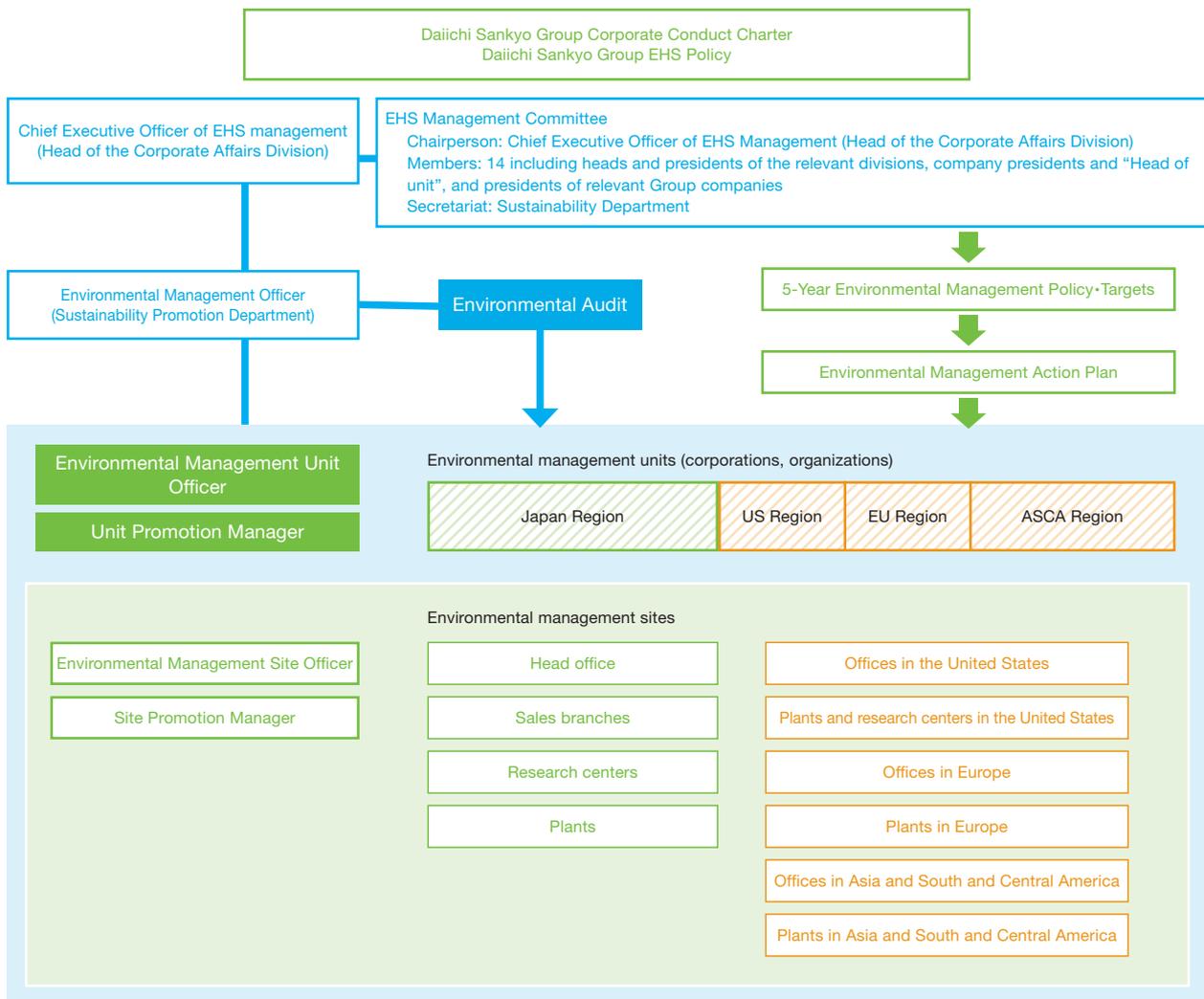
### EHS Management Policy and Environmental Management Target (FY2021-FY2025)

EHS Management Policy	Environmental Management Target
Lower the environmental impact of our operations and supply chain by conserving energy and resources, and reducing greenhouse gas emissions and waste.	<ul style="list-style-type: none"> <li>• CO<sub>2</sub> emissions (Scope1 + Scope2): 25% reduction from FY2015</li> <li>• CO<sub>2</sub> emissions intensity based on sales (Scope3, Cat1): 15% reduction from FY2020</li> <li>• Energy consumption intensity based on sales : 30% reduction from FY2015</li> <li>• Waste emission intensity based on sales : 10% reduction from FY2020</li> <li>• Promotion to recycle waste</li> </ul>
Realize a sustainable society by taking a leading role in addressing environmental issues such as climate change, resource recycling, water risk and biodiversity.	<ul style="list-style-type: none"> <li>• Renewable electricity utilization rate: more than 30% utilization rate</li> <li>• Water consumption intensity based on sales : 10% reduction from FY2020</li> <li>• Waste plastic recycling rate: Over 70% maintained</li> <li>• Flood disaster manual maintenance rate: 100% at research laboratories and production sites in Japan</li> <li>• Promotion of Innovative Environmental Technologies for Decarbonized Community</li> <li>• Continuing Reduction of Pollutant Emissions to Atmosphere and Water Area</li> <li>• Promotion of the sustainable use of ecosystem services and resources</li> </ul>
Minimize EHS risks by complying with related laws and continual improvement of management systems.	<ul style="list-style-type: none"> <li>• Disposal of hazardous waste: 10% reduction from FY2020</li> <li>• ISO14001 acquisition rate: 100% at manufacturing sites</li> <li>• Establishment of EHS management system</li> <li>• Implementation of periodic EHS audits</li> <li>• Reducing EHS Risks through Collaboration with Supply Chains</li> </ul>
Encourage employees to practice EHS by internal communication such as EHS education and enlightening activities.	<ul style="list-style-type: none"> <li>• Education and awareness-raising for the prevention of environmental accidents</li> <li>• Education for all employees and professional training in EHS</li> <li>• Measures to improve employee motivation related to EHS</li> </ul>
Ensure the reliability from society by enhancing information to disclose and enhancing communication with stakeholders.	<ul style="list-style-type: none"> <li>• Third-party assurance coverage: 100%</li> <li>• Periodic Verification and Disclosure Based on TCFD Recommendations</li> <li>• Promoting Partnership for Sustainable Development</li> </ul>

### 1-3 Environmental Management Promotion System

The head of the Corporate Affairs Division of Daiichi Sankyo serves as the chief executive EHS officer of environmental management and oversees environmental management on a Group basis, while the vice president of Sustainability Promotion Department promotes environmental management as the environmental management officer. As a system for promoting environmental management, we have established an environmental management unit that deliberates on business activities, and each environmental management unit establishes an environmental management site and discusses regions and functions as necessary while overseeing targets. In addition, we have established the EHS Management Committee, chaired by the chief executive officer of EHS management. This committee discusses the formulation of the Daiichi Sankyo Group EHS Policy and other important matters and reports them to the Board of Directors.

Diagram of the Daiichi Sankyo Group Environmental Management Promotion System



## 1-4 ISO 14001 Certification

Operating sites with production functions that have high environmental impacts have acquired ISO 14001 certification.

List of ISO 14001 Certified Plants (As of the End of June 2021)

	Company	Site	ISO 14001 Acquisition Period
Daiichi Sankyo Group (multisite certification)	Daiichi Sankyo Co., Ltd.	Sustainability Department	January, 1998
		Pharmaceutical Technology Division (Hiratsuka)	
		Biologics Division (Tatebayashi)	
	Daiichi Sankyo Propharma Co., Ltd.	Hiratsuka Plant	
		Technology Department	
	Daiichi Sankyo Chemical Pharma Co., Ltd.	Onahama Plant	
		Tatebayashi Plant	
		Biologics Technology Department (Tatebayashi)	
		Odawara Plant	
		Technology Department (Onahama, Hiratsuka, Odawara)	
Daiichi Sankyo Biotech Co., Ltd.	Kitamoto Site		
Daiichi Sankyo Happiness Co., Ltd.	Hiratsuka		
Daiichi Sankyo Europe		Pfaffenhofen Plant	December 2019
Daiichi Sankyo Altkirch Sarl		Altkirch Plant	March 2019
Daiichi Sankyo Pharmaceutical (Beijing)		Beijing Plant	March 2019
Sankyo Pharmaceutical (Shanghai) Co., Ltd.		Shanghai Plant	March 2019
Daiichi Sankyo Brasil Farmacêutica		Alphaville Plant	March, 2012
ISO 14001 Certification Acquisition Rate of Production Sites (on the basis of FY2020 CO <sub>2</sub> emissions)	Japan		100%
	Entire group		84.1%

Furthermore, we established the Daiichi Sankyo Group Environmental Management system in accordance with ISO 14001 for other sites.

## 1-5 Environmental Supply Chain Management

Main Efforts	Details
Setting of CSR procurement standards	We request that our business partners make efforts based on the CSR procurement standards of the Group. The environment-related items in the CSR procurement standards are as follows. (1) Reinforce the environmental management system (2) Consider product safety (3) Reinforce green procurement (4) Respond to biodiversity conservation
Cooperation with Suppliers	We ascertain the amount of CO <sub>2</sub> emissions from our major suppliers and how much water they use. We also ask of any supplier that has no CO <sub>2</sub> reduction target to set one as a good opportunity for improvement. These efforts are based on the Science Based Targets* initiative.  *An international initiative that calls on companies to set CO <sub>2</sub> emission reduction targets in line with scientific evidence to achieve the Paris Agreement target of keeping the average global temperature increase below 2°C compared to pre-industrial levels.
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

### Operating Sites Subject to an Environment Audit in Fiscal 2020

Company	Operating Site and Branches
Daiichi Sankyo	Head office
	Shinagawa site
	Kasai site
Daiichi Sankyo Healthcare	
Daiichi Sankyo Pharmaceutical (Beijing)	Beijing Plant
Daiichi Sankyo Pharmaceutical (Shanghai)	Shanghai Plant

\*There were no findings that might cause serious environmental risks.

## 1-7 Emergency Preparedness and Response

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 the necessary equipment.

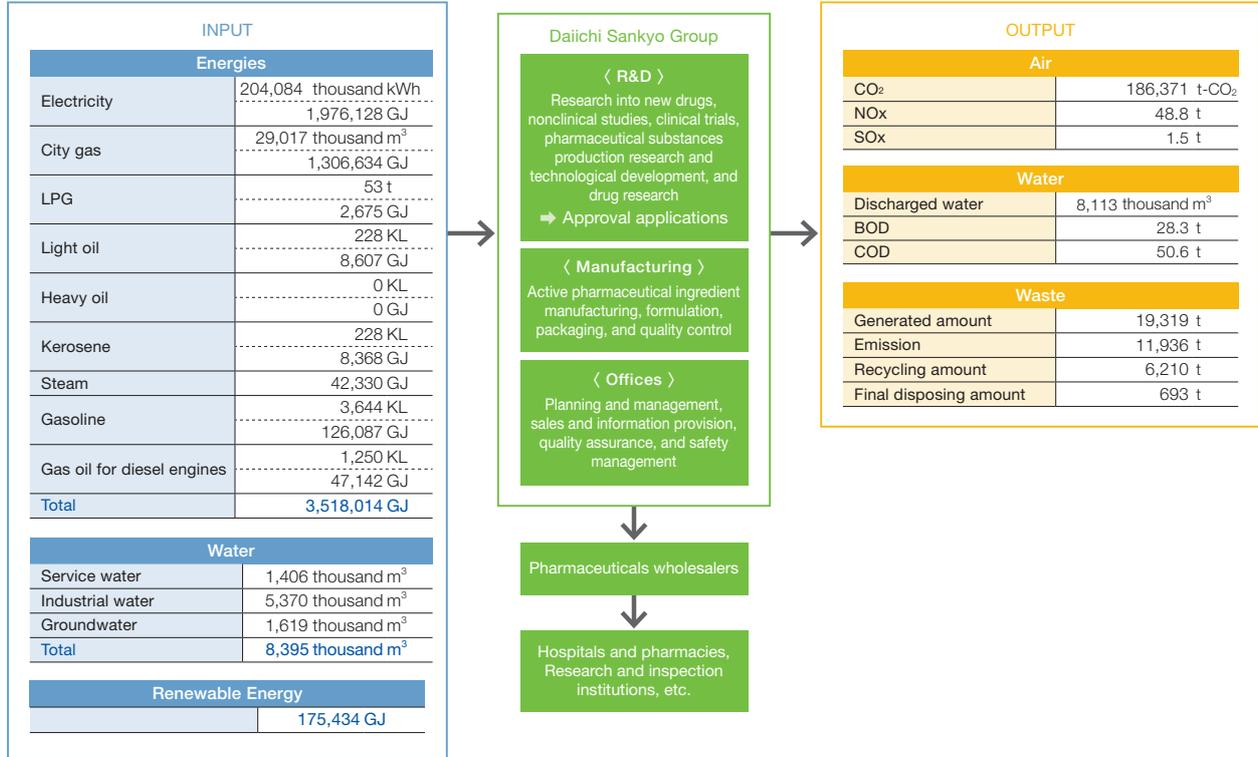
In recent years, we have also strengthened our measures to mitigate flooding risks.

### Emergency Drills Conducted (Plants and Research Facilities)

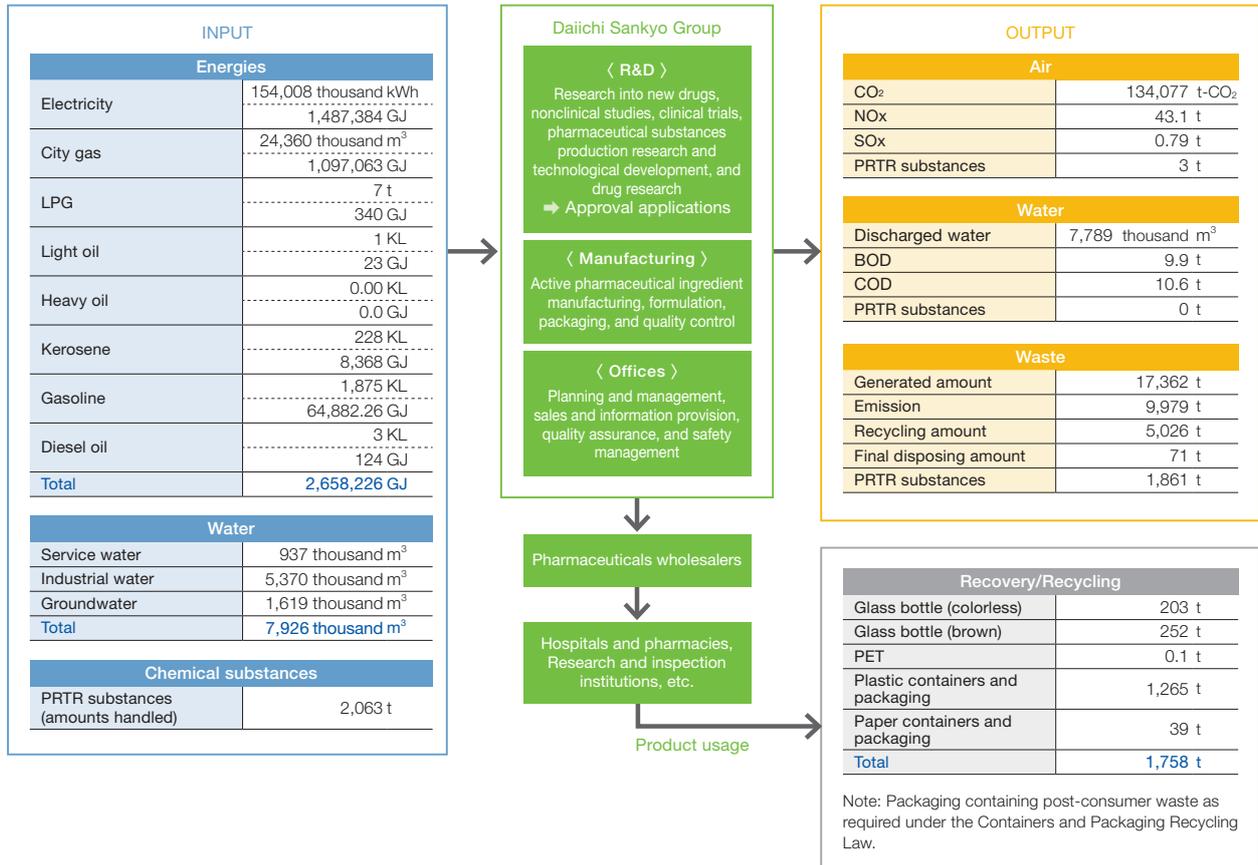
Company	Operating site	Details of Emergency Drills (Possible accidents/incidents)	Number of Emergency Drills	Total Number of Participants
Daiichi Sankyo	Shinagawa R&D Center	Large-scale earthquake, fire, emergency report, transport of injured persons, and confirmation of employees' safety	8 drills	4,800
	Kasai R&D Center	Large-scale earthquake, fire, emergency report, emergency meal-serving drill	10 drills	1,300
Daiichi Sankyo Propharma	Hiratsuka Plant	Large-scale earthquake, fire, leakage, and emergency report	46 drills	959
Daiichi Sankyo Chemical Pharma	Onahama Plant	Large-scale earthquake, wind and flood damage, and leakage and emergency contact	23 drills	766
	Tatebayashi Plant	Comprehensive disaster prevention drills, flooding, and leakage	27 drills	1,129
	Odawara Plant	Large-scale earthquake, fire, leakage, and emergency report, and confirmation of employees' safety	67 drills	963
Daiichi Sankyo Biotech	Kitamoto Site	Large-scale earthquake and fire	6 drills	887

## 1-8 Business Activity and Environmental Performance

Business Activity and Input/Output (Entire Group)



Business Activity and Input/Output (Group in Japan)



## 1-9 Environmental Accounting

### Environment Conservation Cost (Group in Japan)

Unit: million yen

Environmental Item	FY2019		FY2020	
	Investment	Cost	Investment	Cost
Pollution Prevention Cost	108	94	104	57
Global Environmental Conservation Cost	1,770	314	2,221	468
Resource Circulation Cost	0	337		404
Upstream / Downstream Costs		58		58
Administration Cost	3	684	3	616
R&D Cost		30		30
Social Activity Cost		0		0
Environmental Remediation Cost	0	47		226
<b>Total</b>	<b>1,882</b>	<b>1,563</b>	<b>2,328</b>	<b>1,859</b>

\*There were no findings that might cause serious environmental risks.

### Economic Benefit (Group in Japan)

Unit: million yen

	FY2020
Value of sales of valuables	1.06

### Environmental Conservation Benefit (Group in Japan)

	Unit	FY2019	FY2020	Increase/Decrease Compared to the Previous Year	Increase/Decrease Rate Compared to the Previous Year
Total volume of energy consumed	GJ	2,967,401	2,658,226	△ 309,175	△ 10.4%
Water used	1,000m <sup>3</sup>	8,894	7,926	△ 969	△ 10.9%
PRTR substances used	t	2,301	2,063	△ 238	△ 10.3%
CO <sub>2</sub> emission	t-CO <sub>2</sub>	144,204	130,572	△ 13,633	△ 9.5%
Total volume of waste	t	17,371	17,362	△ 9	△ 0.0%
Waste emissions (= Outsourced treating volume)	t	10,421	9,979	△ 442	△ 4.2%
Volume of recycled waste	t	3,744	5,026	1,282	34.2%
Final disposing amount of waste	t	50	71	22	43.3%
Recycling rate	%	35.9	50.3	—	9.4%
Recovered or recycled volume of containers and packages	t	1,772	1,758	△ 14	△ 0.8%
SOx emissions	t	0.79	0.79	△ 0.0	△ 0.7%
NOx emissions	t	45	43	△ 2	△ 5.1%

## 1-10 Environmental Efficiency (Entire Group)

Environmental Efficiency Index	Index Definition	FY2016	FY2017	FY2018	FY2019	FY2020
CO <sub>2</sub>	Sales/CO <sub>2</sub> emissions	99	105	109	119	132
Waste	Sales/Total waste emissions	97	140	126	143	145
Water	Sales/Water consumption	105	112	113	133	145

\* The figures as of fiscal 2015 have been set to 100. Higher index shows higher level of efficiency.

# 2 Conserving Energy and Combatting Global Warming

## 2-1 Our Basic Stance

To facilitate responsible corporate activities that address climate change, we have set the goal of reducing CO<sub>2</sub> emissions in FY2025, the final year of the 5-Year Business Plan, by 25% compared to FY2015, in order to achieve our long-term CO<sub>2</sub> emissions target of 37.5% reduction (a target well below 2°C\*) in FY2030 based on the approach of the Science Based Targets initiative (SBTi)\*\*<sup>2</sup>, which aims to help accomplish the goal of the Paris Agreement\*\*<sup>3</sup> of keeping the average increase in global temperature below 2°C. This CO<sub>2</sub> emissions target is certified by SBTi, and the Company has participated in the Decarbonization Management Promotion Network established by the Japanese Ministry of the Environment and cooperated in the Ministry of the Environment's SBT promotional activities.

Our CO<sub>2</sub> emissions for FY2020 were 182,865 tons (19.4% lower than in FY2015). We have worked on not only “actions to mitigate” CO<sub>2</sub> emissions but also “actions to adapt” to influence from climate change that is inevitable in the medium- to long-term, including weather-related disasters that have apparently become more and more serious in recent years and in particular, flood damage, etc. which is a serious risk. In July 2021, we joined RE100\*\*<sup>3</sup>, which aims to meet 100% of the electricity needs of business activities with renewable energy.

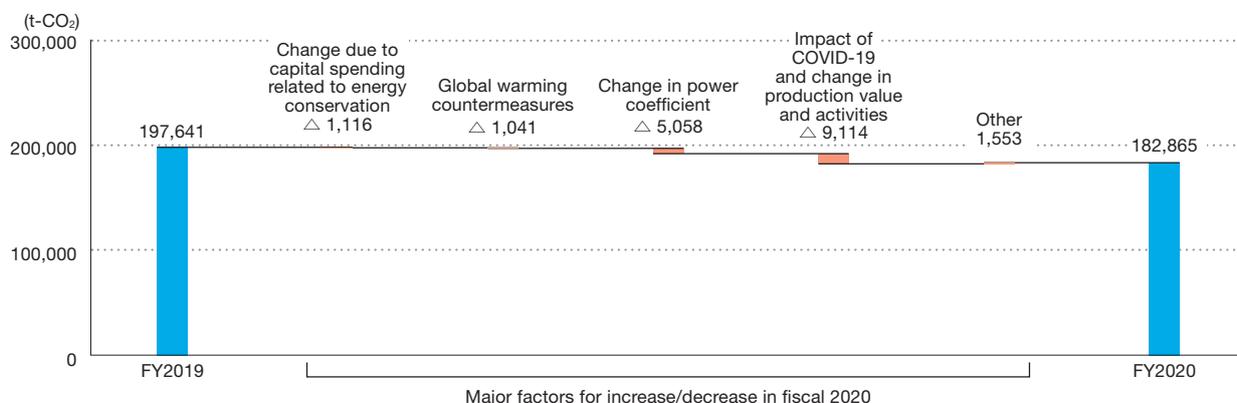
\*1 An international initiative that encourages companies to set CO<sub>2</sub> reduction targets based on scientific evidence in order to help accomplish the Paris Agreement goal of keeping the average increase in global temperature below 2°C.

\*\*2 The target for lowering temperatures sufficiently below 2°C, which is more stringent than the 2°C target set by the SBTi in 2019.

\*\*3 A global initiative that promotes 100% use of renewable electricity by businesses. The initiative is sponsored by The Climate Group, an international NPO, and the CDP, which urges companies to disclose information related to climate change.

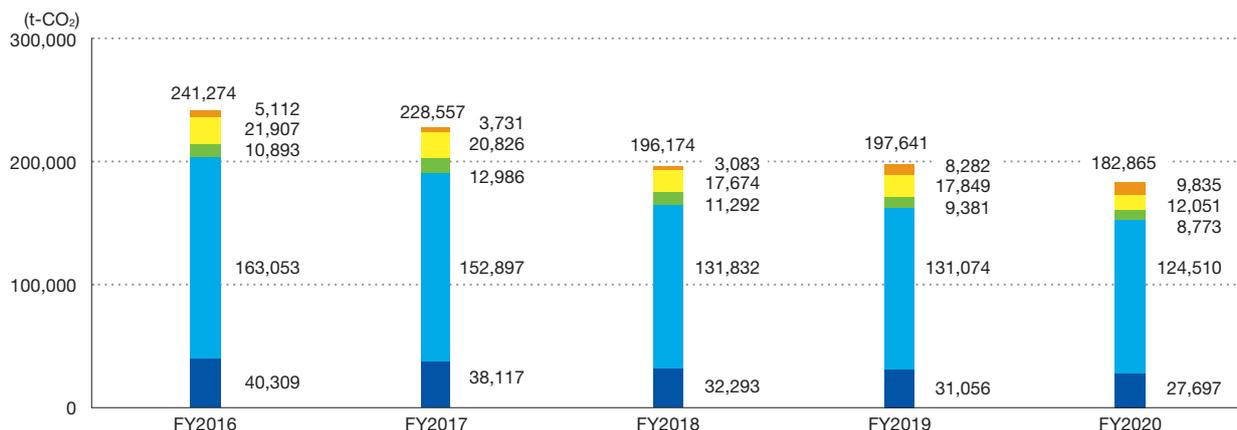
## 2-2 Target and Result of CO<sub>2</sub> Emissions Reduction

### CO<sub>2</sub> Emissions by Factors for Increase/Decrease (Entire Group)



### Breakdown of CO<sub>2</sub> Emissions (Entire Group)

■ R&D centers ■ Plants ■ Offices ■ Sales vehicles ■ Incinerator



### 2-3 CO<sub>2</sub> Emissions by Scope

Total CO<sub>2</sub> Emissions by Region (Scope 1 and Scope 2)

(t-CO<sub>2</sub>)

	SCOPE1	SCOPE2	Total
In Japan	69,103	61,468	130,572
Outside Japan	17,682	34,612	52,294
<b>Total</b>	<b>86,785</b>	<b>96,080</b>	<b>182,865</b>

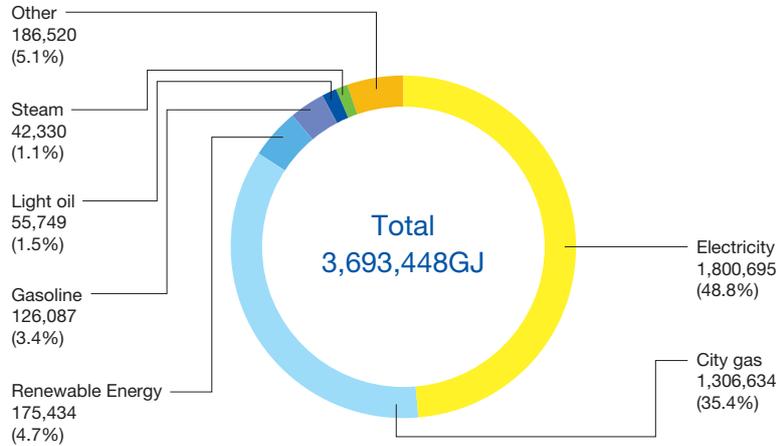
### 2-4 Supply Chain GHG Emission (Scope 3) (Group in Japan)

Sources	CO <sub>2</sub> emissions (t-CO <sub>2</sub> ) FY2019	CO <sub>2</sub> emissions (t-CO <sub>2</sub> ) FY2020	Increase/Decrease Rate Compared to the Previous Year (%)	Emissions Calculation Methodology	Explanation
Purchased goods and services	612,885	609,954	△0.48%	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	46,950	85,081	81.22%	It computed based on the amount of money for acquisition of the fixed assets and CO <sub>2</sub> 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)	11,088	10,501	△5.29%	It computed based on the usage of electricity and steam and CO <sub>2</sub> 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	8,549	8,548	△0.01%	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	9,532	10,144	6.42%	It computed based on the weight of each waste discharged from the plants and R&D center and CO <sub>2</sub> emission coefficients of the guidelines* issued by Ministry of Environment and Ministry of Economy, Trade and Industry.	Geographic scope is Japan.
Business travel	30,271	6,048	△80.02%	It computed based on the travel and accommodation expenses and CO <sub>2</sub> emission coefficients of the guidelines* issued by Ministry of Environment and Ministry of Economy, Trade and Industry. For travel expenses, CO <sub>2</sub> 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	3,711	3,776	1.75%	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 from the leased assets are counted in Scopes 1 and 2.
Downstream transportation and distribution	16,227	14,722	△9.27%	The emission basic unit of sales at wholesalers is estimated based on the sales of major pharmaceutical wholesalers and the CO <sub>2</sub> 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	1,810	1,824	0.77%	It computed based on the weight of each materials for the containers of the sold product and CO <sub>2</sub> 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	2,913	2,913	0.00%	It computed based on the floor area according to the purpose of using the rented assets and CO <sub>2</sub> 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	—	—	—	—	—
<b>Total</b>	<b>743,936</b>	<b>753,511</b>	<b>1.29%</b>		

\* Basic Guidelines on Accounting for Greenhouse Gas Emissions Throughout the Supply Chain (Ver. 2.6), Policy on Emissions Unit Values for Accounting of Greenhouse Gas Emissions, etc., by Organizations Throughout the Supply Chain (Ver. 2.6), and the Emissions Unit Value Database (Ver. 3.0)

## 2-5 Breakdown of Energy Use

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	953	Electricity generated by solar energy equipment installed in plants and research facilities.
Hydroelectric power generation	15,047	Purchased by our Group companies in Germany and Brazil.
Biomass power generation	500	Purchased by group companies in Japan. Not subtracted from the amount of emissions in Scope 2.
Biomass heat	1,749	Purchased by our group companies in Germany.
Other renewable energies	542	Purchased by group companies in Spain, Portugal, Austria, Brazil and other countries.

## 2-7 Emissions Trading

Carbon Offset

Offset Amount	Project Type	Project Number	Certification Standards
30t-CO <sub>2</sub>	Forest conservation in the Amazon region and projects for supporting a sustainable society through agricultural training in Brazil	Acre Amazonian Rainforest REDD+ Portfolio, Brazil	VCS-CCB

## 2-8 Supplementary Notes

### 1 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 CO<sub>2</sub> 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 Calorific Value		CO <sub>2</sub> Emission	
Electricity	General electricity utility (Day time)	9.97	GJ/1,000 kWh	Emission coefficients for power utilities (used for calculating greenhouse gas emissions of specified emitters) for FY2019	t-CO <sub>2</sub> /1,000 kWh
	General electricity utility (Night time)	9.28	GJ/1,000 kWh	Emission coefficients for power utilities (used for calculating greenhouse gas emissions of specified emitters) for FY2019	t-CO <sub>2</sub> /1,000 kWh
	Other	9.76	GJ/1,000 kWh	Emission coefficients for power utilities (used for calculating greenhouse gas emissions of specified emitters) for FY2019	t-CO <sub>2</sub> /1,000 kWh
A-type heavy oil		39.1	GJ/KL	2.71	t-CO <sub>2</sub> /KL
Diesel oil		37.7	GJ/KL	2.58	t-CO <sub>2</sub> /KL
Kerosene		36.7	GJ/KL	2.49	t-CO <sub>2</sub> /KL
LPG		50.8	GJ/t	3.00	t-CO <sub>2</sub> /t
City gas (13A)		44.8	GJ/1,000 m <sup>3</sup>	2.23	t-CO <sub>2</sub> /1,000 m <sup>3</sup>
LNG		54.6	GJ/t	2.70	t-CO <sub>2</sub> /t
Gasoline		34.6	GJ/KL	2.32	t-CO <sub>2</sub> /KL
Steam for industry		1.02	GJ/GJ	0.06	t-CO <sub>2</sub> /GJ

### 2 Emissions not subject to accounting

Of the emission data, both Scope 1 and Scope 2 emissions do not include emissions from small offices outside Japan. Emissions of greenhouse gasses other than CO<sub>2</sub> are not included either, due to the small quantity.

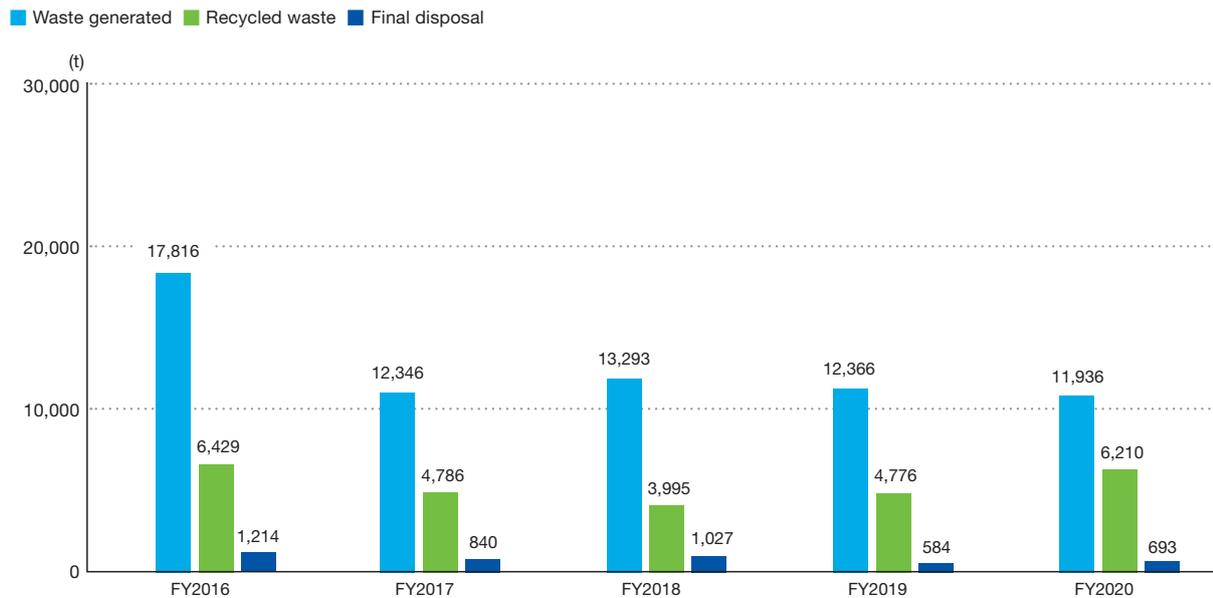
### 3 GHG emissions from sold products

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

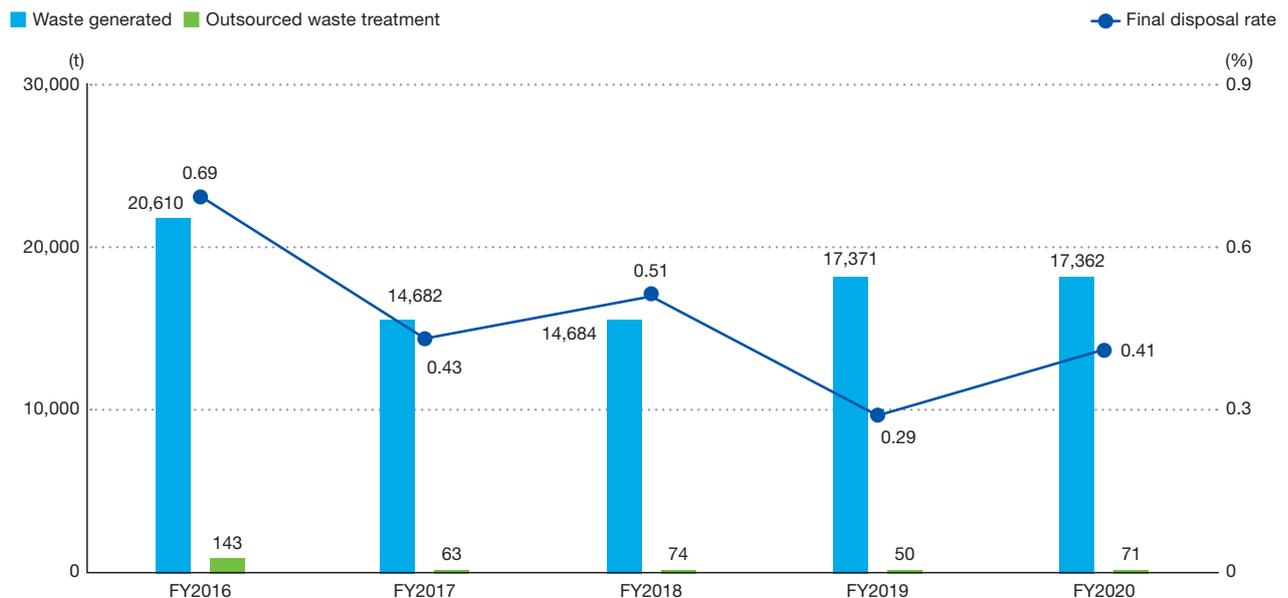
# 3 Effective Use of Resources and Reduction of Environmental Impacts

## 3-1 Waste Reduction Targets and Achievements

Waste Generated, Recycled Waste, and Final Disposal Volume (Entire Group)



Total Waste Generation and Disposal (Group in Japan)

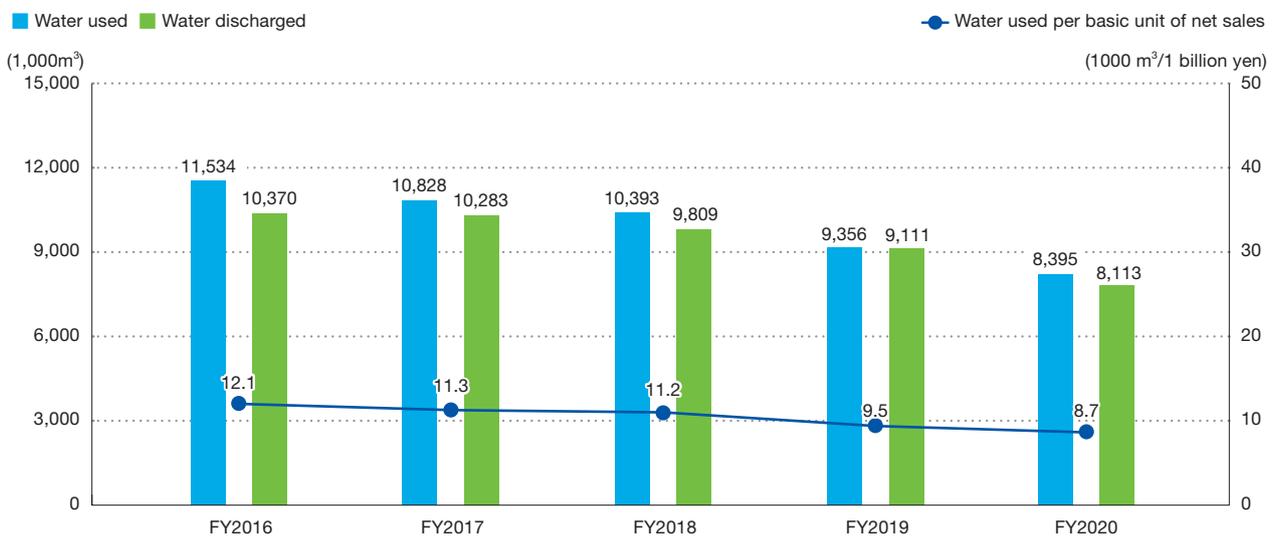


## 3-2 Efforts to Reduce Waste

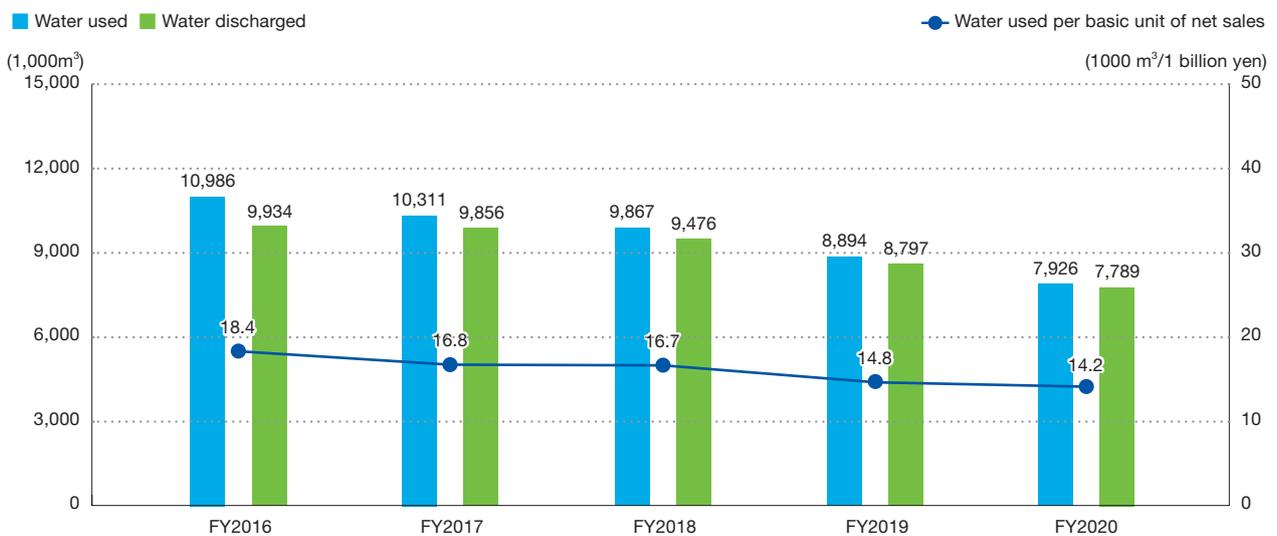
Name of Operating site, etc.	Main Efforts
Offices, sales branches, plants, etc.	Reduce office paper consumption
Headquarters, R&D centers, etc.	Promote the reuse of stationery, devices, and equipment
Cooperation between plants/research facilities and waste disposal contractors	Promote recycling work clothes and latex gloves

## 3-3 Appropriate Use of Water Resources

Volume of Water Used and Discharged (Entire Group)



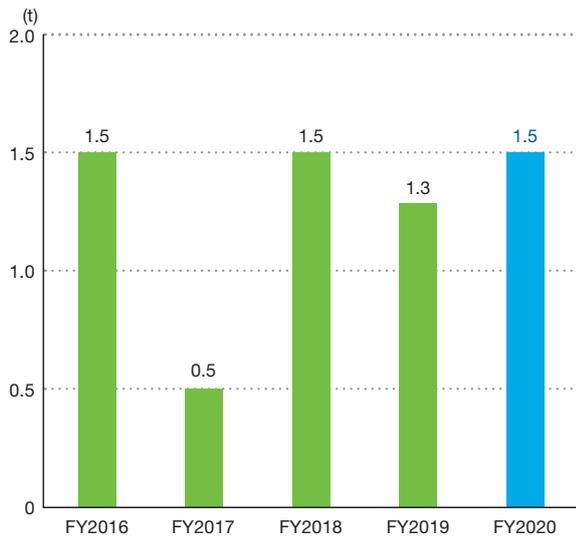
Volume of Water Used and Discharged (Group in Japan)



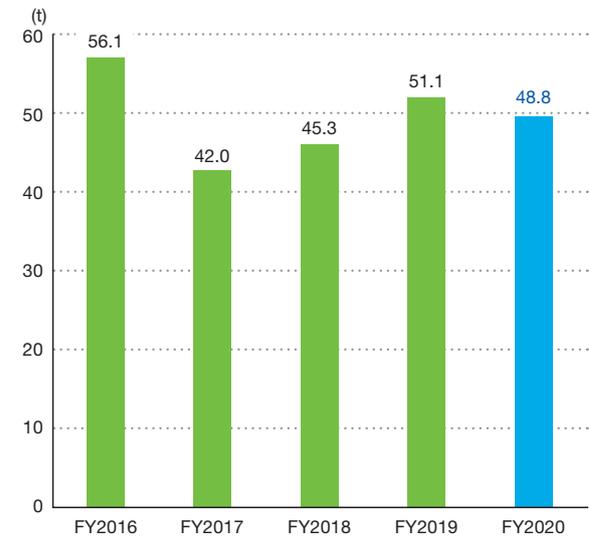
# 4 Reduction of Environmental Risks

## 4-1 Preventing Air and Water Pollution

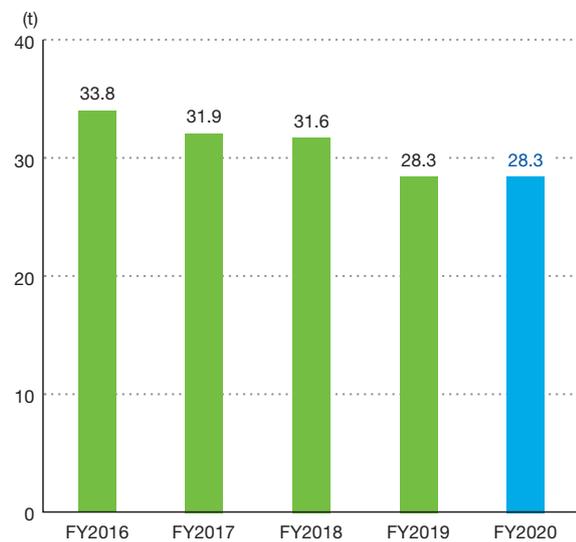
SOx Emissions (Entire Group)



NOx Emissions (Entire Group)

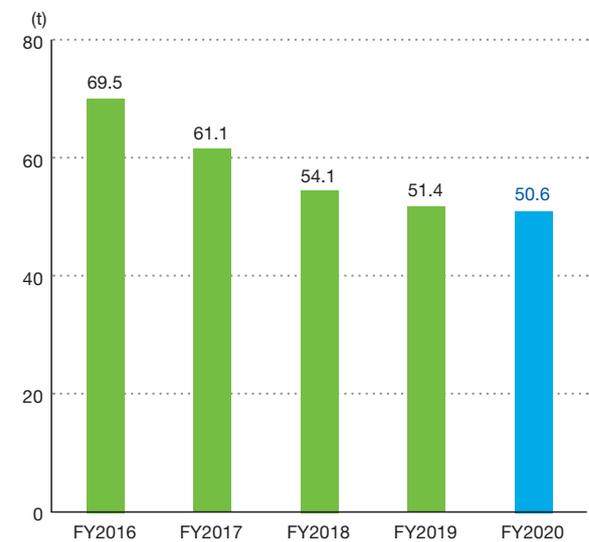


BOD (Entire Group)



\*Public water only

COD (Entire Group)



\*Public water only

## 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 in accordance with a Tokyo municipal ordinance. As a result, contamination was found in a part of soil, and we therefore consult with the government and performed the necessary purification work.
Site of the former Yasugawa Plant (Yasu City, Shiga Prefecture)	We have been continuously monitoring the groundwater since we completed on-site environmental improvement work in 2006. As a result, contamination was found in part of the soil. We are currently conducting a soil investigation in consultation with regulatory authorities to perform appropriate purification work. We also confirmed the presence of mercury used as a material for pesticides that exceeded environmental standards on the grounds of the former plant site in 1993. Since then, we have installed a robust underground storage facility in adherence to regulatory guidance to manage the soil appropriately. Although there have been no reports of leakage or health issues to date, we decided to remove the storage facility in view of increasing safety and security in the region and in response to requests from the local community, and we issued a press release announcing our decision in April 2020. We will consult and coordinate with the relevant parties to ensure that the removal work will cause no negative impact on the surrounding environment.

## 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 Chemical Substances (Group in Japan)

(Unit: metric ton; mg-TEQ for dioxins)

Substance (Annual handling amount of 1 or more metric tons)	Handling Amount	Emission (except for emission into soil)		Transfer Amount		
		Air	Public Water	Sewage	Out of Offices (Recycling)	Out of Offices (Other)
Acetonitrile	953.1	1.2	0.0	0.0	0.0	950.7
Chloroform	22.5	0.3	0.0	0.0	22.2	0.0
Cobalt and its compounds	2.2	0.0	0.0	0.0	0.0	0.0
Dichloromethane (also known as methylene chloride)	6.8	0.3	0.0	0.0	6.5	0.0
N,N-Dimethylformamide	25.3	0.0	0.0	0.0	0.0	0.0
Toluene	935.4	0.8	0.0	0.0	764.6	0.0
Cyanamide	10.9	0.0	0.0	0.0	10.9	0.0
Triethylamine	98.8	0.3	0.0	0.0	0.0	98.6
N-Hexane	8.3	0.5	0.0	0.0	0.0	7.9
<b>Total</b>	<b>2,063.3</b>	<b>3.4</b>	<b>0.0</b>	<b>0.0</b>	<b>804.2</b>	<b>1,057.2</b>
Dioxins	-	0.000	0.000	0.033	0.000	0.000

## • Storage and Usage of PCB Contaminants

### Usage

(units)

Types of PCBs	Quantity
Capacitors	0
Fluorescent lamp ballasts, etc.	0

### Storage

(units)

Types of PCBs	Quantity		
	Heavy PCB	Light PCB	Total
Capacitors	1,341	0	1,341
Fluorescent lamp ballasts, etc.	2,001	0	2,001
Mercury lamp ballasts	3	0	3
Other electric devices	5	0	5
Other polluted products	12	0	12

\* We have sorted and weighed the PCB contaminated matter and have registered the shipment to be treated by JESCO, an interim storage and environmental safety corporation. We have already disposed of all low concentration PCBs.

# 5 Climate Change and Water Risks

## 5-1 Response to Climate Change risk

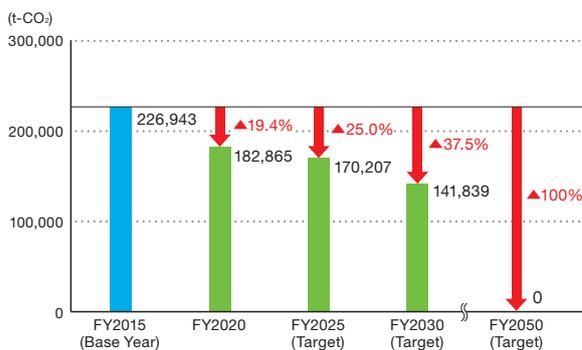
### • Setting a Target to Reduce CO<sub>2</sub> (by 37.5% Compared to 2015) with Consideration for Long-Term Goals

Daiichi Sankyo Group has set a target to reduce greenhouse gases, which was approved by the Science Based Targets initiative (SBTi)\*. Our target to reduce greenhouse gases emitted through the Group's business activities falls in line with the necessary degree of reduction for keeping the average increase in global temperature below 2°C.

In fiscal 2020, we achieved a 19.4% reduction in our CO<sub>2</sub> emissions compared to fiscal 2015 levels, far exceeding our initial reduction target of 5.6%. While the decline in corporate activities due to the COVID-19 pandemic had an impact, we nevertheless made progress in our energy conservation measures, procurement of electricity with lower emission coefficients, and our use of renewable energy. We remain committed to attaining our 2030 target of reducing CO<sub>2</sub> emissions by 37.5% from fiscal 2015.

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

Breakdown of CO<sub>2</sub> Emissions (Entire Group)



### • Disclosure based on TCFD recommendation

In April 2019, Daiichi Sankyo Group expressed support for the TCFD recommendation, which were formulated to encourage companies to disclose information about the risks and opportunities presented by climate change in business activities. In line with the TCFD recommendations, the analysis and response to climate change risks and opportunities are disclosed.



#### Governance

The Daiichi Sankyo Group has established the EHS Management Committee formed of members including group companies in an effort to protect the environment and ensure the health and safety of employees and contribute to the development of a sustainable society while achieving the uniform management and promotion of environment, health, and safety management for which there is a high likelihood of risks occurring. We hold discussions on policies, target setting, and activities related to global EHS management at this committee twice a year.

In fiscal 2019, the committee met in July and February to discuss measures for combating climate change, optimizing the environmental management system, and disclosing information in response to the recommendations of the TCFD, among other agenda items.

<Read more here>

Corporate Governance

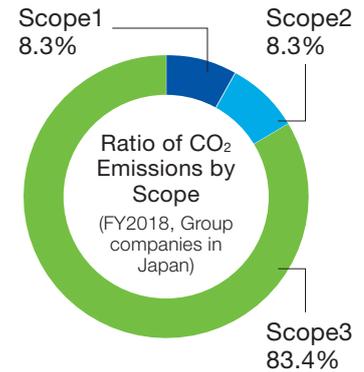
[https://www.daiichisankyo.com/about\\_us/governance/](https://www.daiichisankyo.com/about_us/governance/)

Environmental Management Promotion System

[https://www.daiichisankyo.com/about\\_us/responsibility/csr/business/environment/management/](https://www.daiichisankyo.com/about_us/responsibility/csr/business/environment/management/)

## Strategy

As the impact of various environmental factors increases, we will need to realize a sustainable society if we are to continue our corporate activities. Particularly for pharmaceuticals, which are life-related products, disruption of the supply chain due to worsening weather-related disasters and a decline in the supply capacity of pharmaceuticals are major risks, both from business and social perspectives. On the other hand, CO<sub>2</sub> emissions are characterized by low direct emissions from business activities (Scope 1 and Scope 2) and high indirect emissions from the supply chain (Scope 3). Thus, we consider transition risks are relatively low. Based on this understanding of the environment, the Daiichi Sankyo Group conducted a scenario analysis and risk assessment in accordance with the recommendations of the TCFD in order to clarify the resilience of our businesses towards climate change.



## Risk management

As regards climate change risks, a cross-departmental task team was established in fiscal 2019, and workshops on the outline of scenario analysis and the IEA/IPCC were held for employees from relevant departments. In this way, we enhanced our understanding of what happens to the world when transition risks increase (1.5°C scenario, 2°C scenario, etc.) or when physical risks increase (4.0°C scenario, etc.). In addition, business risks and opportunities through to fiscal 2030 were examined.

Risk	
2°C Scenario	Introduction of carbon taxes, increased costs for introducing renewable energy facilities, and reputational risk attributable to insufficient disclosure
4°C Scenario	Supply chain disruption, temporary suspension of operations at company sites, increased air conditioning costs due to rising temperatures, and difficulty in operation due to water withdrawal risk, and reduced productivity of products derived from natural compounds
Opportunity	
2°C Scenario	Measures to achieve Science Based Targets (SBTs)
4°C Scenario	Contribution to diseases that will increase with climate change

<Source> 2°C Scenario, IEA WEO 2018 SDS; 4°C Scenario, IPCC RCP8.5

• Results of scenario analysis

For each business, the potential impact and resilience were clarified, and a comprehensive evaluation was performed, taking into account financial impacts as well as investor perspectives.

Scenario	Key Risk	Event	Potential Impact on Daiichi Sankyo	Degree of Impact	Daiichi Sankyo's Resilience	Business Risk
2°C Scenario (world with advanced transition)	Strengthening policies and regulations related to decarbonization	Introduction of carbon taxes	<ul style="list-style-type: none"> <li>A carbon tax 100 \$/ t-CO<sub>2</sub> in 2030 will result in approx. 2.0 billion yen</li> <li>Increased costs associated with supplier transition risk responses</li> </ul>	Minor	<ul style="list-style-type: none"> <li>Adapt to a decarbonized society and turn the risk into an opportunity by continuing to take a range of measures to achieve SBTs, although the financial impact is not significant in terms of amount</li> </ul>	Minor/ Opportunity
		Increased costs for introducing renewable energy facilities	<ul style="list-style-type: none"> <li>Energy sources are mainly electricity and gas. Renewable electricity is already being purchased in some areas</li> <li>Replacing all electricity used within the Group with renewable energy will cost 0.3 to 0.6 billion yen, but the impact will be minor</li> </ul>	Minor	<ul style="list-style-type: none"> <li>Consider all options for de-fossilization (for all fossil fuels, including gas)</li> </ul>	Minor/ Opportunity
4°C Scenario (world with increasing physical impacts)	Increased frequency and scale of weather-related disasters (such as heavy rains, floods, and typhoons)	Supply chain disruption	<ul style="list-style-type: none"> <li>Increased concerns over the stable supply</li> </ul>	Major	<ul style="list-style-type: none"> <li>Strengthen inventory control to ensure the stable supply in the event of a disaster</li> <li>Purchase from multiple suppliers. Raw materials that cannot be purchased from multiple suppliers are to be examined</li> </ul>	Minor
		Temporary suspension of operations at company sites	<ul style="list-style-type: none"> <li>Key research centers may be flooded</li> <li>Manufacturing bases are unlikely to be flooded even if located close to a river. However, traffic disruption may lead to temporary suspension of operations</li> </ul>	Major	<ul style="list-style-type: none"> <li>Continue to examine ways to strengthen our operating bases and optimize our global bases in light of our business continuity plan</li> <li>Include more training for flood responses/countermeasures in our emergency drills to enhance resilience</li> </ul>	Minor
	Temperature rise	Increased prevalence of diseases associated with climate change	<ul style="list-style-type: none"> <li>Increased demand for products for malignant melanoma, cardiovascular, respiratory, and tropical diseases</li> </ul>	Major	<ul style="list-style-type: none"> <li>Expand research and development of pharmaceuticals for the diseases</li> <li>Ensure production lines and strengthen inventory control</li> </ul>	Opportunity
		Increased air conditioning costs	<ul style="list-style-type: none"> <li>At our head office, research and development bases, and manufacturing bases, most operations are performed basically indoors, and air conditioning costs increase as the temperature rises</li> </ul>	Minor	<ul style="list-style-type: none"> <li>Continue to improve energy efficiency, although the costs are within an absorbable range and their impact is small</li> </ul>	Minor
	Water shortages	Risk of operations being infeasible	<ul style="list-style-type: none"> <li>Plants in China and Brazil are at greatest water withdrawal risk and are likely to be shut down because of flooding</li> </ul>	Major	<ul style="list-style-type: none"> <li>In the event of plants in China being shut down for a long period of time, consider emergency supply measures, such as using other manufacturing sites and outsourcing manufacturing, in line with trends in pharmaceutical regulations</li> </ul>	Minor
Biodiversity loss	Reduced productivity of products derived from natural compounds	<ul style="list-style-type: none"> <li>No product has been subject to major impacts to date</li> </ul>	Minor	<ul style="list-style-type: none"> <li>Continue to monitor risks and opportunities for products derived from natural compounds</li> </ul>	Minor	

## Indicators and Targets

With regard to indicators and targets for assessing and managing climate-related risks and opportunities, the results of the latest scenario analysis have been reflected in the environmental management goals under the fifth five-year business plan.

### EHS Management Policy and Environmental Management Target (FY2021-FY2025)

EHS Management Policy	Environmental Management Target
Lower the environmental impact of our operations and supply chain by conserving energy and resources, and reducing greenhouse gas emissions and waste.	<ul style="list-style-type: none"> <li>• CO<sub>2</sub> emissions (Scope1 + Scope2): 25% reduction from FY2015</li> <li>• CO<sub>2</sub> emissions intensity based on sales (Scope3, Cat1): 15% reduction from FY2020</li> <li>• Energy consumption intensity based on sales : 30% reduction from FY2015</li> <li>• Waste emission intensity based on sales : 10% reduction from FY2020</li> <li>• Promotion to recycle waste</li> </ul>
Realize a sustainable society by taking a leading role in addressing environmental issues such as climate change, resource recycling, water risk and biodiversity.	<ul style="list-style-type: none"> <li>• Renewable electricity utilization rate: more than 30% utilization rate</li> <li>• Water consumption intensity based on sales : 10% reduction from FY2020</li> <li>• Waste plastic recycling rate: Over 70% maintained</li> <li>• Flood disaster manual maintenance rate: 100% at research laboratories and production sites in Japan</li> <li>• Promotion of Innovative Environmental Technologies for Decarbonized Community</li> <li>• Continuing Reduction of Pollutant Emissions to Atmosphere and Water Area</li> <li>• Promotion of the sustainable use of ecosystem services and resources</li> </ul>
Minimize EHS risks by complying with related laws and continual improvement of management systems.	<ul style="list-style-type: none"> <li>• Disposal of hazardous waste: 10% reduction from FY2020</li> <li>• ISO14001 acquisition rate: 100% at manufacturing sites</li> <li>• Establishment of EHS management system</li> <li>• Implementation of periodic EHS audits</li> <li>• Reducing EHS Risks through Collaboration with Supply Chains</li> </ul>
Encourage employees to practice EHS by internal communication such as EHS education and enlightening activities.	<ul style="list-style-type: none"> <li>• Education and awareness-raising for the prevention of environmental accidents</li> <li>• Education for all employees and professional training in EHS</li> <li>• Measures to improve employee motivation related to EHS</li> </ul>
Ensure the reliability from society by enhancing information to disclose and enhancing communication with stakeholders.	<ul style="list-style-type: none"> <li>• Third-party assurance coverage: 100%</li> <li>• Periodic Verification and Disclosure Based on TCFD Recommendations</li> <li>• Promoting Partnership for Sustainable Development</li> </ul>

<Read more here>

#### Promoting Environmental Management

[https://www.daiichisankyo.com/about\\_us/responsibility/csr/business/environment/management/](https://www.daiichisankyo.com/about_us/responsibility/csr/business/environment/management/)

## 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 operating sites with the highest water risks among our group are two plants in China, one in Brazil. Water withdraw restrictions and other strengthened regulations are considered to be major risk factors.

### Office Water Use Associated with Highest Water Risks (Volume of Water Used (Withdrawn))

Volume of Water Used (Withdrawn) (1,000 m <sup>3</sup> )	Volume of Water Discharged (1,000 m <sup>3</sup> )	Actual Volume of Water Used (1,000 m <sup>3</sup> )
154	125	29

\*Two plants in China and one in Brazil

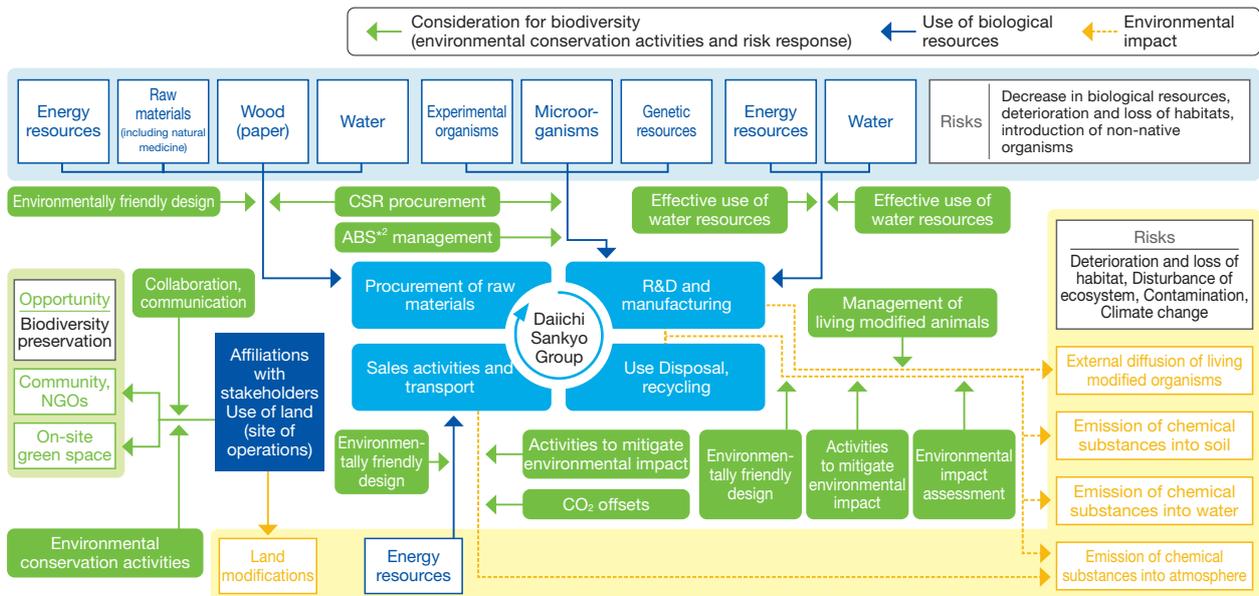
# 6 Initiatives for Biodiversity Conservation

## 6-1 Our Basic Stance

### Basic Biodiversity Principles and Action Guidelines

Basic Policy	
<ul style="list-style-type: none"> <li>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.</li> <li>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.</li> </ul>	
Action Guidance	
1. Actively promote to address biodiversity conservation in all business activity	<ul style="list-style-type: none"> <li>Under take ongoing endeavors to avoid or reduce operational impacts on biodiversity, devoting particular attention to lowering the environmental impacts of air and water emissions and wastes.</li> </ul>
2. Identify the biodiversity impacts of ecosystem services, using those services sustainably	<ul style="list-style-type: none"> <li>Recognize the operational importance of ecosystem services while understanding and minimizing their impacts on biodiversity, using those services sustainably.</li> </ul>
3. Use genetically modified organisms responsibly	<ul style="list-style-type: none"> <li>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.</li> </ul>
4. Access to Genetic Resources and the Fair and Equitable Sharing of Benefits Arising from their Utilization	<ul style="list-style-type: none"> <li>Comply with the Convention on Biological Diversity, the Bonn Guidelines, and other relevant rules to access and utilize genetic resources of the provider countries appropriately and to share benefits arising from their utilization in a fair and equitable manner.</li> </ul>
5. Communicate with stakeholders and improve in-house awareness	<ul style="list-style-type: none"> <li>Foster biodiversity preservation by communicating and liaising better with public and private entities.</li> <li>Educate employees to better understand how operations affect biodiversity and encourage internal and external efforts to safeguard biodiversity.</li> </ul>

### Map of Corporate Activities and Biodiversity<sup>1</sup>



<sup>1</sup> 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)

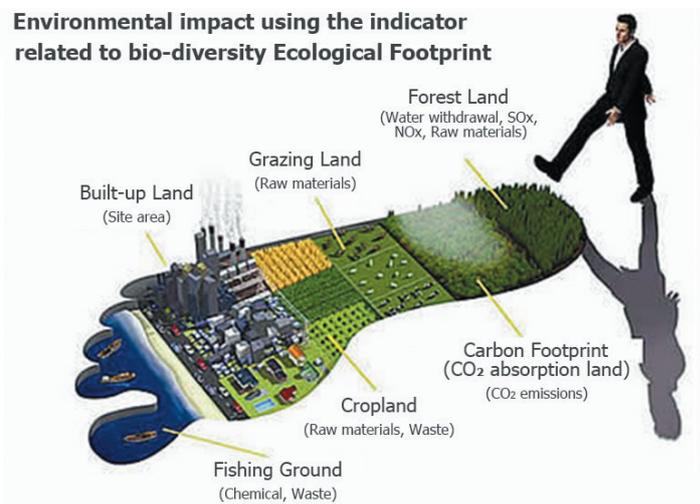
<sup>2</sup> Access to genetic resources and benefit sharing

## 6-2 Initiatives for Biodiversity Conservation

### ● Assessment of the biodiversity indicator called ecological footprint

We have been assessing our ecological footprint (EF), an indicator of biodiversity, jointly with experts from the NGO Global Footprint Network since fiscal 2014 to examine all environmental impacts resulting from the business activities of group companies in Japan. Moreover, we are using the assessed EF as a comprehensive indicator of environmental impacts, including those related to biodiversity, by checking and monitoring long-term changes in the relationship between the group's reduction of environmental impacts and its biodiversity conservation (trade-off).

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.



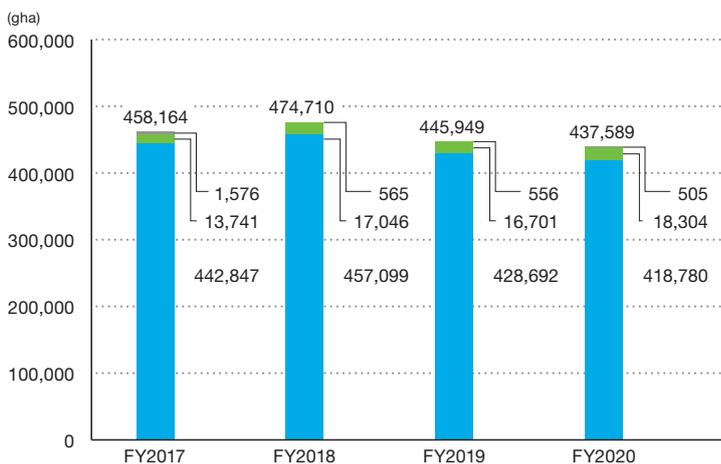
### ● Implementation of WET testing

In fiscal 2020, 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.

### Ecological Footprint of Group Companies in Japan

■ CO<sub>2</sub> absorption area ■ Forest land ■ Other



# 7 Environmental Communication

## 7-1 Main Efforts

Efforts	Details
Reporting of ISO 14001 Audit Results	Date: Tuesday, January 15, 2021 Time: 14:30–16:30 Target attendees: 44 employees involved in the ISO 14001 internal audit (video conference) Agenda: Report on results of the ISO 14001 surveillance audit
Working Session on Combating Global Warming	Date: Wednesday, March 24, 2021 Target attendees: employees tasked with saving energy and promotion managers (65 in total) (video conference) Agenda: Lecture 1: “Kyuden Mirai Energy’s initiatives on offshore wind power” Lecture 2: “Development of wave power generation in Hiratsuka City”
Lecture for Employees Involved in Environmental Operations	Date: Tuesday, July 14, 2021 Time: 13:30–14:30 Target attendees: employees tasked with promoting environmental management units and sites or otherwise involved in environment-related operations (76 in total) (video conference) Agenda: Lecture on addressing revisions to the Law Concerning the Recovery and Destruction of Fluorocarbons 1. Basic issues related to fluorocarbons 2. Regulations governing the disposal of equipment 3. Measures to prevent leakage during equipment use Date: Wednesday, March 10, 2021 Time: 13:30–15:30 Target attendees: employees promoting environmental management units and sites or otherwise involved in environment-related operations (80 in total) (video conference) Agenda: 1. Lecture on the current status of plastic waste and future initiatives 2. Briefing on the “ecoBRAIN” management tool for environmental laws and regulations
Environmental Art Contest	We received 1,426 applications from Group companies in and outside of Japan. Categories Images: 382 works from Group companies in Japan and 164 works from those outside Japan “Senryu” and slogans: 853 works from Group companies in Japan and 27 from those outside Japan The awards ceremony was held online on Thursday, November 19, 2020.
Environmental e-learning 2020	Theme: Envisioning the Future of the Company and Society from the Perspective of the SDGs Number of participants: 9,350 (participation rate: 98.36%)
COOL CHOICE Program	Period: June 15–September 4 Number of enrollees: 1,608
Posters for raising environmental awareness	Posters were displayed at 140 locations.

## 7-2 Environment-related Awards

Daiichi Sankyo	Selected to the CDP 2020 Climate Change A List Selected to the CDP Supplier Engagement Rating Leaderboard for second consecutive year
Daiichi Sankyo Osaka Branch	Received the Special Award of the Osaka Stop Climate Change Awards

# 8 Site Data

## Business Activity and Input/Output in fiscal 2020 (Group in Japan: Plants and R&D Centers)

INPUT		Unit	Shinagawa	Kasai	Onahama	Tatebayashi	Hiratsuka	Odawara	Kitamoto
Energies	Electricity	1,000 kWh	25,042	17,049	9,132	5,025	33,671	15,782	37,864
		GJ	242,817	164,998	79,658	48,157	327,859	153,251	367,216
	City gas	1,000m <sup>2</sup>	1,933	3,144	1,441	2,768	9,001	1,569	4,406
		GJ	87,071	141,599	64,890	124,655	405,355	70,685	198,436
	LPG	t	0	0	1	1	0	4	0
		GJ	0	0	39	65	17	218	0
	Light oil	t	0	0	0	0	0	1	0
		GJ	0	0	0	0	0	23	0
	Heavy oil	KL	0	0	0	0	0	0	1
		GJ	0	0	0	0	0	0	43
	Kerosene	KL	0	0	0	0	0	0	228
		GJ	0	0	0	0	0	0	8,368
	Gasoline (hybrid)	KL	0	0	0	0	0	0	0
	Gasoline	KL	0	0	0	0	2	0	0
GJ		16	0	12	4	54	4	0	
Gas oil for diesel engines	KL	0	0	0	0	3	0	0	
	GJ	0	0	0	0	0	0	0	
<b>Total</b>	<b>GJ</b>	<b>329,904</b>	<b>306,597</b>	<b>144,601</b>	<b>172,881</b>	<b>733,390</b>	<b>224,198</b>	<b>574,062</b>	
Water	Service water	1,000m <sup>3</sup>	104	101	79	53	327	31	243
	Industrial water	1,000m <sup>3</sup>	0	0	5,317	53	0	0	0
	Groundwater	1,000m <sup>3</sup>	2	0	0	0	2	1,577	0
	<b>Total</b>	<b>1,000m<sup>3</sup></b>	<b>106</b>	<b>101</b>	<b>5,396</b>	<b>106</b>	<b>328</b>	<b>1,608</b>	<b>243</b>

OUTPUT		Unit	Shinagawa	Kasai	Onahama	Tatebayashi	Hiratsuka	Odawara	Kitamoto
Air pollution	CO <sub>2</sub>	t-CO <sub>2</sub>	14,054	13,643	7,504	8,231	33,180	9,654	25,125
	NO <sub>x</sub>	t	3.4	3.2	1.3	16.4	14.4	2.0	2.4
	SO <sub>x</sub>	t	0.0	0.0	0.0	0.5	0.0	0.0	0.3
Water pollution	Water discharged	1,000m <sup>3</sup>	55.3	60.5	5,307.9	81.1	247.7	1,830.4	169.2
	BOD	t	1.5	1.3	7.0	0.1	4.2	2.9	0.3
	COD	t	0.0	0.0	8.5	0.4	0.0	1.2	0.6
Waste	Generated amount	t	400	407	2,588	342	2,370	10,405	851
	Emission	t	400	407	2,588	342	1,775	3,616	851
	Recycling amount	t	290	381	29	287	502	3,213	325
	Final disposal amount	t	2	1	12	1	0	53	3

# 9

## ESG Data (Environment)

Goal Reference	Classification	Details	Scope	Unit	FY2016	FY2017	FY2018	FY2019	FY2020	
Basic Information	Sales		Outside Japan	Million yen	359,224	347,295	340,017	379,793	406,216	
			In Japan	Million yen	595,900	612,900	589,700	602,000	556,300	
			Entire group	Million yen	955,124	960,195	929,717	981,793	962,516	
	Employees		Entire group	Person	14,670	14,446	14,887	15,348	16,033	
CO <sub>2</sub>	Energy-originated CO <sub>2</sub> emissions	Sales vehicles	Outside Japan	t-CO <sub>2</sub>	15,669	14,633	11,189	12,232	7,715	
			In Japan	t-CO <sub>2</sub>	6,238	6,193	5,991	5,617	4,337	
			Entire group	t-CO <sub>2</sub>	21,907	20,826	17,179	17,849	12,051	
		Offices	Outside Japan	t-CO <sub>2</sub>	4,396	6,750	6,031	4,013	3,801	
			In Japan	t-CO <sub>2</sub>	6,497	6,236	5,756	5,312	4,972	
			Entire group	t-CO <sub>2</sub>	10,893	12,986	11,787	9,324	8,773	
		Plants and R&D centers	Outside Japan	t-CO <sub>2</sub>	39,365	37,509	38,018	38,304	30,944	
			In Japan	t-CO <sub>2</sub>	163,997	153,504	144,576	133,276	121,263	
			Entire group	t-CO <sub>2</sub>	203,362	191,013	182,594	171,580	152,207	
		Total	Outside Japan	t-CO <sub>2</sub>	59,430	58,893	55,237	54,549	42,459	
			In Japan	t-CO <sub>2</sub>	176,732	165,933	156,323	144,204	130,572	
			Total	t-CO <sub>2</sub>	236,162	224,826	211,560	198,753	173,031	
	Non-energy oriented CO <sub>2</sub> emissions	Incinerator	Entire group	t-CO <sub>2</sub>	5,112	3,731	3,083	8,282	9,835	
	Total of CO <sub>2</sub> emissions	Total	Entire group	t-CO <sub>2</sub>	241,274	228,557	214,643	207,035	182,865	
	CO <sub>2</sub>	CO <sub>2</sub> emissions by Greenhouse Gas Protocol	Scope 1	Outside Japan	t-CO <sub>2</sub>	23,812	23,823	20,998	21,814	17,682
				In Japan	t-CO <sub>2</sub>	91,662	84,283	79,505	78,597	69,103
				Total	t-CO <sub>2</sub>	115,474	108,106	100,503	100,411	86,785
			Scope 2	Outside Japan	t-CO <sub>2</sub>	35,618	35,069	34,239	32,735	34,612
				In Japan	t-CO <sub>2</sub>	90,182	85,382	79,901	73,889	61,468
				Total	t-CO <sub>2</sub>	125,799	120,451	114,140	106,624	96,080
			Category 1: Purchased goods and services	In Japan	t-CO <sub>2</sub>	515,388	646,985	644,322	612,885	609,954
			Category 2: Capital goods	In Japan	t-CO <sub>2</sub>	44,564	50,017	89,891	46,950	85,081
			Category 3: Activities related to fuel and energy (not included in Scopes 1 or 2)	In Japan	t-CO <sub>2</sub>	6,748	6,364	6,058	11,088	10,501
			Category 4: Upstream transportation and distribution	In Japan	t-CO <sub>2</sub>	9,773	9,571	8,960	8,549	8,548
			Category 5: Waste generated in operations	In Japan	t-CO <sub>2</sub>	10,071	7,657	9,955	9,532	10,144
			Category 6: Business travel	In Japan	t-CO <sub>2</sub>	15,322	16,193	15,164	30,271	6,048
			Category 7: Employee commuting	In Japan	t-CO <sub>2</sub>	3,283	3,057	2,779	3,711	3,776
			Category 9: Downstream transportation and distribution	In Japan	t-CO <sub>2</sub>	16,755	21,723	16,867	16,227	14,722
Category 12: End-of-life treatment of sold products			In Japan	t-CO <sub>2</sub>	2,476	1,681	1,939	1,810	1,824	
Category 13: Downstream leased assets			In Japan	t-CO <sub>2</sub>	6,617	6,943	3,562	2,913	2,913	
Scope 3			In Japan	t-CO <sub>2</sub>	630,996	770,193	799,497	743,936	753,511	
Scopes 1 + 2 + 3			Total in Japan	t-CO <sub>2</sub>	872,270	998,750	1,014,140	950,971	936,376	
Emissions by group site in Japan		Shinagawa	In Japan	t-CO <sub>2</sub>	17,978	17,091	16,834	16,152	14,054	
		Kasai	In Japan	t-CO <sub>2</sub>	16,808	16,201	15,459	14,903	13,643	
		Daiichi Sankyo Propharma (Hiratsuka)* <sup>1</sup>	In Japan	t-CO <sub>2</sub>	36,704	36,455	35,873	36,441	33,180	
		Daiichi Sankyo Propharma (Takatsuki)	In Japan	t-CO <sub>2</sub>	18,156	18,879	18,470	9,451	0	
		Daiichi Sankyo Chemical Pharma (Onahama)	In Japan	t-CO <sub>2</sub>	12,439	9,016	8,871	8,010	7,504	
		Daiichi Sankyo Chemical Pharma (Tatebayashi)* <sup>2</sup>	In Japan	t-CO <sub>2</sub>	6,626	6,701	7,250	8,220	8,231	
		Daiichi Sankyo Chemical Pharma (Hiratsuka)	In Japan	t-CO <sub>2</sub>	2,296	161	110	57	37	
		Daiichi Sankyo Chemical Pharma (Odawara)	In Japan	t-CO <sub>2</sub>	10,345	9,017	8,677	10,554	9,654	
		Asubio Pharma	In Japan	t-CO <sub>2</sub>	5,523	4,825	0	0	0	
		Daiichi Sankyo Biotech Co., Ltd.	In Japan	t-CO <sub>2</sub>	37,120	35,159	33,034	29,488	25,125	

Goal Reference	Classification	Details	Scope	Unit	FY2016	FY2017	FY2018	FY2019	FY2020
Energy	Energy consumption by group companies in Japan	Electricity	In Japan	1,000kWh	190,635	179,783	171,119	162,682	154,008
				GJ	1,855,855	1,749,509	1,662,432	1,580,937	1,487,384
		City gas	In Japan	1,000m <sup>3</sup>	35,700	32,988	31,203	28,678	24,360
				GJ	1,607,796	1,485,679	1,405,265	1,291,567	1,097,063
		LPG	In Japan	t	11	10	10	10	7
				GJ	548	514	499	516	340
		LNG	In Japan	t	0	0	0	0	0
				GJ	0	0	0	0	0
		Light oil	In Japan	KL	1	5	1	1	1
				GJ	36	200	21	45	23
		Heavy oil	In Japan	KL	3	11	10	0	0
				GJ	116	414	377	0	0
		Kerosene	In Japan	KL	258	278	320	276	228
				GJ	9,469	10,203	11,745	10,129	8,368
		Steam	In Japan	GJ	0	0	0	0	0
	Gasoline (Plants and R&D centers)	In Japan	KL	5	4	8	7	6	
			GJ	156	137	150	112	89	
	Gasoline (Business-use vehicles)	In Japan	KL	2,554	2,681	2,574	2,427	1,873	
			GJ	88,361	92,746	89,340	84,094	64,917	
	Total	In Japan	GJ	3,567,177	3,339,402	3,169,679	2,967,401	2,658,226	
	Energy use by entire group	Electricity	Entire group	1,000kWh	253,147	233,166	216,865	209,678	204,084
				GJ	2,366,436	2,270,529	2,108,908	2,039,611	1,976,128
		City gas	Entire group	1,000m <sup>3</sup>	39,079	37,117	35,388	33,095	29,017
				GJ	1,758,555	1,671,450	1,593,608	1,490,315	1,306,634
		LPG	Entire group	t	58	62	59	59	53
				GJ	2,969	3,152	2,989	2,989	2,675
		LNG	Entire group	t	0	0	0	0	0
				GJ	0	0	0	0	0
		Light oil	Entire group	KL	1,908	1,795	261	141	228
				GJ	71,934	67,661	63,835	64,652	55,749
		Heavy oil	Entire group	KL	11	11	10	0	0
				GJ	438	414	377	0	0
		Kerosene	Entire group	KL	258	278	320	276	228
GJ				9,469	10,203	11,745	10,129	8,368	
Steam		Entire group	GJ	44,021	45,833	48,894	48,793	42,330	
Gasoline		Entire group	KL	7,499	7,247	7,222	7,243	4,895	
			GJ	259,454	250,748	200,323	196,152	126,087	
Thermal energy		Entire group	GJ		5,683	978	0	43	
Entire group	Entire group	GJ	4,618,657	4,327,129	4,031,656	3,852,642	3,518,014		
Fluorocarbons	Fluorocarbon leakage	In Japan	t-CO <sub>2</sub>	1,312	546	977	1,207	1,207	
Water resources	Water used and discharged by group companies in Japan	Service water	In Japan	1,000m <sup>3</sup>	1,165	1,079	1,040	958	937
		Industrial water	In Japan	1,000m <sup>3</sup>	7,600	7,443	7,182	5,899	5,370
		Ground water	In Japan	1,000m <sup>3</sup>	2,221	1,789	1,645	2,038	1,619
		Total water used	In Japan	1,000m <sup>3</sup>	10,986	10,311	9,867	8,894	7,926
		Effective water use volume	Entire group	1,000m <sup>3</sup>	1,052	455	391	98	137
		Water discharged	In Japan	1,000m <sup>3</sup>	9,934	9,856	9,476	8,797	7,789
	Water used and discharged by group companies outside Japan	Water used	Outside Japan	1,000m <sup>3</sup>	547	517	526	461	470
		Effective water use volume	Outside Japan	1,000m <sup>3</sup>	111	89	193	147	146
		Water discharged	Outside Japan	1,000m <sup>3</sup>	436	428	333	314	323
	Water used and discharged by the entire group	Water used	Entire group	1,000m <sup>3</sup>	11,534	10,828	10,393	9,356	8,395
		Effective water use volume	Entire group	1,000m <sup>3</sup>	1,163	545	584	245	283
		Water discharged	Entire group	1,000m <sup>3</sup>	10,370	10,283	9,809	9,111	8,113
	Water recycled in Japan (Kobe City recycles water)	Purchases by Asubio Pharma (ASB)	ASB	1,000m <sup>3</sup>	11	7	0	0	0
	Water used in water-stressed regions	Water used	Entire group	1,000m <sup>3</sup>	256	215	213	160	154

Goal Reference	Classification	Details	Scope	Unit	FY2016	FY2017	FY2018	FY2019	FY2020
Water pollution	Water pollution loads	BOD	In Japan	t	9.8	10.3	12.7	10.7	9.9
		COD	In Japan	t	14.1	13.8	12.2	11.9	10.6
		BOD	Outside Japan	t	24.0	21.6	18.9	17.6	18.4
		COD	Outside Japan	t	55.4	47.3	41.9	39.5	40.0
		BOD	Entire group	t	33.8	31.9	31.6	28.3	28.3
		COD	Entire group	t	69.5	61.1	54.1	51.4	50.6
Waste	Waste at group companies in Japan	Waste generated	In Japan	t	20,610	14,682	14,684	17,371	17,362
		Waste treated externally	In Japan	t	15,648	10,281	10,933	10,421	9,979
		Waste recycled	In Japan	t	5,484	3,771	3,045	3,744	5,026
		Recycling rate	In Japan	%	35.0	36.7	27.8	35.9	50.3
		Final disposal	In Japan	t	143	63	74	50	71
		Final disposal rate	In Japan	%	0.69	0.43	0.51	0.29	0.41
	Waste at group companies outside Japan	Waste treated externally	Outside Japan	t	2,168	2,065	2,360	1,944	1,957
		Waste recycled	Outside Japan	t	945	1,014	950	1,032	1,184
		Final disposal	Outside Japan	t	1,071	778	952	535	621
	Waste by the entire group	Waste treated externally	Entire group	t	17,816	12,346	13,293	12,366	11,936
		Waste recycled	Entire group	t	6,429	4,786	3,995	4,776	6,210
		Final disposal	Entire group	t	1,214	840	1,027	584	693
Office paper used	Amount	In Japan	10,000 sheets	5,355	5,360	5,109	4,320	2,750	
Air pollution	SOx emissions	Outside Japan	t	1.2	0.3	0.8	0.5	0.7	
		In Japan	t	0.3	0.2	0.6	0.8	0.8	
		Entire group	t	1.5	0.5	1.5	1.3	1.5	
	NOx emissions	Outside Japan	t	7.1	5.6	4.7	5.7	5.7	
		In Japan	t	48.9	36.4	40.6	45.4	43.1	
		Entire group	t	56.1	42.0	45.3	51.1	48.8	
PRTR substances	Amounts handled	In Japan	t	3,182	1,278	1,798	2,301	2,063	
	Amounts discharged and transferred (Air)	In Japan	t	49	5	7	4	3	
	Amounts discharged and transferred (Water)	In Japan	t	0	0	0	0	0	
	Amounts discharged and transferred (Sewers)	In Japan	t	120	0	0	0	0	
	Amounts discharged and transferred (Water + sewers)	In Japan	t	120	0	0	0	0	
	Amounts discharged and transferred (Waste)	In Japan	t	428	1,211	1,626	2,040	1,861	
VOC	100 VOCs specified by Japan's Ministry of the Environment	Amount emitted into the atmosphere	In Japan	t	1.4	1.4	1.1	1.5	1.5
Containers and packaging	Containers and packaging collected and recycled (obligatory recycling amount)	Glass bottle (colorless)	In Japan	t	175	158	159	153	203
		Glass bottle (brown)	In Japan	t	300	266	266	267	252
		PET plastic bottles	In Japan	t	0	0.3	0.3	0.1	0.1
		Plastic containers and packaging	In Japan	t	1,413	1,341	1,386	1,309	1,265
		Paper containers and packaging	In Japan	t	115	42	43	43	39
		Total	In Japan	t	2,003	1,807	1,854	1,772	1,758
Environmental efficiency	CO <sub>2</sub> carbon intensity	CO <sub>2</sub> emissions/sales in Japan	In Japan	t-CO <sub>2</sub> /million yen	0.297	0.271	0.265	0.240	0.235
	CO <sub>2</sub> environmental efficiency	Sales in Japan/CO <sub>2</sub> emissions	In Japan	Million yen/t-CO <sub>2</sub>	3.37	3.69	3.77	4.17	4.26
	CO <sub>2</sub> environmental efficiency index	Relative to the value of 100 for the base year of FY2015	In Japan	-	103	113	116	128	131
	Waste generation intensity	Waste generated/sales in Japan	In Japan	t/million yen	0.035	0.024	0.025	0.029	0.031
	Waste and environmental efficiency	Sales in Japan/waste generated	In Japan	Million yen/t-CO <sub>2</sub>	28.9	41.7	40.2	34.7	32.0
	Waste and environmental efficiency index	Relative to the value of 100 for the base year of FY2015	In Japan	-	99	143	138	119	110
	Water use intensity	Water use/sales in Japan	In Japan	1,000m <sup>3</sup> /million yen	0.018	0.017	0.017	0.015	0.014
	Water and environmental efficiency	Sales in Japan/water use	In Japan	Million yen/1,000m <sup>3</sup>	54.2	59.4	59.8	67.7	70.2
	Waste and environmental efficiency index	Relative to the value of 100 for the base year FY2015	In Japan	-	112	123	123	140	145

Goal Reference	Classification	Details	Scope	Unit	FY2016	FY2017	FY2018	FY2019	FY2020
Intensity	CO <sub>2</sub> carbon intensity	CO <sub>2</sub> Emissions/Group Sales	Entire group	t-CO <sub>2</sub> /million yen	0.253	0.238	0.231	0.211	0.190
	CO <sub>2</sub> environmental efficiency	Group Sales/CO <sub>2</sub> Emissions	Entire group	million yen/t-CO <sub>2</sub>	3.96	4.20	4.33	4.74	5.26
	CO <sub>2</sub> environmental efficiency index	Relative to the value of 100 for the base year FY2015	Entire group	—	99	105	109	119	132
	Waste generation intensity	Waste generated/Group Sales	Entire group	t/million yen	0.019	0.013	0.014	0.013	0.012
	Waste and environmental efficiency	Group Sales/Waste generated	Entire group	million yen/t	53.6	77.8	69.9	79.4	80.6
	Waste and environmental efficiency index	Relative to the value of 100 for the base year FY2015	Entire group	—	97	140	126	143	145
	Water use intensity	Water consumption/Group Sales	Entire group	1,000m <sup>3</sup> /million yen	0.012	0.011	0.011	0.010	0.009
	Water and environmental efficiency	Group Sales/Water consumption	Entire group	million yen/1,000m <sup>3</sup>	82.8	88.7	89.5	104.9	114.6
	Waste and environmental efficiency index	Relative to the value of 100 for the base year FY2015	Entire group	—	105	112	113	133	145
	CO <sub>2</sub> carbon intensity (Employees)	CO <sub>2</sub> Emissions/Employees	Entire group	t-CO <sub>2</sub> /person	16.4	15.8	14.4	13.5	11.4
	Office paper used intensity (sales)	Office paper used/Sales (billion yen)	In Japan	10,000 sheets/billion yen	9.0	8.7	8.7	7.2	7.8
	PRTR emission intensity (sales)	PRTR emissions (air, water)/Sales (billion yen)	In Japan	t/billion yen	0.7	2.0	2.8	3.4	3.3
	Water use intensity (sales)	Water consumption (Group)/Sales (billion yen)	In Japan	1,000 m <sup>3</sup> /billion yen	12.1	11.3	11.2	9.5	8.7
Water consumption/Sales (billion yen)					18.4	16.8	16.7	14.8	14.2
Management	Status of acquisition of ISO 14001 certification	Number of sites certified	Outside Japan	sites	1	1	4	5	5
			In Japan	sites	6	6	6	6	5
			Entire group	sites	7	7	10	11	10

\*1: Includes Daiichi Sankyo Co., Ltd., Daiichi Sankyo Chemical Pharma Co., Ltd., and Daiichi Sankyo Happiness Co., Ltd

\*2: Includes Daiichi Sankyo Co., Ltd.

\*Plant was sold to another company in October 2019.



DAIICHI SANKYO CO., LTD  
Sustainability Promotion Department  
October, 2021

This book is published on the website of Daiichi Sankyo.