# **Climate change**

# Ambitious on Climate Change

We define the following three main targets as our long-term vision for 2050 to realize a sustainable society: "carbon neutrality" to achieve a decarbonized society, "100% recycling rate" to strive for a circular economy, and "minimization of environmental risks" to fulfill our responsibility to realize a society that is in harmony with nature.

Value Creation Story

With the growing social demand for carbon neutrality, we revised the target to a more ambitious one in June 2022. Specifically, we established targets to reduce  $CO_2$  emissions by 42% in FY2025 and 63% in FY2030 compared to FY2015 emissions. To achieve these targets, we have achieved



\*4 Net Zero Energy Building

#### **Indicator and Target**

CO <sub>2</sub> emissions (Scope 1 + Scope 2)	2025 target : 42% reduction from FY2015 2030 target : 63% reduction from FY2015			
$\ensuremath{\text{CO}_2}$ emission intensity based on sales (Scope 3, Cat1)	2025 target : 15% reduction in $CO_2$ emission intensity based on sales compared to FY2020			
Business partner engagement (Scope 3, Cat1)	2025 target : Have more than 70% of business partners set targets based on the 1.5°C			
Renewable electricity utilization rate	2025 target : 60% or more 2030 target : 100%			

Environmental Management System

# **Environment**

We conduct business activities to contribute to the enrichment of quality of life through providing pharmaceutical products. We know, however, that those activities could cause environmental impact that might raise environmental issues. What underlies our promotion of environmental management is the following belief: activities necessary to provide pharmaceutical products must not unnecessarily contribute to environmental phenomenon that may threaten people's health and daily lives.

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our FY2025 target of a renewable electricity utilization rate of more than 60%. For FY2030, we aim to achieve a renewable electricity utilization rate of 100% as set forth in RE100\*1 as early as possible. In July 2023, these targets were recognized as scientifically based targets in line with the 1.5°C target by the SBTi\*2.

<sup>\*1</sup> International initiative that brings together companies committed to 100% renewable energy. It is run by The Climate Group, an international environmental NGO, and CDP, an NPO that supports companies in disclosing their climate change measures

<sup>\*2</sup> An international initiative that encourages companies to set CO<sub>2</sub> reduction targets in line with the Paris Agreement goals

# **Climate Change**

### **Climate Change Risks**

The Group recognizes environmental issues such as global warming or extreme weather which have impact on our work and lives. Under the Daiichi Sankyo Group Corporate Conduct Charter and the Daiichi Sankyo Group EHS\*5 Policy, we are promoting environmental management and practicing responsible corporate activities to mitigate climate change and other environmental challenges. We expressed our support for the recommendations of the TCFD\*6 in May 2019, and disclosed information such as governance and results of scenario analysis in accordance with the TCFD disclosure framework in 2020. In addition, we will disclose information in accordance with the TCFD recommendations revised in October 2021, and aim to further strengthen our climate change-related governance and business strategies to proactively respond to climate change, which is a

global issue

We have established the EHS Management Committee in an effort to protect the environment and ensure the health and safety of employees while achieving uniform management. The committee is chaired by the Chief Executive Officer of EHS Management, and consists of relevant division heads and presidents of the group companies. The EHS Management Committee discusses and reports on policies, target setting, and activities related to global EHS management twice a year, and matters to be discussed and reported are submitted to the Board of Directors, which supervises the committee activities. In FY2023, the committee discussed the promotion of business partner engagement for Scope 3 reduction and the development of a net-zero transition plan.

Information disclosure based on the recommendations of the TCFD

\*5 Environment, Health, Safety

\*6 The Task Force on Climate-Related Financial Disclosures (TCED): A task force set up in December 2015 by the Financial Stability Board (FSB), an international organization joined by central banks and financial regulators of major countries

# Contribute to the realization of a decarbonized society

CO2 emissions (Scope1+Scope2) for FY2023 were 109,239 t-CO2, a 49.8% reduction compared to FY2015. Not limited to our efforts to "mitigate" CO2 emissions and other environmentally hazardous actions, we facilitate initiatives to "adapt" to impacts that have become tangible or influence that is inevitable in the mid- to long-term. By scope, FY2023 performance for the entire Group was 85,245 t-CO2 for Scope 1 and 23,994 t-CO2 for Scope 2, which were 0.9% lower and 1.1% higher than in FY2022, respectively.

Scope 3 CO<sub>2</sub> emissions were 4,430,241t, showing an increase from FY2022. The increase is largely due to an increase in purchased goods and services (Cat.1).

To reduce Scope 3 (Cat. 1) emissions, we have set a KPI in our current mid-term business plan for more than 70% of suppliers to have a 1.5°C targets, and are currently strengthening engagement.

#### FY2025 and FY2030 Target(Scope1+2) toward Carbon Neutrality



### Utilization of Renewable Energy

At the Daiichi Sankyo Europe Pfaffenhofen Plant in Germany, which has been converting all purchased electricity to electricity generated from renewable energy since 2014, a self-consumption solar power system (annual energy production of 580 MWh) constructed on the plant's premises began operation in February 2022, and its amount of electricity generated is increasing every year. Moreover, in FY2023, we began converting to renewable fuels by using biomass wood pellets for steam production. In addition, in January 2023, the Daiichi Sankyo Pharmaceutical (Shanghai) Shanghai Plant began using a solar power plant (with annual energy production of approx. 540 MWh), which is able to cover the annual energy consumption of the plant's administrative building. This is expected to reduce CO<sub>2</sub>

Value Creation Story

emissions by 300 t-CO<sub>2</sub> per year.

Moreover, at the Daiichi Sankyo Chemical Pharma Onahama Plant, which started operation of the solar power system with annual energy production of approx. 4,000 MWh in December 2020, finished construction of the Daiichi Sankyo Group's first Nearly ZEB-certified building, its new office, in March 2023. This office generates electricity using solar power and saves energy by effectively combining high-efficiency air conditioning, water heating, and lighting equipment, thereby cutting standard building energy consumption by 78% (51.9% from energy savings and 26.9% from energy generation).

The Group is a member of RE100 and aims to achieve a 100% utilization rate of electricity derived from renewable energy sources by FY2030 and a materiality KPI of at least 60% by FY2025. The renewable electricity utilization rate in FY2023 is 80.0%, well on track to achieve RE100. We will continue to actively introduce various renewable energy sources, including solar power generation.

# Listed on CDP's Climate Change A List 2023

In February 2024, the Group has been recognized for leadership in corporate transparency and performance on climate change by global environmental non-profit CDP\*7, securing a place on its prestigious "A List" for the fourth consecutive year. With the growing social demand for carbon neutrality, the Group revised the target to a more ambitious one with the 1.5°C target of the Paris Agreement in June 2022. Our GHG emission reduction targets and supplier engagement target have been approved as 1.5°C targets by SBTi in July 2023. Furthermore, we have submitted a commitment letter to the SBTi declaring its goals for reducing GHG emissions, including net-zero standard. To achieve net-zero GHG emissions by FY2050, we aim to obtain net-zero certification for our "Transition Plan for Climate Change" and targets.

\*7 Global non-profit that runs the world's environmental disclosure system for companies, cities, states and regions



Daiichi Sankyo Chemical Pharma Onahama Plant New management building



Daiichi Sankyo Pharmaceutical (Shanghai) Shanghai Plant



# **Pollution**

#### **Preventing Air and Water Pollution**

As a pharmaceutical company handling various chemical substances, the Group considers proper management of chemical substances as an important initiative and issue. To prevent air and water pollution, the Group companies' plants outside of Japan, including Daiichi Sankyo Pharmaceutical (Shanghai), Daiichi Sankyo Europe (Germany),

and Daiichi Sankyo Brasil Farmaceutica regularly monitor their emissions to ensure compliance with the laws and regulations of each country and region. In Japan, the Group has established voluntary control standards that are stricter than legal requirements and properly monitors the emissions at plants and research & development (R&D) centers in Group companies.



# **Preventing Soil Contamination**

The Group makes efforts to prevent soil and groundwater contamination at plants and research centers. In Japan, when an investigation is required based on the Soil Contamination Countermeasures Act and related prefectural ordinance, we conduct the appropriate investigation according to the laws and regulations on discussion with the governmental offices.

Furthermore, we also conduct investigations according to the laws and regulations even in the cases where mandatory regulations do not apply,

such as the closing of offices and change of use purpose.

If contamination occurs, we report it to the related government offices and properly disclose information to members of the surrounding community, and take appropriate measures, such as prevention of diffusion and purification according to the extent of contamination. The offices that have already taken measures, such as purification, continue to monitor and report the result of analysis to governmental offices and community members.

#### **Progress of Measures for Soil Purification**

Office	Overview
The site of former Yasugawa plant (Yasu City, Shiga)	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. We issued a press release announcing our decision in April 2020, and we are conducting removal work in consultation and coordination with all concerned parties. During excavation, we take due care not to affect the surrounding environment through measures such as temporally setting up negative-pressure tents that cover the entire storage facility to prevent soil from scattering.

#### **Chemical Substances**

We manage chemical substances that may adversely affect human health or the ecosystem based on the PRTR\*1 system provided in the Act on Confirmation, etc. There was no transport, import, export, or treatment of waste that was deemed hazardous or any transport of waste that was

Value Creation Story

#### Group in Japan

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 (recycle)	Out of Offices (others)
Chloroform	2.1	0.1	0.0	0.0	2.0	0.0
Cobalt and its compounds	1.1	0.0	0.0	0.0	0.0	0.0
Methylene dichloride	9.5	0.6	0.0	0.0	8.9	0.0
Triethylamine	140.3	0.3	0.0	0.0	140.0	0.0
Toluene	773.8	0.5	0.0	0.0	7.1	570.0
N-Hexane	10.9	0.8	0.0	0.0	7.8	1.8
Tetrahydrofuran	397.4	0.2	0.0	0.0	0.0	300.0
Methyl isobutyl ketone	4.3	0.0	0.0	0.0	0.0	0.0
Total	1339.5	2.6	0.0	0.0	165.8	871.8
Dioxins	0.000	0.000	0.000	0.000	0.000	0.000

# **Environmental Impact Assessment of the Manufacturing Processes**

The Group conducts the necessary environmental impact assessments for its pharmaceuticals based on the guidelines of relevant countries and implements measures as appropriate.

The Group realizes that one of the sustainability risks associated with its business activities is the possible negative impacts of pharmaceutical manufacturing and its by-products on the environment. There have been incidents in the past in which by-products of pharmaceutical manufacturing were detected in rivers and other natural environments. The Group is aware that social concern is rising with regard to this issue as well as its potential environmental repercussions. The Group watches closely such social

shipped internationally as described in the terms of the Basel Convention Annex I, II, III, and VIII.

\*1 Pollutant Release and Transfer Register

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

responses and the global trend toward promotion of initiatives for EPS\*2 by the European Federation of Pharmaceutical Industries and Associations (EFPIA).

We believe that we need to continuously coordinate with governments, industry organizations, and research institutions to examine more appropriate risk evaluations and risk management.

\*2 EPS (Eco-Pharmaco-Stewardship): Voluntary initiatives to prevent environmental impacts throughout the lifecycle of pharmaceuticals and eco-friendly product management.

# Water, Biodiversity

### Water Risks

The Group considers the ability to utilize adequate freshwater at all operating sites and throughout the value chain to be extremely important for promoting and continuing our business.

Water risks include physical, regulatory, reputation and other risks, for which we carry out comprehensive risk evaluations based on the results of analyses of local water risks using the WWF-DEG Water Risk Filter and the survey results on water risks emanating from plants and research facilities. These evaluations indicate that operating sites with the highest water risks among our Group are one plant in China and one in Brazil. Water withdrawal restrictions and other strengthened regulations are considered to be major risk factors. In those plants, we are paying attention to regulatory trends and optimizing water usage.

#### Water use by plants located in high water risk areas (FY2023)

Site	River basin	Water withdrawals(kilo m <sup>3</sup> )	Water discharges(kilo m <sup>3</sup> )	Water consumption(kilo m <sup>3</sup> )
Shanghai Plant (China)	Yangtze River	41.4	33.8	7.6
Alphaville Plant (Brazil)	Parana	10.1	5.5	4.6
	Total	51.5	39.3	12.2

# **Initiatives for Biodiversity**

EHS Basic Policy and EHS Management Policy (FY2021-FY2025) stipulate that business activities must consider biodiversity and ecosystem services. The Group has established the Basic Biodiversity Principles and Action Guidelines based on these policies. When these were established, the Group surveyed its initiatives on biodiversity, the use of natural resources, and status of efforts to comply with the Cartagena Protocol both inside and outside of Japan. Additionally, the Group assessed the relationship between its business activities and

#### biodiversity.

The Group believes that biodiversity conservation and sustainable use of ecosystem services are essential in performing business. We promote raising awareness and understanding of employees, as well as the strengthening of environmental conservation activities in collaboration with business partners and private groups, to procure materials with less environmental burden, and to socially contribute towards biodiversity conservation.

#### Map of Corporate Activities and Biodiversity



\*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

# **Biodiversity Conservation Activities**

Our group is promoting activities to contribute to the conservation of local biodiversity at each site. In March 2023, we participated in 30by30 Alliance for Biodiversity launched by the Ministry of the Environment of Japan.

Value Creation Story

#### Case 1 Tatebayashi site (Japan)

To preserve the golden orchid and the silver orchid, we have prohibited entry into the forested area of the property at the Tatebayashi site where the plant naturally grows (approximately 1,000 m<sup>2</sup>). The continued conservation effort has resulted in an increase in the population of the species and expansion of breeding range.

#### Case 2 Pfaffenhofen Plant (Germany)

We cooperate with Pfaffenhofen in Bloom - an initiative started by the city of Pfaffenhofen aimed to increase the pollinator population - and we are planting many flowers in the approximately 3,200 m<sup>2</sup> area on the plant premises as an environment where honeybees and other insects can inhabit.

# **Ecological Footprint**

We assess the ecological footprint (EF), an indicator of biodiversity, jointly with experts from the NGO Global Footprint Network, to examine all environmental burdens in the business activities of Group companies in Japan. The assessed EF is used as a comprehensive indicator of environmental burdens, including those related to biodiversity, by reviewing and monitoring long-term changes in the relationship between the reduction of environmental burdens and biodiversity conservation (trade-off) in the Group.

This initiative 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 has been registered on the Nijyu-Maru Project as well.

# **TNFD** Disclosure

The Group believes that biodiversity conservation and sustainable use of ecosystem services are essential in performing business. We promote biodiversity initiatives to achieve the 2030 Nature Positive\*1.

In May 2024, we registered as a "TNFD\*2 Adopter"\*3, which indicates our support for the TNFD recommendations and our commitment to TNFD disclosure. Currently, we are conducting a brief evaluation of nature-related risks in our supply chain for our main products, and identifying key issues and conducting a locality Analysis. Based on the results, we are aiming for initial disclosure in line with TNFD recommendations by the end of FY2024.



Golden orchid (Tatebavashi site)



Planting in the premises (Pfaffenhofen plant)



- \*1 To halt and reverse biodiversity loss to put nature on a path to recovery for the benefit of people and planet
- \*2 Task Force established in June 2021 to provide a framework for the management and disclosure of nature-related risks. Final recommendations (v1.0) of the TNFD published in September 2023 to provide a framework for companies and financial institutions to identify, assess, manage and disclose nature-related issues
- \*3 TNFD Adopter : Organizations that have committed to start making disclosures aligned with the TNFD (Taskforce on Nature-related Financial Disclosures) Recommendations in their corporate reporting by the financial year 2024 (or earlier) or 2025. https://tnfd.global/engage/tnfd-adopters

# **Resource Use and Circular Economy**

# **Resources inflows and outflows**

Water is an important resource which is essential for pharmaceutical production, and we recognize that it is one ecosystem service that should be used sustainably. In addition to understanding the risks and challenges associated with water consumption and the status of water resources in countries and regions where our operation sites are located, we also implement measures including consuming water reasonably and efficiently, promoting reuse with purification equipment, and reducing the amount of water used.

The water consumed per unit of net sales in FY2023 was 5.1 Thousand m<sup>3</sup>/billion yen (down 40.7% from FY2020); while the total volume of water used by the entire Group was 8,191 thousand m<sup>3</sup> (down 2.4% from FY2020).

Furthermore, water intake by the Group did not have significant impact on water sources.

#### Water consumed (Withdrawal) and Wastewater Discharged Global (Plants and research falicilites)



# Outflow of resources related to products and services

Value Creation Story

#### After use PTP Sheet Recycling Program

Daiichi Sankyo Healthcare has started Japan's first demonstration experiment of the "After use PTP Sheet Recycling Program" in the city of Yokohama in October 2022.

As of the end of September 2024, the collection sites were set up at 102 locations in pharmacies, drugstores, hospitals, and public facilities and a cumulative total of approximately 5 tons of used PTP sheets have been collected. The collected PTPs are recycled into new products. Collection boxes are also available at the Daiichi Sankyo Kusuri Museum on the first floor of the headquarter building in Japan.

# **Waste Reduction Targets and Performance**

The Group defines zero emissions for waste as the final disposal rate representing less than 1% of the total amount of waste.

At our plants and research centers, the Group has established waste reduction and resource efficiency as important issues. Consequently, we seek to save resources through efforts such as the streamlining of resources used in manufacturing and packaging processes, the comprehensive separation of unnecessary and waste materials, the reduction of the total volume of unnecessary and waste material, and resource recycling. Whenever possible, the Group chooses waste disposal firms that recycle thoroughly.

At each office, we promote the thorough separation of trash, double-sided printing of office paper, paperless operations and other measures.

#### Outsourced waste treatment, Recycled Waste, and Final disposal amount Global (Plants and research falicilites)



#### **Closed-loop Recycling Efforts**

Our special subsidiary, Daiichi Sankyo Happiness's Hiratsuka site, conducts closed-loop recycling\*1 as a contribution to a recycling-oriented society through employing disabled people. Collected documents and other materials are sorted into reusable paper only and recycled into toilet paper by a partner company, which is then used at the site where the documents and other materials are collected. We contribute to solving social issues by horizontally spreading the program to other sites and introducing it as a good practice in our environmental e-learning program for all employees. \*1 Reusing or recycling materials recovered from their own used products into their own product.



"Okusuri Sheet Kururin BOX" at the Daiichi Sankyo Kusuri Museum

