

Contributing to Building a Low-carbon Society | FY2023 Archive

Efforts to Save Energy and Reduce CO₂ Emissions

Sumitomo Pharma aims to reduce greenhouse gas (GHG) emissions (Scope 1+2) to zero by fiscal 2050 through fossil fuel substitution. This will be achieved through the active use of energy saving and carbon dioxide eliminating technologies, which are expected to advance in the future, and renewable energy which is forecast to expand.

From fiscal 2023, we have set targets not only for Scope 1+2 but also for Scope 3, and have obtained approval from the Science Based Targets (SBT) Initiative *1.

To achieve the Scope 1+2 targets, we will continue to introduce non-fossil energy sources such as renewable energy-derived electricity, and systematically pursue capital investments that contribute to energy saving and CO₂ reductions through switching to LED lights and introducing energy-efficient facilities, taking into consideration the cost effectiveness in terms of CO₂ reduction (yen/t-CO₂) and the payback period of each measure. Following Oita Plant from November 2021 *2 and Suzuka Plant from April 2022 *3, we have switched the purchased electricity at the Tokyo Head Office to 100% renewable energy-derived electricity in April 2024 *4. For Scope 3, we will actively communicate with our suppliers to work together to achieve the target.

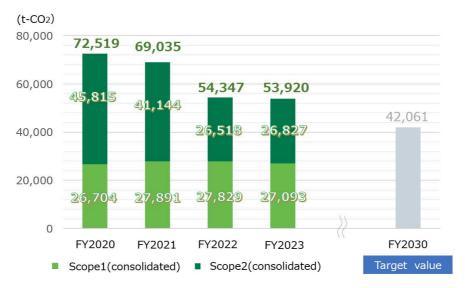
Additionally, we support all of the Japanese Government's policies in addressing global warming prevention, including the carbon neutral declaration, as well as relevant laws and regulations concerning energy saving and climate change. We comply with the Act on Rationalizing Energy Use and Shift to Non-fossil Energy, the Act on Promotion of Global Warming Countermeasures, and the Climate Change Adaptation Act, and appropriately submit periodic reports to the government on energy consumption and other relevant information. Furthermore, in support of "Decokatsu" initiative which is being promoted by the government, we made the "Decokatsu" declaration in January 2024. We are actively raising awareness among our executives and employees by using the "Decokatsu" logo as well as the icons for Sustainable Development Goal 7 and 13. Each of us engages steadily in energy saving actions, such as thoroughly controlling air conditioning temperatures, reducing the use of air conditioners by dressing appropriately, and green driving.

- *1 Sumitomo Pharma Receives SBTi (Science Based Targets initiative) Approval Press Release: https://www.sumitomo-pharma.com/news/20231110.html
- *2 Sumitomo Chemical Co., Ltd. Press Release: https://www.sumitomo-chem.co.jp/english/news/detail/20211021e.html 📮
- *3 By adding environmental value to the electric power procured by Chubu Electric Power Miraiz through the use of non-fossil fuel energy certificates for sources of renewable energy such as hydroelectric electric power plants owned by the Chubu Electric Power Group, it is in effect achieving zero CO₂ emissions Press Releases: https://www.sumitomo-pharma.com/news/20220408.html



CO₂ Emissions (Energy Sources) Trends

The figure below shows the transition of emissions toward the target form fiscal 2023: "Reduce GHG emissions (Scope 1+2) by 42% (consolidated) compared to fiscal 2020 by fiscal 2030." In fiscal 2023, a reduction of approximately 26% was achieved.



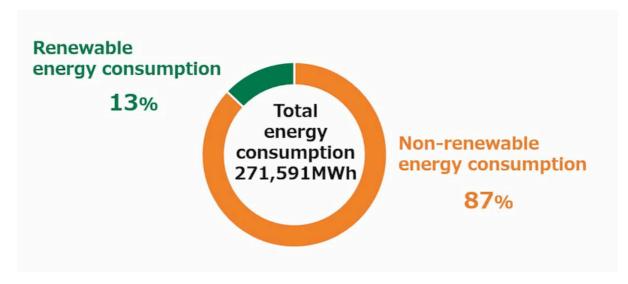
Trends in GHG emissions reduction target (consolidated) with FY2020 as base year

Boundary of calculation: Sumitomo Pharma Co., Ltd., consolidated subsidiaries in Japan, overseas consolidated subsidiaries

For information on the details of the calculation criteria, please see "ESG Data Table."

Proportion of Renewable Energy Use

In fiscal 2023, renewable energy comprised approximately 13% of total energy use. We will continue to introduce renewable energy systematically to increase the proportion used.



Ratio of Renewable Energy Use

Boundary of calculation: Sumitomo Pharma Co., Ltd., consolidated subsidiaries in Japan, overseas consolidated subsidiaries

For information on the details of the calculation criteria, please see "ESG Data Table."

Solar Power Generating Systems

Sumitomo Pharma has installed solar power generation systems at our Central Research Laboratories and the Osaka Research Center and the total amount generated at both research facilities in fiscal 2023 was 140 MWh. The solar power generation is displayed real-time on a monitor screen inside the research building to enhance environmental awareness of the employees.



Solar panels on the roof of a Central Research Laboratories building



Solar power generation displayed real-time on a monitor screen

Non-Fossil Certificates

By utilizing the Non-Fossil Certificates provided by Dydo Drinco,Inc. *6 for the electricity consumption required to operate Dydo Drinco's vending machines, we were able to reduce our CO₂ emissions by approximately 13 tons in fiscal 2023. We will continue to value such collaborative opportunities with our business partners.

*6 DyDo DRINCO, INC."LOVE the EARTH Vendors": https://www.dydo.co.jp/jihanki/lte_vendor/ 📮 (in Japanese only)

Accounting of CO₂ Emissions across the Supply Chain

We work to monitor CO₂ emissions across the supply chain. CO₂ emissions both by Scope and by Category (in Scope 3) are as shown in the table below. Our Scope 3 emissions gradually decreased from fiscal 2021 to 2023 primarily due to the decrease in CO₂ emissions in Category 1 (purchased goods and services). In fiscal 2021, the amount of business travel plunged as a result of countermeasures against COVID-19. After fiscal 2022, however, it largely recovered to pre-COVID levels, leading to a significant increase in Category 6 (business travel) CO₂ emissions compared with fiscal 2021. In fiscal 2022, Sumitomo Chemical Co., Ltd. joined the CDP Supply Chain Program '7. As a member of Sumitomo Chemical Group, we request disclosure of GHG emissions from our main suppliers, in accordance with the program and as part of our ongoing effort to use primary data '8 to determine Scope 3 Category 1 emissions. In a bid to promote sustainability in the entire value chain, we have established the "Sustainable Code of Conduct for Business Partners, which sets five priority categories that we expect our business partners to work on, and have initiated the Sustainability Survey of our business partners from fiscal 2023. As for the environment, one of the key categories, our business partners are requested to set targets for GHG reductions voluntarily and take actions to achieve them. Through the CDP Supply Chain Program and collaboration with our business partners, we are working towards our consolidated target to reduce GHG emissions (Scope 3, Category 1) by 25% compared with fiscal 2020 by fiscal 2030.

For more details on the Sustainability Survey, please see "Sustainable Code of Conduct for Business Partners" and "Environmental Communications."

CO₂ Emissions by Scope

Scope	Definition	CO_2 Emissions $(t-CO_2)$ in $FY2021$	CO_2 Emissions $(t-CO_2)$ in $FY2022$	CO_2 Emissions $(t-CO_2)$ in $FY2023$	Boundary
Scope1	Direct emissions of greenhouse gases from ourselves (fuel combustion, industrial processes)	21,398	27,829	27,093	Shown in the graphs of CO ₂ Emissions
					(Energy

^{*7} CDP Supply Chain Program: https://www.cdp.net/en/supply-chain

^{*8} Compilation of primary data: Calculating emissions using data obtained directly from suppliers, etc., without using the database of emission intensity such as emission intensity contained in Ministry of the Environment DB

Scope	Definition	CO_2 Emissions $(t-CO_2)$ in $FY2021$	CO_2 Emissions $(t-CO_2)$ in $FY2022$	CO_2 Emissions $(t-CO_2)$ in $FY2023$	Boundary
Scope2	Indirect emissions from the consumption of electricity, heating, cooling and steam supplied by other parties	40,351	26,518	26,827	Sources) Trends
Scope3	Indirect emissions other than those covered in Scope 1 and Scope 2 (emissions by other parties involved with the activities of our business)	382,293	366,620	356,214	Shown in the table below

CO₂ Emissions by Category (Scope 3)

Category		CO ₂ Emissions (t-CO ₂) in FY2021	CO ₂ Emissions (t-CO ₂) in FY2022	CO ₂ Emissions (t-CO ₂) in FY2023	Methods of Calculation and Emissions Intensity, etc.	Boundary
1	Purchased goods and services	332,970	310,925	305,002	Calculated by multiplying the purchase price of raw and packaging materials for products and purchased goods as well as manufacturing outsourcing costs by the emission intensity values stated in the DB of the Ministry of the Environment.	Non- consolidated basis
2	Capital goods	19,015	24,134	18,623	Calculated by multiplying the acquisition price of the fixed asset by the emissions intensity in Japanese Ministry of the Environment database	Consolidated basis, including overseas subsidiaries
3	Fuel- and energy-related activities not included in Scope 1 or Scope 2	15,643	15,048	15,017	Calculated by multiplying purchased electricity and steam by the emissions intensity in Japanese Ministry of the Environment database and purchased fuel by the emissions intensity in Carbon	Non- consolidated basis

Category		CO ₂ Emissions (t-CO ₂) in FY2021	CO ₂ Emissions (t-CO ₂) in FY2022	CO ₂ Emissions (t-CO ₂) in FY2023	Methods of Calculation and Emissions Intensity, etc.	Boundary
					Footprint database or lifecycle inventory (LCI) database	
4	Upstream transportation and distribution	824	853	820	Calculated by multiplying ton/kilometer for the transportation scenario by the emissions intensity in Japanese Ministry of the Environment database and LCI database	Transport in Japan, on a non- consolidated basis
5	Waste generated in operations	4,466	3,655	4,563	Calculated by multiplying the weight of waste according to type and processing method by the emissions intensity in Japanese Ministry of the Environment database	Plants, research laboratories, distribution centers on a non- consolidated basis
6	Business travel	886	3,140	3,375	Calculated by multiplying business travel expenses paid by the emissions intensity in Japanese Ministry of the Environment database	Non- consolidated basis
7	Employee commuting	651	634	690	Calculated by multiplying commuting cost according to transportation means by the emissions intensity in Japanese Ministry of the Environment database	Non- consolidated basis
8	Upstream leased assets	Not relevant	Not relevant	Not relevant	_	_
9	Downstream transportation and distribution	3,344	5,305	4,184	Calculated by multiplying CO ₂ emissions (estimate) per unit of sales in major pharmaceutical wholesaling by sales of our products in pharmaceutical wholesale segment	Non- consolidated basis
10	Processing of sold products	Not relevant	Not relevant	Not relevant	_	_

Category		CO ₂ Emissions (t-CO ₂) in FY2021	CO ₂ Emissions (t-CO ₂) in FY2022	CO ₂ Emissions (t-CO ₂) in FY2023	Methods of Calculation and Emissions Intensity, etc.	Boundary
11	Use of sold products	4,065	2,521	3,554	Calculated by multiplying HFC amount in pharmaceutical MDIs (metered dose inhalers) sold by GWP	Non- consolidated basis
12	End-of-life treatment of sold products	323	302	250	Calculated by multiplying the weight of the container and packaging according to material based on "Containers and Packaging Recycling Law" by the emissions intensity in Japanese Ministry of the Environment database	Non- consolidated basis
13	Downstream leased assets	106	103	136	Calculated by multiplying the energy consumption of the building asset owned and rented out by the conversion factors based on "Greenhouse Gas Emissions Accounting, Reporting, and Disclosure System" which is provided in "Act on Promotion of Global Warming Countermeasures"	Non- consolidated basis
14	Franchises	Not relevant	Not relevant	Not relevant	_	_
15	Investments	Not relevant	Not relevant	Not relevant	_	_

Japanese Ministry of the Environment database (Ver. 3.2 applied to fiscal 2021 emissions, Ver. 3.3 applied to fiscal 2022 emissions, Ver. 3.4 applied to fiscal 2023 emissions): The database on emissions unit values for accounting of greenhouse gas emissions, etc. by organizations throughout the supply chain

LCI database: LCI database IDEAv2 (for calculation of greenhouse gas emissions throughout the supply chain)

Note:

As for Category 1 (purchased goods and services) and Category 2 (capital goods), figures after fiscal 2022 were calculated considering consumption tax. This is because "the Japanese Ministry of the Environment's database on emissions unit values for accounting of greenhouse gas emissions, etc. by organizations throughout the supply chain (ver. 3.3)" states that the consumption tax is included in the emissions intensity. Figures for emissions in fiscal 2021 do not include consumption tax, but no adjustment has been made because the effect is insignificant.

As for Category 9 (downstream transportation and distribution), figures for CO₂ emissions of pharmaceutical wholesaling in fiscal 2022 were used for calculations of CO₂ emissions in fiscal 2023, because CO₂ emissions of pharmaceutical wholesaling in fiscal 2023 have not been released yet. As for total sales of pharmaceutical wholesaling and sales of our products in pharmaceutical wholesale segment, we used figures for fiscal 2023.

SBT (Science-based targets)

Our SBT are as follows.

- Reduce absolute Scope 1 and 2 GHG emissions 42% by fiscal 2030 from a fiscal 2020 base year (1.5°C level)
- Reduce absolute Scope 3 GHG emissions from purchased goods and services 25% by fiscal 2030 from a fiscal 2020 base year (Well below 2°C level)

We are making steady progress on the Scope 1+2 target, with a 26% reduction compared to fiscal 2020. For the Scope 3 target, due to significant changes in the composition of our products, the calculation based on secondary data showed an approximately 21% increase. However, on a standalone basis, our emissions have decreased by 6% compared to fiscal 2020.

Going forward, we will actively collaborate with suppliers to reduce GHG emissions and promote the use of primary data to better reflect the actual emissions.

Partnership Initiatives

Partnership with Federation of Pharmaceutical Manufacturers' Associations of JAPAN

We participate in activities of the Federation of Pharmaceutical Manufacturers' Associations of Japan (FPMAJ) through our membership in the Japan Pharmaceutical Manufacturers' Association (JPMA), an FPMAJ member. FPMAJ is member of the Japan Business Federation (KEIDANREN), which supports the Japanese Government's "2050 Carbon Neutral Declaration," has expressed its determination to work together with the Government to achieve it and drawn up a "Carbon Neutral Action Plan." Based on this action plan, FPMAJ has set the long-term vision of the Carbon Neutral Action Plan for the pharmaceutical industry as "achieving net-zero CO₂ emissions by 2050" and established the Phase II target of "reducing CO₂ emissions by 46% (research laboratories, plants, offices, and sales vehicles) from fiscal 2013 level by fiscal 2030," and is thus promoting the reduction in CO₂ emissions. We are also participating in and proactively working to advance this action plan.

Also, in line with Japanese Government policy, FPMAJ is working on reducing emissions of chlorofluorocarbons, which are also GHGs, and has established "Chlorofluorocarbon Study Subcommittee," a specialist subcommittee. The subcommittee has drawn up a voluntary action plan including numerical goals and in addition to carrying out activities to control emissions of chlorofluorocarbon substitutes (HFCs) used in quantitative spray aerosols is supporting policy execution through regular reporting to the Industrial Structure Council of the Ministry of Economy, Trade and Industry. Since Sumitomo Pharma imports and sells Qvar *, an inhaled steroid asthma therapy containing HFC-134a as a propellant, we participate in subcommittee efforts to reduce HFCs and collaborate with the regulatory authorities.

Participating in Japan Climate Initiative

Japan Climate Initiative (JCI) is a network of companies, local governments, NGOs and others in Japan that actively tackles climate change with an aim to strengthen information dissemination and information exchange to realize a decarbonized society. In an endorsement of JCI's declaration that it is "Joining the front line of the global push for decarbonization from Japan," Sumitomo Pharma has been participating since October 2018. By publishing messages and sending letters to the Government, JCI has been seeking stronger measures against climate change. Sumitomo Pharma endorses the following JCI messages.

- "Long-term Strategy Demonstrating Japan's Leadership in Achieving a Decarbonized Society to the World" published on May 16 2019 *9
- "JCI Message to the Japanese Government Calling for Ambitious 2030 Goals to Realize the Paris Agreement" published on April 19 2021 *10
- "Now is the time to accelerate renewable energy deployment -Calling for stronger climate change action in the midst of the fossil energy crisis-" published on June 3, 2022 *11
- "Overcoming Two Crises with Renewable Energy and Carbon Pricing" published on April 12, 2023 *12
- "Japanese non-state actors call for an ambitious 2035 target that is consistent with the 1.5 °C goal" published on July 8, 2024 *13

*9	$https://japanclimate.org/english/news-topics/messageonlongtermstrategy_en/ \ \square \\$
*10	$https://japanclimate.org/english/news-topics/call-for-ambitious-2030-target/ \ \square \\$
*11	https://japanclimate.org/english/news-topics/jci-message-re-release/ \Box
*12	https://japanclimate.org/english/news-topics/jci-message-g7-release/ \Box
*13	https://japanclimate.org/english/news-topics/jci-message-2035ndc-release/