Sumitomo Pharma
Innovation today, healthier tomorrows

Effective Use of Resources | FY2023 Archive

Effective Use of Water Resources

Good quality and sufficient quantities of fresh water are essential for our business activities, including the manufacturing of pharmaceutical products. As problems related to water resources are becoming increasingly serious worldwide, Sumitomo Pharma has set a Mid- to Long-term Environmental Goals of "reducing water withdrawal by 12% from fiscal 2018 level by fiscal 2030," in order to use water resources in a sustainable manner. Moreover, we believe that reducing water withdrawal leads to the protection of water sources and it is therefore an activity that indirectly contributes to the conservation of biodiversity.

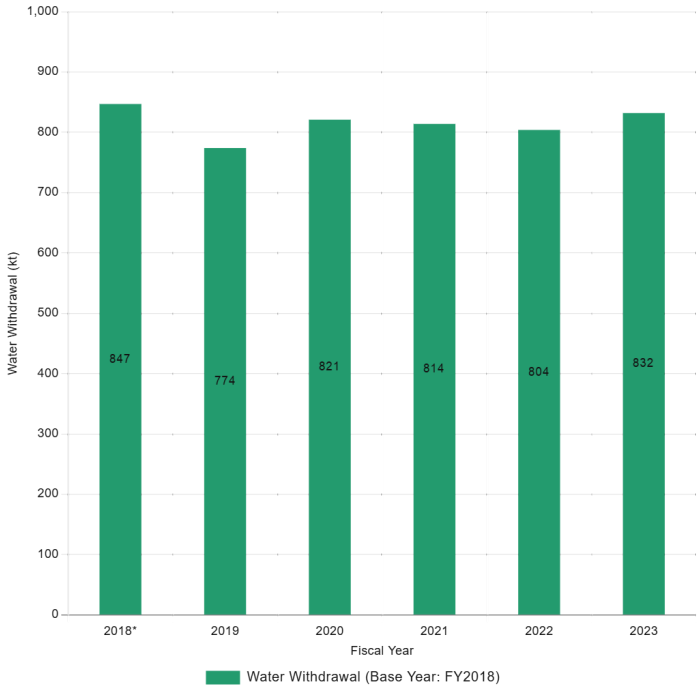
We manage the water withdrawal and discharge at all of all business sites in the Sumitomo Pharma Group, excluding small-scale offices such as tenant offices. To effectively utilize water resources, we have implemented measures such as reviewing the number of cleaning cycles for equipment and installing water-saving nozzles on faucets in animal breeding rooms. In fiscal 2023, in order to reduce and effectively utilize the amount of water required for cooling air conditioners, we have continued to adjust the operating hours of air conditioners, building on the previous year's efforts. However, the impact of increased production has led to an increase in water usage at the non-consolidated level compared to the previous fiscal year.

For more information on the progress of the Mid-term Environmental Goals, please see "Environmental Goals and Performance."

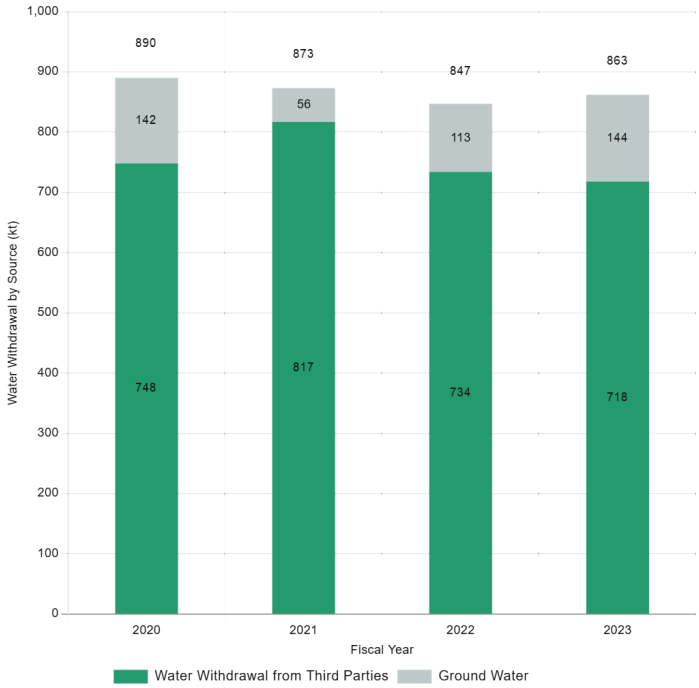
We will continue our efforts to reduce water withdrawal through pursuing greater efficiency in water usage and water saving measures.

Water Withdrawal and Breakdown by Withdrawal Source

Water Withdrawal Reduction Targets and Transition (Non-Consolidated)

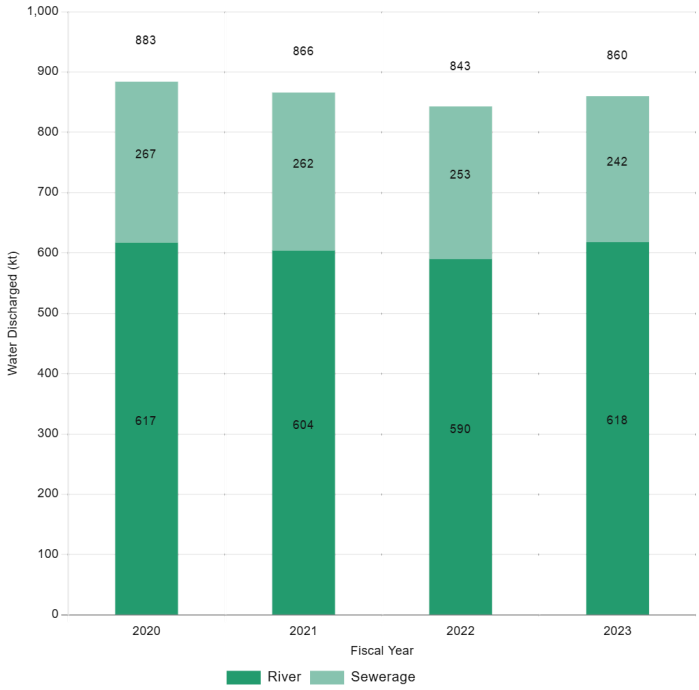


Water Withdrawal by Source (Consolidated)



Boundary of calculation:
Consolidated basis (Sumitomo Pharma Co., Ltd., consolidated subsidiaries in Japan, overseas consolidated subsidiaries)
However, small offices such as branches and business offices are excluded. In addition, overseas consolidated subsidiaries that do not have production sites or major research facilities are excluded from the scope because they have only small offices.
For more information on the calculation criteria, please see "ESG Data Table."

Water Discharged and Breakdown by Discharge Destination



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

Addressing Water Risks

As concerns about water risks increase worldwide, the Group regularly assesses risks pertaining to current and future water stress, vulnerability of the downstream environment and water disasters at our domestic and overseas production and research sites using databases such as Aqueduct, the water risk assessment tool of the World Resources Institute (WRI), and the Integrated Biodiversity Assessment Tool (IBAT), which measures biodiversity risk. We used the Intergovernmental Panel on Climate Change (IPCC) Representative Concentration Pathways (RCP) 8.5 scenario (the high-level reference scenario) for simulations to predict future river basin water supply volumes. In addition, through interview surveys of staff at our production and research sites and other methods, we have studied water-related problems that have actually occurred at each site in the past as well as future region-specific issues. Based on a comprehensive analysis of these findings, we consider that current water risks at our production and research sites are relatively low.

For water withdrawal from production and some research sites, we are preventing environmental pollution by setting voluntary standards that are even stricter than the environmental standards specified in the Water Pollution Prevention Act.

For water risks and water-related opportunities associated with climate change, conducting detailed analysis and assessments in accordance with the TCFD recommendations, we will pursue specific initiatives to reduce water risks.
For more information on water risks and water-related opportunities associated with climate change, please see "Information Disclosure Based on TCFD Recommendations (Response to Climate Change)."

As part of our value chain risk management, we continue to evaluate water risks of important raw material manufacturers and contract manufacturers using Aqueduct. Additionally, based on the "Sustainable Code of Conduct for Business Partners," we conduct the sustainability evaluation to confirm the status of the implementation of these guidelines by our business partners, including suppliers. In these assessments, we use a "Sustainability Survey" to understand the water withdrawal, water discharged, management of pollutants in wastewater, and water-saving/recycling initiatives of our business partners. Going forward, we will deepen communication with our business partners and work to reduce water risks across the entire value chain.

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

Results of water risk assessment using WRI Aqueduct (Target; our group production and research sites)

Water Stress Assessment (Fiscal 2023)

Level of water stress	Japan		Overseas	
	Number of sites	FY2023 water withdrawal (kt)	Number of sites	FY2023 water withdrawal (kt)
Low（<10%）	1	291	0	0
Low - Medium（10-20%）	4	536	0	0
Medium - High（20-40%）	0	0	1 (U.S.)	7
High（40-80%）	0	0	1 (China)	24
Total	5	827	2	31

Risks and Opportunities due to Water-Related Problems

Risk factor		Details	Impact
Regulatory risks	Restrictions on water withdrawal	Additional expenses to be incurred to secure the various types of water required for our business activities	Increase in capital expenditure and operating costs
	Strengthening of wastewater standards	Additional expenses to be incurred to bring our wastewater up to the water quality that can be safely discharged	
Physical risks	Increase and intensification of natural disasters	Suspensions and delays in product supply due to damage at facilities (our own facilities and those in the supply chain) involved in	Decrease in revenue Loss of business opportunities

Risk factor		Details	Impact
	(torrential rain, flooding, etc.)	our business activities and changes in water supply and demand. There may also be delays in research and development.	
	Reductions in water withdrawal, deterioration in water quality	Additional expenses to be incurred to secure the volume and quality of various types of water required for our business activities	Increase in capital expenditure and operating costs
Reputational risks	External evaluations	Low external evaluations due to lack of water-related activities or information dissemination to lower corporate value	Decline in stock price

Opportunity factors		Details	Impact
Regulatory opportunities	Restrictions on water withdrawal	Realizing effective use of water resources through water recycling and reducing water withdrawal to enable reductions in water-related costs	Reduction in operating costs
Physical opportunities	Increased risk of infectious diseases due to deterioration in quality of water resources	Providing existing pharmaceuticals and developing new drugs and vaccines to contribute to preventing and treating infectious diseases	Increase in business opportunities and revenue
Reputational opportunities	External evaluations	Achieving reduction in water risks to increase our sustainability and corporate value	Rise in stock price

Reduction of Waste

To make effective use of limited resources, Sumitomo Pharma continues to actively practice the "3Rs" of waste management (reduce, reuse, recycle) under the Mid- to Long-term Environmental Goals.
In fiscal 2023, we continued to achieve the target of maintaining the final amount of waste disposed of in landfills at less than 0.5% of the generated amount under the Mid-term Environmental Goals, as in fiscal 2022. We also achieved the Mid-term Environmental Goals' targets for recycling rates.
As a priority issue for our Mid- to Long-term Environmental Goals from fiscal 2024, we have set a target of achieving a waste plastic recycling rate of 65% or more by fiscal 2030, as a responsibility of a manufacturing company that uses plastics. To achieve the "resource circulation" target, we are undertaking various initiatives, such as material recycling of blister packaging waste and sale of unused research equipment with the aim of reuse.

For more information on the progress of the Mid-term Environmental Goals, please see "Environmental Goals and Performance."

Going forward, we will actively pursue recycling through thorough waste separation, conversion of waste into valuable resources and outsourcing to waste disposal companies who are capable of recycling.

We are promoting the following actions to reduce waste and promote recycling:

- Material recycling of blister packaging waste [*1]
- Elimination of plastic bottles from all vending machines in all business sites as part of our effort to do away with plastic bottles
- Sale of lab equipment no longer in use for the purpose of reusing it [*2]
- Participation in a recycling initiative using the material recycling platform operated by Askul Corporation in which used plastic folders are collected at all business sites for recycling [*3]

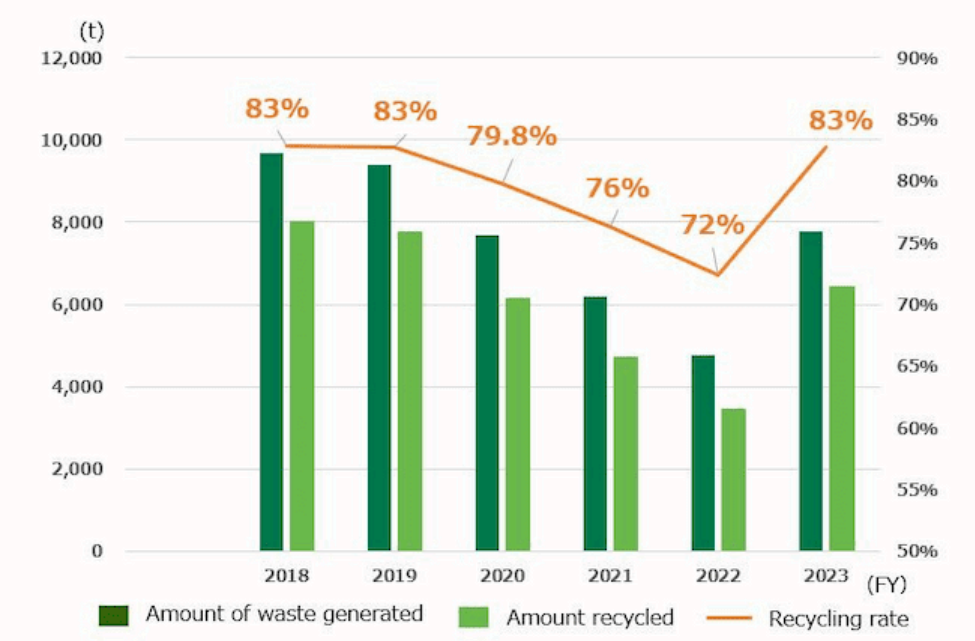
*1 Sumitomo Pharma and ORIX Eco Services to Collaborate on Recycling Blister Packaging Waste at Suzuka Plant
Press Release: https://www.sumitomo-pharma.com/news/20231120.html

*2 ZAI Reuse Market for Scientific Equipment: https://science.zai.market/ (in Japanese only)

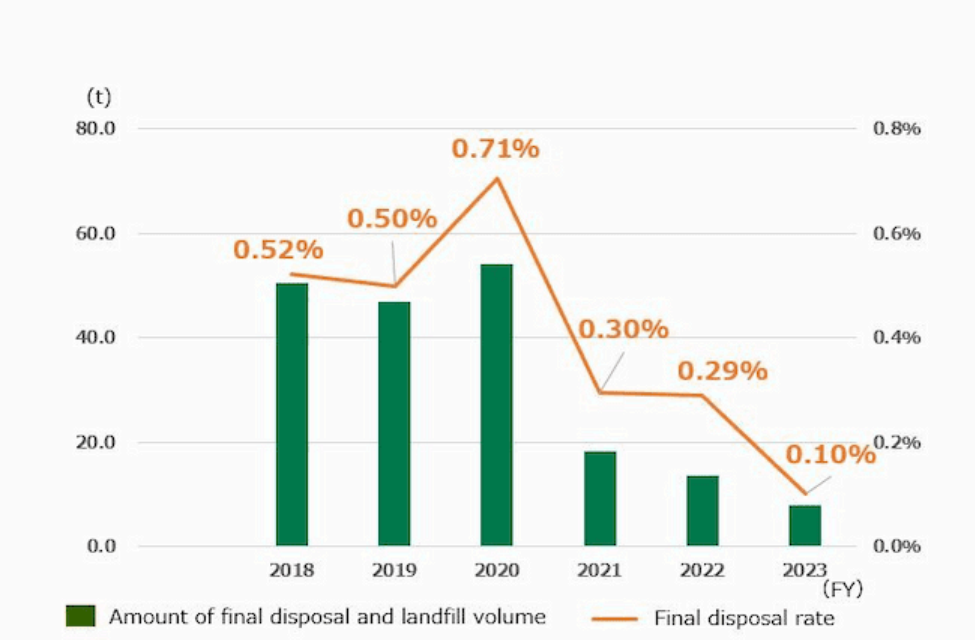
*3 ASKUL Resource Circulation Platform: https://www.askul.co.jp/kaisya/shigen/ (in Japanese only)

Waste-related Indicators

Recycling Rate



Final Disposal Rate



Boundary of calculation: Sumitomo Pharma Co., Ltd. only (branches and business offices are excluded)

Compliance with Japanese PCB Law

We sequentially dispose of polychlorinated biphenyls (PCB) waste from equipment such as transformers, capacitors and fluorescent lamp ballasts that use PCBs at each workplace in accordance with the Act on Special Measures concerning Promotion of Proper Treatment of PCB Wastes. All disposal of high concentration PCB waste has been completed. We will continue to perform proper management and storage of low levels of PCB-containing waste until such time that they can be processed by specialized contractors under the law.

PCB management status	As of September 2024
Waste containing high levels of PCB in storage	0 units
Waste containing low levels of PCB in storage or in use	4 units

Recycling of Product Containers and Packaging Materials

In accordance with the Containers and Packaging Recycling Act, Sumitomo Pharma recycles some of the containers and packaging materials used for our products.
Going forward, we will also fulfill our obligation to recycle containers and packaging, and actively work on reducing the amount of packaging materials used and replacing them with renewable resources.

Product Packaging Material Usage, Outsourced Recycling Amounts [*4] (Fiscal 2022 results)

Product packaging materials	Usage (t)	Outsourced recycling amount (t)
Plastic	323	94

Product packaging materials	Usage (t)	Outsourced recycling amount (t)
Glass (brown)	36	9
Paper	204	4

Total cost of outsourced recycling: 6,251,000 yen

*4 Outsourced recycling amounts are calculated based on coefficients for calculating mandatory recycling amounts determined by the Japanese Government.

Reduction of Chemical Substance Emissions

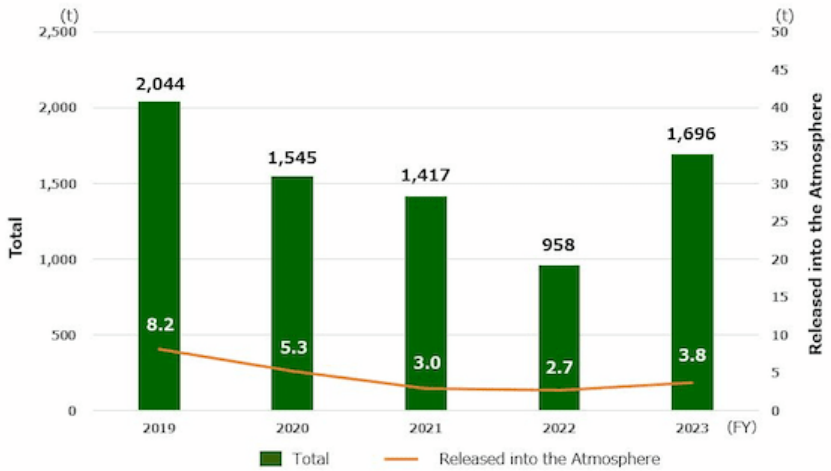
Chemical substances frequently handled in Sumitomo Pharma include toluene, methanol and acetone. These chemical substances are used primarily as solvents and in almost all cases are ultimately disposed of as waste oil or other waste products. We are taking proactive measures to deal with volatile solvents, such as dichloromethane, by installing recovery equipment to prevent leakage into the atmosphere. All of our workplaces subject to reporting under Japanese Act on Confirmation, etc. of Release Amounts of Specific Chemical Substances in the environment and Promotion of Improvements to the Management Thereof (PRTR Law) submitted appropriate reports based on results in fiscal 2022.

Sumitomo Pharma reports properly in accordance with Japan's Water Pollution Control Act and other laws and regulations. We continuously monitor wastewater through routine inspections and other means, while also working to strengthen our monitoring system by formulating measures to prevent pollution caused by toxic substances.

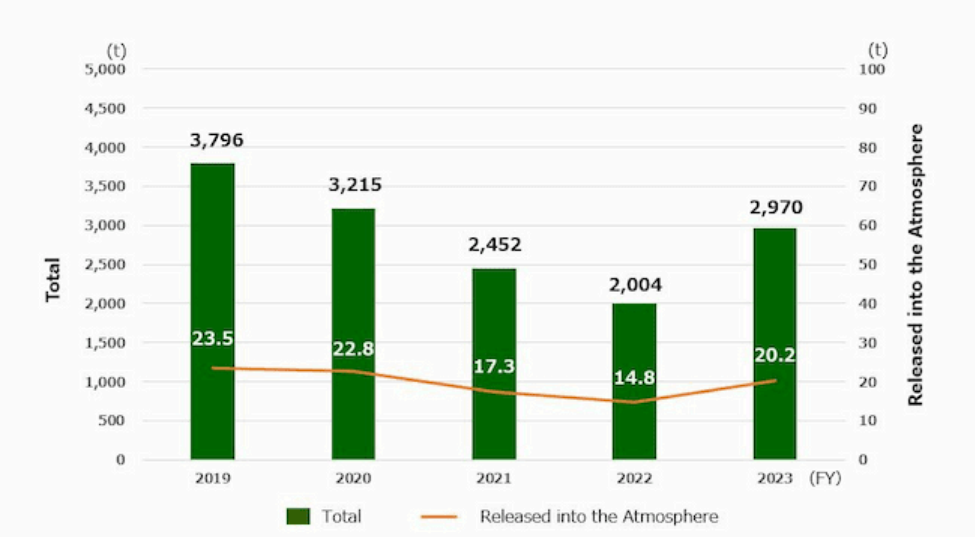
For more information on details of the progress of the Mid-term Environmental Goals, please see "Environmental Goals and Performance."

Chemical Substance Emission Related Indicators

PRTR *5 Substances



VOC *6 Substances



*5 PRTR: Pollutant Release and Transfer Register (The results for fiscal 2023 are tabulated for the substances specified in the PRTR Law enforcement order that came into effect on April 1, 2023.)

*6 VOC: Volatile Organic Compounds

Development of Environmental Conservation Systems

Green Procurement

Pursuant to our Green Procurement Basic Policy, we operate the Sumitomo Pharma's Green Procurement Guidelines of office supplies and other items. We give priority to selecting environmentally friendly products based on the Sumitomo Phama's Green Procurement Guidelines.
In fiscal 2023, the green procurement ratio of office supplies reached 51%. We will continue to encourage employees to pursue in green purchasing policies. We promote green procurement further by exploring the possibilities in switching to "green" items.

Green Logistics

We operate Green Logistics Guidelines to make our physical distribution activities more eco-friendly. In fiscal 2023, we implemented 43 initiatives, including the provision of external power supplies for the air conditioning of refrigerator trucks, requests to turn off vehicle engines while on premises (logistic centers), efficient distribution of shipped products (Suzuka Plant), and the use of ships for transportation and combined shipping to reduce CO_2 (Oita Plant).

Green Product Development

The Company has set out Green Product Development Rules and Manuals, and our R&D Division and Supply Chain Division promote green product development accordingly. In fiscal 2023, we implemented 33 initiatives, including reducing to use of organic solvents and the application of a high-speed method for LC analysis to reduce the impact on the environment

(R&D Division), improving production efficiency through changes in formulation methods to reduce energy use, reducing raw materials and test reagents by streamlining PQ (Performance Qualification) and PV (Process Validation) considerations, and collecting information on environmentally-friendly materials and examining the application of biomass materials for blister packaging (Suzuka Plant).

Green Facilities Design

Our Supply Chain Division, research laboratories and Osaka Head Office are engaged in the promotion of green facilities design.
In fiscal 2023, we implemented 15 initiatives, including introducing automatic powder characteristics analyzers, updating hot water piping (Suzuka Plant), updating air-cooled chillers (Central Research Laboratories), and switching to LED lights (Oita Plant, Suzuka Plant, Central Research Laboratories).