



Environment

Environmental Management

Basic Approach

Since fiscal 2022, the Mitsubishi Chemical Group (the MCG Group) has been engaged in environmental and safety activities, based on its “One Company, One Team” system.

Mitsubishi Tanabe Pharma Group conducts environmental management, and has formulated the [Code of Conduct](#) and [Environment & Safety Policy](#), which set out a basic approach and initiatives for business activities based on the MCG Group’s high-level policies.

We promote activities that consider the environment, safety, and health in line with these guidelines and policies and constantly strive to reduce our environmental impact. In addition, we proactively disclose environmental information to society and promote communication through dialogue with stakeholders.

Code of Conduct for the Environment and Safety

In conformity with the overriding principle that safety is paramount, we strive to prevent accidents occurring at workplaces and to implement adequate precautions and preparations against all contingencies, including occupational accidents and disasters. We also take continuing steps to reduce the impact of our corporate activities on the natural environment and we are fully committed to community environmental conservation activities.

Environment & Safety Policy

Mitsubishi Tanabe Pharma Corporation and its group companies (“MTPC Group”) aim to be global research-driven pharmaceutical companies that are trusted by society, and actively strive to protect the global environment and ensure people’s safety.

1. We assess our corporate activities for their environmental impact in order to continuously reduce environmental burden.
2. We give priority to safety considerations for all our workers to prevent occurrence of occupational accidents.
3. We set clear targets for our environmental and safety activities, and we effectively maintain and improve our system to achieve such targets.
4. We pursue activities in compliance with not only laws and regulations relating to environment and safety, but also more rigorous corporate management standards.
5. We systematically conduct training to raise each and every employee's awareness of the environment and safety.
6. We proactively disclose information relating to environment and safety so that we can deepen communication with society.
7. By proactively participating in and cooperating with environmental management and disaster reduction activities organized by local communities, we prepare against unforeseen contingencies such as accidents and disasters, to minimize their impact.

Environmental Compliance

The Group has declared that “We work actively to protect the global environment and strive to realize the Company’s harmonious co-existence with society” as a compliance action policy to be implemented by each employee. Specifically, in every aspect of our business activities, we will strive to reduce greenhouse gas emissions, promote energy conservation, resource conservation and resource recycling, reduce waste, and participate in and cooperate with local communities in environmental conservation activities. We will work to achieve a sustainable society by transitioning to a carbon-neutral society and a circular economy as well as protecting the global environment. We will continue to reduce our environmental impact by creating a companywide environment and occupational safety management system, establishing, and sharing goals and targets for environment and safety management, and formulating, implementing, evaluating, and reviewing plans at all offices. We will thoroughly manage environmental and safety risks and take prompt and appropriate actions to deal with any problems that may arise.

Environmental Management Promotion System

We are moving forward with a system of environmental management with the Representative Director in charge. Headed by the Representative Director, the Environment & Safety Committee convenes regularly to discuss and make decisions on important environmental and safety issues, medium-to-long-term as well as annual policies, and activity goals.

In addition, the Environment & Safety Liaison Council, which consists of heads of each division and presidents of domestic and overseas Group affiliated companies, and is overseen by the Environment & Safety Management Department manager, meets regularly. The Council thoroughly discusses and reviews activities related to the environment and safety as well as execution plans and submits important matters and issues related to policy decisions to the Environment & Safety Committee.

Furthermore, we established the Environment & Safety Management Department in the corporate organization as a department that oversees environment and safety matters for the Group as a whole. Through close ties with management and frontline workers, the office supports stronger frontline capabilities and the development of a culture of safety. In this way, the office works to prevent the occurrence or recurrence of accidents related to the environment and safety.

The policies, targets, and plans of the Group with regard to the environment are formulated in conjunction with the MCG Group. We engage in regular exchanges of information within the MCG Group as we undertake environmental activities.

ISO 14001 Certifications

Of the Group's production bases in Japan and overseas, five bases have obtained ISO 14001 certification. At production and research bases that have not obtained ISO 14001, we are building our own environment management systems in accordance with ISO 14001 and are managing these appropriately.

Bases with ISO 14001 certification

Company name	Name of base	Year certification first obtained
Mitsubishi Tanabe Pharma Factory	Onoda Plant	1998
	Yoshitomi Plant	2001
Mitsubishi Tanabe Pharma Indonesia	Bandung Plant	2004
Tianjin Tanabe Seiyaku	Head Office Plant	2010
Mitsubishi Tanabe Pharma Korea	Hyangnam Plant	2014

Environmental Audits

The environment management department periodically (Domestically: Annual, Overseas: Biennially) conducts environmental audits at production and research bases in Japan and overseas to confirm matters such as the status of environmental management and compliance, and that its environmental conservation activities are conducted legally and appropriately.

In these audits, we use check sheets of company regulations to check the status of compliance with internal rules, and the management status of environment-related facilities (waste storage facilities, wastewater treatment facilities, exhaust gas generation facilities, etc.). We ask that they submit an improvement plan and report to address the matters identified in the audit and confirm their response at the next audit. We ensure the effectiveness of environmental audits at our overseas bases by periodically conducting EHS compliance audits by external specialists who are familiar with the laws and regulations of the countries and regions in which they are located.

In fiscal 2022, environmental audits were conducted at five domestic bases (Yokohama Office, Shonan Office, Onoda Office, Onoda Plant, and Yoshitomi Plant). Overseas, audits were conducted at three bases (Tianjin Tanabe Seiyaku, Mitsubishi Tanabe Pharma Korea, and Taiwan Tanabe Seiyaku).

Although remote audits have been conducted online since the spread of COVID-19, in recognition of the infection situation, audits were performed face-to-face onsite for the first time in three years, at which activities and issues unique to each business location were shared and environmental activities confirmed to be in good condition.

Priority items checked in audits

- Managerial and operational status of environment-related facilities, etc.
- Status of compliance with environmental laws and regulations and internal rules
- Initiatives under the Law Concerning the Promotion of Resource Recycling of Plastics

Environmental Education

Aiming for rigorous environmental compliance, the Group plans and implements environmental education and training in accordance with the level of connection to the environment.

Employees in charge of environmental management, work to maintain and improve specialized skills and knowledge about environmental management by proactively obtaining qualifications and taking outside training courses.

In response to the strengthening of environmental laws and regulations in recent years, in fiscal 2022, we held environmental training sessions on subjects such as the latest trends in environmental laws and regulations, and examples of trends and risks in waste management measures.

Major training conducted in fiscal 2022

Training for new employees	<ul style="list-style-type: none"> • Participants New employees of the domestic Group • Date of implementation April 2022 • Description Mitsubishi Tanabe Pharma Group environmental targets for environmental problems
Environmental training for MR	<ul style="list-style-type: none"> • Participants Domestic MR employees • Date of implementation August 2022 • Description Mitsubishi Tanabe Pharma Group initiatives toward climate change and resource recycling
Environmental laws and regulations training	<ul style="list-style-type: none"> • Participants People responsible for environmental management of domestic Group bases, and those wishing to do so • Date of implementation November 2022 • Description Latest trends in laws and regulations regarding the environment Trends in waste management measures and examples of its risks • Participants Domestic Supply Chain • Date of implementation March 2023 • Description Training regarding waste processing

Status of Environmental Accidents/Violations of Environmental Laws and Regulations

For the sixth consecutive year, the Group had no environmental accidents and no major violations of environmental-related laws and regulations.



Environment

Targets & Initiatives

Achievement Status of Medium-Term Environmental Action Plan 21-25

The Group views environmental measures as an important management issue and has identified “environment-friendly business” as a materiality that contributes to the SDGs, and has formulated the Medium-Term Environmental Action Plan 21-25, which established six environmental themes, including monitoring indicators, as priority items. We have formulated a long-term reduction target for greenhouse gas (GHG) emissions to reach zero by 2050.

- GHG emissions reduction targets (scope 1 + 2) (including all domestic and overseas Group companies)
 - Target for fiscal 2030: 45% reduction (compared to fiscal 2019)
 - Target for fiscal 2050: Zero emissions

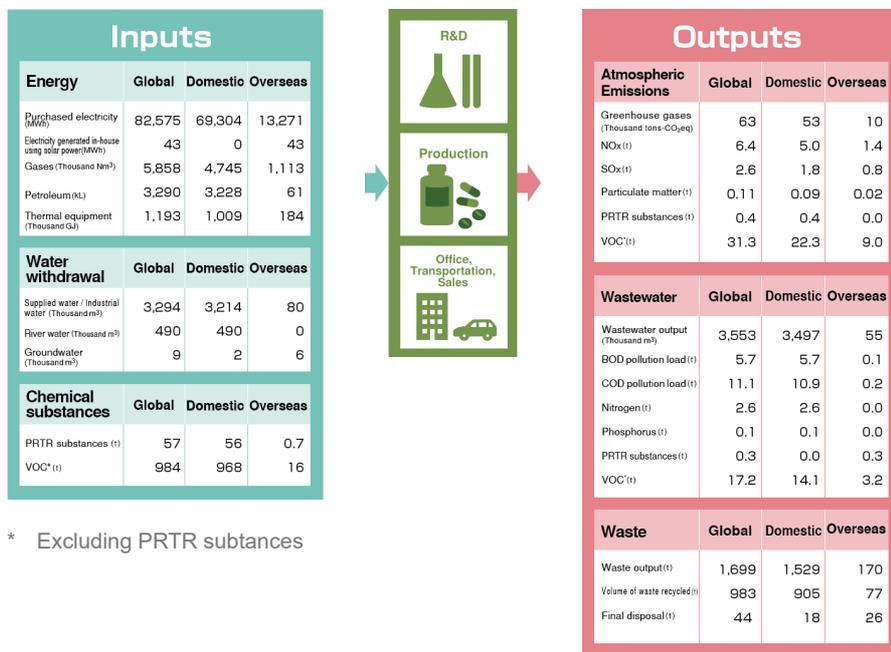
	Targets	Principal Initiatives and Results in Fiscal 2022	Environmental SDGs
Energy conservation and global warming mitigation	<ul style="list-style-type: none"> • Reduce GHG emissions by 25% by fiscal 2025 compared to fiscal 2019 (Global: Scope 1 + 2) 	<ul style="list-style-type: none"> • 24% reduction compared to fiscal 2019 • Installation of solar power generation facilities at overseas bases 	 Goal 7
	<ul style="list-style-type: none"> • Promote reduction of supply chain CO₂ emissions 	<ul style="list-style-type: none"> • Scope 3 was tracked and disclosed in the Sustainability Report 	
	<ul style="list-style-type: none"> • Appropriately manage fluorocarbons 	[Management results] <ul style="list-style-type: none"> • Amount recovered and decomposed 165 kg • Amount leaked 179 kg (799 t-CO₂eq) [Main Initiative] <ul style="list-style-type: none"> • Shift to low-GWP cooling 	 Goal 13

	Targets	Principal Initiatives and Results in Fiscal 2022	Environmental SDGs
Reduction of waste, recycling and reuse of resources	<ul style="list-style-type: none"> Reduce amount of waste generated by 30% by 2025 compared to fiscal 2019 (domestic) Reduce amount of final waste disposed by 50% by 2025 compared to fiscal 2019 (domestic) 	<p>[Results]</p> <p>Compared to fiscal 2019</p> <ul style="list-style-type: none"> 35% reduction of waste generated in Japan 52% reduction in final waste disposal <p>[Main Initiatives]</p> <ul style="list-style-type: none"> Promotion of waste 3R 	 <p>Goal 12</p>
	<ul style="list-style-type: none"> Promote reduction of plastic usage and recycling of waste 	<p>[Results]</p> <ul style="list-style-type: none"> Plastic waste emissions in Japan 179 tons (41% reduction year-on-year) *Emission volume is the total for the Group 58% recycling rate <p>[Main Initiatives]</p> <ul style="list-style-type: none"> Promotion of waste 3R 	
Effective use of water resources	<ul style="list-style-type: none"> Reduce water usage volume by 15% by 2025 compared to fiscal 2019 (Global) 	<p>[Results]</p> <ul style="list-style-type: none"> 37% reduction compared to fiscal 2019 <p>[Main initiatives]</p> <ul style="list-style-type: none"> Circulation of recycled water within plants Review of water volume withdrawn 	 <p>Goal 6</p>
Prevention of environmental pollution	<ul style="list-style-type: none"> Continue to maintain COD emissions at current levels compared to fiscal 2019 (Domestic) 	<p>[Results]</p> <ul style="list-style-type: none"> 18% reduction compared to fiscal 2019 	 <p>Goal 6</p>
	<ul style="list-style-type: none"> Reduce PRTR emission substances (Domestic) 	<p>[Results]</p> <ul style="list-style-type: none"> 73% reduction compared to fiscal 2019 	 <p>Goal 12</p>
Preservation of biodiversity	<ul style="list-style-type: none"> Promote understanding and reduce environmental impact on biodiversity Promote biodiversity preservation efforts 	<ul style="list-style-type: none"> Awareness of environmental impact through monitoring, etc., and measures to reduce impact Participation in activities to preserve the natural environment, such as tree-planting on Mt. Ikoma in Osaka Prefecture, and preservation of rural landscapes in the Hachioji-Takiyama area of Tokyo 	 <p>Goal 15</p>

	Targets	Principal Initiatives and Results in Fiscal 2022	Environmental SDGs
Enhancement of environmental management	<ul style="list-style-type: none"> Strengthen environmental risk management, promote compliance, and prevent environmental accidents 	<ul style="list-style-type: none"> Performance of environmental audits Subjects: 5 production and research bases in Japan, 3 overseas Performance of environmental education and training Appropriate response to environmental trouble and revisions to environmental laws and regulations 	
	<ul style="list-style-type: none"> Maintain zero environmental accidents and violations of laws and regulations 	[Results] <ul style="list-style-type: none"> While maintaining zero environmental accidents and violations of laws and regulations for six years 	

Material Balance

The figures below show the amount of resources (inputs) directly consumed and the environmental impact (outputs) discharged by our business activities in fiscal 2022.



Calculation Standards for Environmental Performance Indicators [PDF : 92.0KB]

Participation in Initiatives and Industry Group Activities

The Group participates in the following initiatives and industry group activities to solve social issues related to the environment and continues to be a company that is trusted by society.

Activities of Japan Climate Initiative (JCI)

In an effort to achieve the decarbonized society required in the Paris Agreement, the Group has participated in the Japan Climate Initiative* since 2021. Additionally, we have expressed our support for two previous messages from the JCI to the Japanese government, as well as the “Overcoming Two Crises with Renewable Energy and Carbon Pricing” message issued on April 12, 2023.

* The Japan Climate Initiative (JCI) is a network comprised of various entities (non-government actors) besides the national government that includes companies, municipalities, and NGOs, aiming to achieve a carbon-free society. Companies that are actively working on climate change measures are joining in support of the JCI Declaration which states, “Joining the front line of global trend for decarbonization from Japan.”

Activities of Pharmaceutical Industry Associations

The Company participates as a member of the Environmental Committee of The Federation of Pharmaceutical Manufacturers' Associations of Japan and contributes to formulating guidelines and action plans for the industry. We also participate in the Carbon Neutral Working Group and are working to achieve the carbon dioxide emissions reduction target based on Japan Business Federation's (Keidanren's) requests. Furthermore, we are participating in an environmental issues study group established by the Japan Pharmaceutical Manufacturers Association (JPMA) in fiscal 2022, and are working to address environmental issues as a pharmaceutical industry.



Environment

Climate Change Initiatives

Climate change is an environmental problem that has a significant effect on the continued existence of life, including human beings, and efforts to prevent it are now a major challenge for the global community. The Group has positioned climate change initiatives as an important management theme and is promoting the reduction of greenhouse gas emissions resulting from its business activities.

Reduction of Greenhouse Gas (GHG) Emissions

To mitigate climate change, the Group is endeavoring to reduce its energy consumption and greenhouse gas emissions by preventing the leakage of fluorocarbons, and has set the following targets in the Medium-Term Environmental Action Plan 21-25.

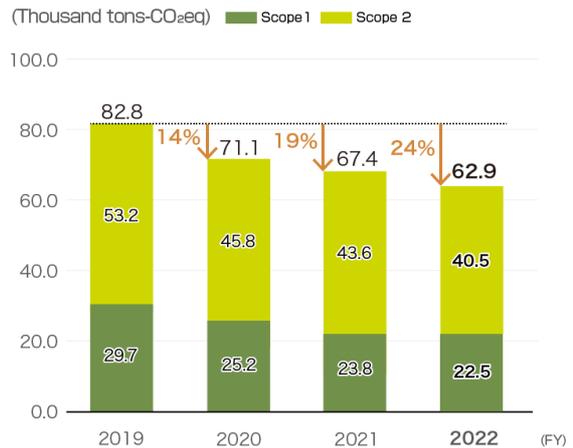
◇25% reduction in fiscal 2019 GHG emissions by fiscal 2025 (Global: Scope 1+ 2)

Greenhouse gas emissions for all global bases in fiscal 2022 were 62.9 thousand t-CO₂eq, down 24% compared to fiscal 2019.

This breaks down as: Scope 1 emissions are 22.5 thousand t-CO₂eq, a 25% reduction from fiscal 2019, with Scope 2 emissions of 40.5 thousand t-CO₂eq, a 23% reduction on fiscal 2019.

This reduction can be attributed to the conclusion of consolidation of a series of bases (such as Toda and Kashima) in Japan, and the ongoing daily promotion of energy conservation efforts at each base in order to achieve our goal of a 25% reduction.

GHG emissions (scope 1 + 2)



Supply Chain Greenhouse Gas Emissions Reduction Overview

Scope 3 emissions are largest in category 1, accounting for 94.9% of all supply chain greenhouse gas emissions (scope 3).

Scope 3 greenhouse gas emissions

Category		GHG emissions (Thousand t-CO ₂ eq)	Calculation method
1	Purchased goods and services	665.0	Calculated from the purchase prices of raw materials and products in Japan, which are multiplied by the emissions unit values* from the Ministry of the Environment database
2	Capital goods	20.2	Calculated from acquisition amounts of property, plant and equipment, not only for domestic companies but also for overseas companies in the scope of consolidation, which are multiplied by the emissions unit values* from Ministry of the Environment database
3	Fuel- and energy-related activities not included in Scope 1 or 2	10.3	Calculated from amount of energy used at domestic and overseas Group offices, which is multiplied by emissions unit values* from Ministry of the Environment database or the emissions unit values from the LCI database (IDEAv2.3)
4	Transport and delivery (upstream)	1.9	Calculated from domestic transportation ton-kilometers for shipments from plants to distribution centers, shipments from distribution centers to wholesalers, and shipments from sales-promotion item warehouses to branches, sales offices, etc., using the ton-kilometer method in the greenhouse gas emission calculation and reporting manual from Japan's Ministry of the Environment and Ministry of Economy, Trade and Industry Calculated from electricity used for storage management at outsourced distribution centers and sales-promotion item warehouses, multiplied by the actual emissions factor indicated in the emissions factors for electric power enterprises announced by the Ministry of the Environment and the Ministry of Economy, Trade and Industry on January 24, 2022
5	Waste generated in operations	1.2	Calculated from the amounts of waste, by type, from domestic Group offices (production and research bases, headquarters/Tokyo Head Office, distribution centers), which are multiplied by emissions unit value* from Ministry of the Environment database
6	Business travel	0.8	Calculated from number of domestic and overseas employees, which is multiplied by the emissions unit value* from Ministry of the Environment database
7	Employee commuting	1.1	Calculated by multiplying the amount of transportation costs paid by domestic and overseas transportation districts by multiplying the emissions unit values* from Ministry of the Environment database
12	End-of-life treatment of sold products	0.3	Calculated from amount of recycling obligation based on the Containers and Packaging Recycling Law in Japan, which is multiplied by the emissions unit value* from Ministry of the Environment database
Total		700.9	

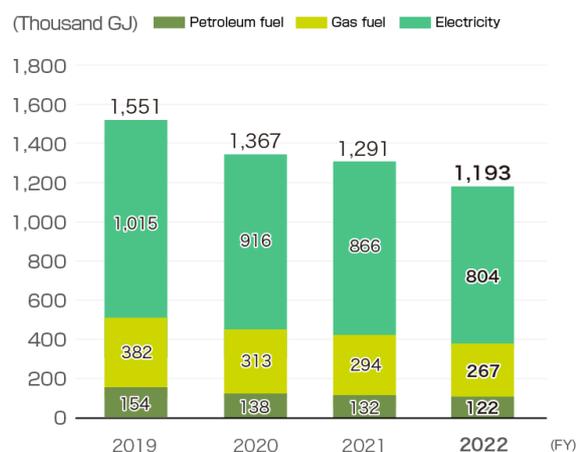
* Ministry of the Environment database: database on emissions unit values for calculating greenhouse gas emissions, etc., by organizations throughout the supply chain (Ver.3.3)

Reduction of Energy Used

The domestic Group holds regular energy liaison committee meetings for energy conservation to review changes in energy consumption and energy conservation measures as needed. We are also promoting energy conservation throughout the Group by creating an energy management system for the entire group.

Energy use (thermal equivalent) has reduced for the fourth consecutive year though a variety of energy-saving activities undertaken at each base.

Energy use (global)



Initiatives to Reduce Greenhouse Gas Emissions

Energy-Saving Initiatives at Bases

The Group is actively promoting energy conservation activities.

At our domestic and overseas bases, we are continuously replacing lights with LED lighting, controlling the blinking of lights with sensors, as well as promoting the shutdown of operations in manufacturing areas during long vacation periods. In fiscal 2022, we implemented a range of initiatives aimed at energy saving related to air conditioners at each base and workplace, such as changing air conditioner temperature settings in manufacturing areas and reviewing operation of low-temperature rooms at research sites. We also conduct daily energy-conserving activities such as energy-saving campaigns at all bases to educate employees and recommend turning off lights and equipment power when not in use.

Additionally, in collaboration with other industries, we are participating in NEDO's "Strategic Innovation Program for Energy Conservation Technologies," and have begun actual operation of a pharmaceutical production facility using a continuous batch production system. Based on the verification we have carried out to date, we anticipate that the production system we are currently developing will allow us to reduce energy consumption by 80 percent in comparison to conventional methods.

Click here for details.

<https://www.mt-pharma.co.jp/news/2021/MTPC210617.html> (Japanese language only)

Beginning in fiscal 2022, the Group has been working with Ono Pharmaceutical Co., Ltd., and Shionogi & Co., Ltd., in joint transport of pharmaceuticals and medical products in Japan, promoting a reduction in CO₂ emissions by reducing the number of vehicles used in transport. Click here for details.

<https://www.mt-pharma.co.jp/news/2023/MTPC230116.html>

(Japanese language only)

Introduction of Hybrid Vehicles

The Group is shifting steadily from gasoline-powered vehicles to hybrid vehicles and promoting eco-driving to reduce greenhouse gas emissions from company-owned vehicles.

		FY2019	FY2020	FY2021	FY2022
Ratio of company-owned vehicles that are hybrid vehicles		67%	64%	64%	67%
CO₂ emissions from company-owned vehicle fuels (domestic)	CO₂ emissions	4,165 t-CO ₂	3,131 t-CO ₂	3,576 t-CO ₂	3,520 t-CO ₂
	Ratio of reduction in CO₂ emissions (compared to fiscal 2019)	—	25%	14%	15%

Renewable Energy Use

Use of renewable energy that does not emit greenhouse gases is an effective measure to contribute to climate change mitigation.

The Group has installed new solar power generating equipment at Mitsubishi Tanabe Pharma Korea (Hyangnam Plant), and carbon-free power has been installed at the Shonan Office and at some Group offices in Europe. Going forward, we will consider switching to electricity from renewable sources for procurement of power at other major Group bases.

Towards carbon neutrality

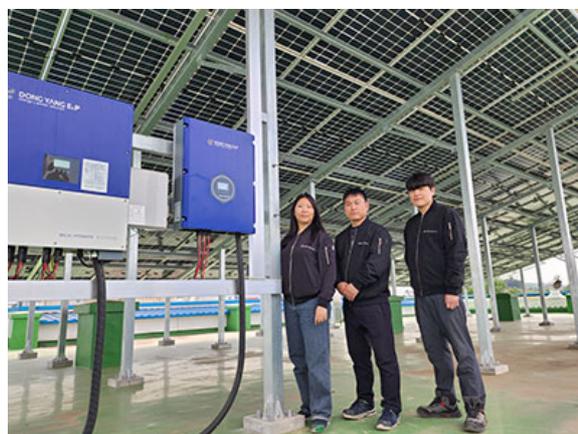
We annually update certifications such as ISO14001 and ISO45001 at the Mitsubishi Tanabe Pharma Korea (Hyangnam Plant) in proactive KAITEKI initiatives aimed at safety, health, and the environment.

In particular, in order to respond to climate change and enhance our corporate competitiveness, we participate in the Korean RE100 (K-RE100) and in September 2022 installed solar power generation equipment to expand our use of renewable energy.

As of May 2023, this equipment had generated 61,695 kWh of electricity since starting operation, contributing to carbon neutral activities with a reduction in CO₂ emissions of 28,997 kg-CO₂. Sustainable use maximizes energy efficiency and reduces carbon emissions, and we even anticipate significant economic benefits.

Beginning with this installation of solar power generating equipment, we move towards utilizing renewable energy, planning and moving ahead with our efforts steadily, and thus leading society as a global business.

Looking to the future, at the Hyangnam Plant we will continue with KAITEKI initiatives to maintain our position as a plant with future value, and improve our corporate competitiveness.



Hyangnam Plant employees

Controlling Fluorocarbons Emissions

The Group is working to prevent leaks of fluorocarbons, which add to the effects of ozone layer depletion and greenhouse gases. Equipment containing fluorocarbons installed in domestic bases is properly managed with a ledger in accordance with the Law Concerning the Discharge and Control of Fluorocarbons revised in 2020. In addition, we comply with installation standards and conduct regular equipment inspections and when disposing of the equipment, we recover and destroy the fluorocarbons and maintain a record of this for three years.

Furthermore, when installing equipment containing fluorocarbons, we select a model that takes into account global warming potential and energy-saving performance.

In fiscal 2022, at the Group's domestic production and research bases, the volume of fluorocarbons recovered and destroyed was 165 kg, and the leakage volume was 179 kg (799 tons-CO₂eq). The CO₂-equivalent leakage volumes for domestic Group companies were below the threshold for reporting to the national government for all years since 2015 when the leakage reporting system was established.



Environment

Water Resource Initiatives

Water shortages and increased flood risks due to climate change are becoming a social issue, and for the Group, securing good quality water is extremely important for pharmaceutical research and manufacturing. The Group manages the amount of water withdrawal and wastewater in its business activities, saves water to reduce its water withdrawal, and makes effective use of its limited water resources.

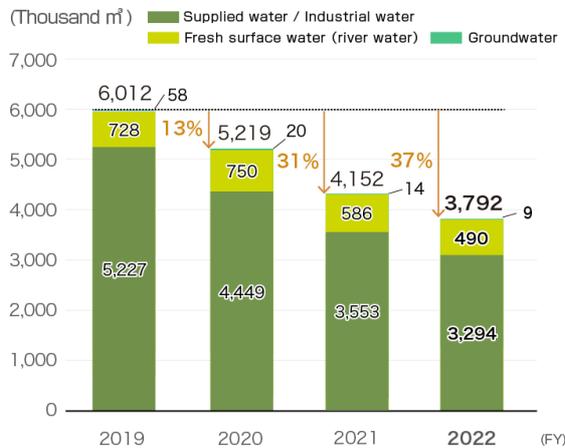
The Group's Medium-Term Environmental Action Plan 21-25 targets a 15% reduction in water usage volume by 2025 compared to fiscal 2019 (Global).

The water withdrawal of all bases globally in fiscal 2022 was 3,792 thousand m³, down 37% from actual withdrawals in fiscal 2019, significantly exceeding targets.

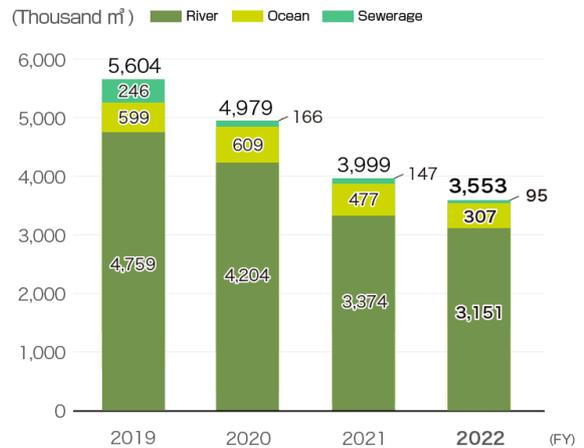
In addition to our normal water-saving activities, the use of recycled water at our plants and a review of water intake contributed to the reduction of water withdraw

The total volume of wastewater discharged at all bases globally in fiscal 2022 was 3,553 thousand m³, with the largest volume discharged to rivers, and other discharges made in sea areas and sewage systems.

Water withdrawal (global)



Wastewater discharged (global)





Environment

Initiatives to Reduce Waste and Reuse Resources

Pollution of the natural environment by waste and the resulting impact on ecosystems have become problematic, and efforts to recycle resources will help curb environmental destruction and reduce waste, making a major contribution to the protection of the global environment.

Under the Medium-Term Environmental Action Plan 21-25, the Group has set the goal of reducing the volume of waste generated and the amount of final waste disposed, to this end, we are advancing the “3Rs (Reduce, Reuse, Recycle) + Renewable” from the standpoint of correct handling and effective resource use with the aim of realizing a circular economy.

Waste reduction targets (Domestic)

- 30% reduction in waste generated by fiscal 2025 compared to fiscal 2019
- 50% reduction in final waste disposal by fiscal 2025 compared to fiscal 2019

Proper Management of Waste

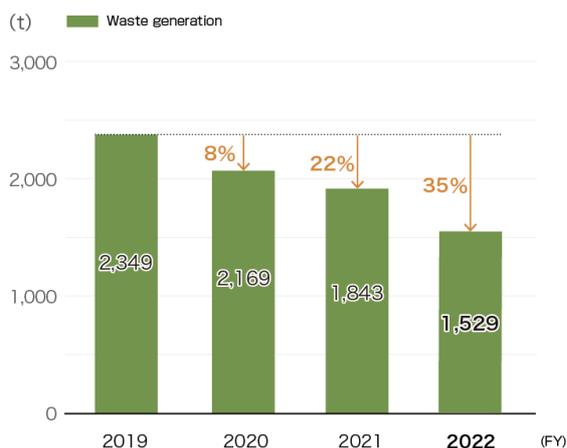
As a waste-discharging enterprise, the Group properly implements and manages the conclusion of agreements with contractors for waste collection, conveyance and processing, the management of electronic manifests, and on-site confirmation of disposal contractors.

We choose waste disposal contractors who proactively recycle resources, conduct on-site confirmation before concluding these contracts, and evaluate whether disposal consignment is possible.

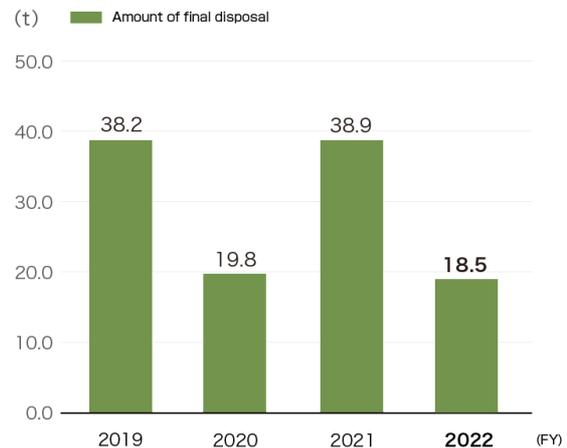
In fiscal 2022, waste generated by the domestic Group was 35% less than in fiscal 2019 and final disposal was 52% less than in fiscal 2019. The recycling rate was 59%. Going forward, we will evaluate measures to further promote recycling, including revision of processing methods and vendor selection.

Furthermore, we will continue to implement initiatives to minimize waste, such as switching from disposing of recovered solvents that have exceeded their recovery period, to sale of these substances.

Amount of waste generated (domestic)



Amount of final waste disposed (domestic)



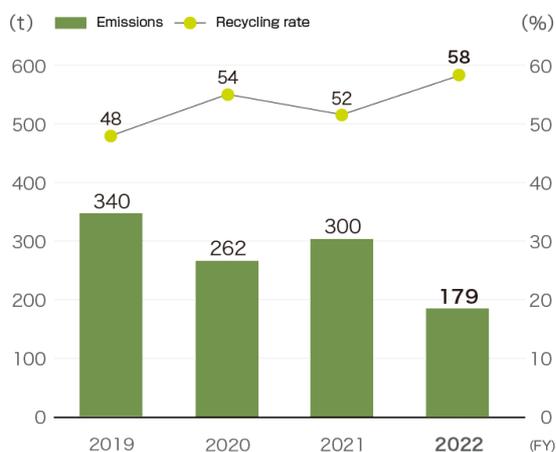
Reduction of Plastic Consumption and Promotion of Recycling

In recent years, environmental pollution caused by the discharge and long-term accumulation of plastic waste in the ocean has become a major global problem. Additionally, disposal of fossil-based plastics has been demonstrated to increase greenhouse gas emissions. In the Group, we are considering improving the plastic materials used for packaging pharmaceuticals, with a view to improving our measures towards environmental problems associated with these plastics.

58% of the plastic waste generated by the domestic Group in fiscal 2022 was recycled (fiscal 2019: 48%). Looking to the future, we will continue to evaluate methods of further increasing the recycling rate.

The Group has proper management in place, in accordance with the Law Concerning the Promotion of Resource Circulation for Plastics, enacted on April 1, 2022. Emissions from the Company and the Group in fiscal 2022 were as shown in the following diagram. (Mitsubishi Tanabe Pharma Corporation: 44 tons, Mitsubishi Tanabe Pharma Factory Ltd.: 135 tons)

Waste plastic emissions and recycling rate (domestic)





Environment

Initiatives to Prevent Pollution

The Group works to prevent air, water, soil, noise, vibration, and odor pollution and each base sets stricter voluntary standards than the legal emissions standards for pollutants and applies them daily. Additionally, we have put goals in place for the prevention of environmental pollution for the Medium-Term Environmental Action Plan 21-25, and we are working to achieve them.

We also work to prevent the external leakage of PRTR substances, VOCs, PCBs, and other substances, which are regulated by laws, and reduce the amount we handle.

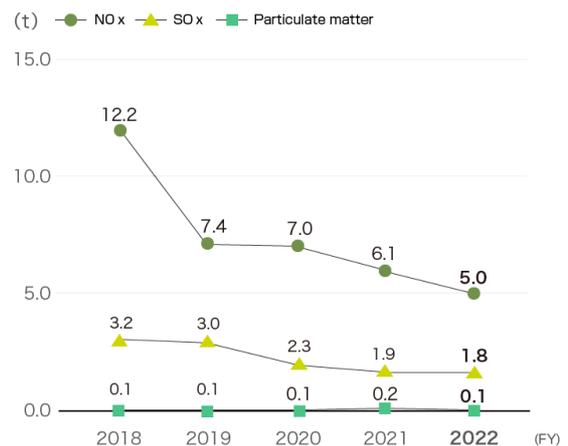
Prevention of Air Pollution

The Group controls the generation of soot and smoke by reducing the operating time of fuel-driven boilers, water heaters and coolers, and power generators.

At domestic bases, we reduce the concentration of air pollutants in soot and smoke by mainly converting the fuel for these soot and smoke generating devices from oil to gas.

We have also enhanced measures to prevent environmental pollution in soot and smoke generating devices at our overseas bases by addressing the increasingly strict regulations of each country and improving and updating the devices as needed.

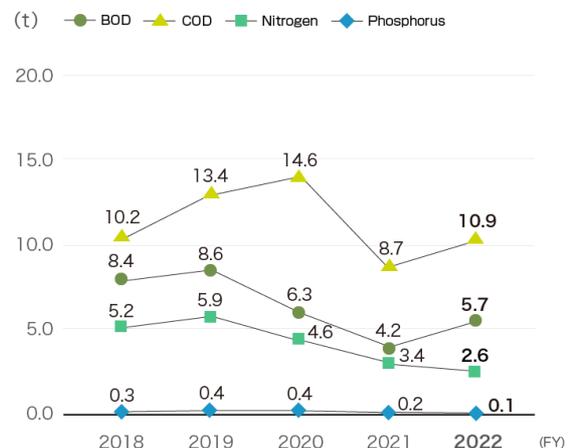
Emissions of air pollutants by domestic bases



Prevention of Water Pollution

Harmful substances discharged from the Group's production and research bases are treated as waste as much as possible to prevent contamination with wastewater. Also, we adjust the pH of wastewater and purify it before discharge to comply with emission standards. Especially at Mitsubishi Tanabe Pharma Factory (the Onoda and Yoshitomi plants) and Mitsubishi Tanabe Pharma Indonesia (Bandung plant), where wastewater is discharged into public water bodies, wastewater undergoes activated sludge treatment, and we comply with emission standards for public water bodies that are stricter than that for sewage discharge. At two domestic plants, we constantly measure the pH, COD, nitrogen, and phosphorus of the wastewater, and when we detect an abnormality, we immediately stop its discharge and store it in a reserve tank.

Environmental impact on public water bodies (domestic)



Prevention of Soil and Groundwater Pollution

The Group conducts land use history surveys of domestic bases where it owns land to identify soil contamination risk. If the survey finds that the soil or groundwater is contaminated, we notify the authorities and take appropriate action.

Response to the soil and groundwater pollution implemented in fiscal 2022

Base	Activity	Implemented content
Mitsubishi Tanabe Pharma Factory Yoshitomi Plant	Groundwater purification	The plant has continued to purify and monitor groundwater contamination found in fiscal 2013 by pumping up the groundwater, with purification completed in March 2023
Taiwan Tanabe Seiyaku Hsinchu Plant	Groundwater purification	The plant continues to purify and monitor groundwater pollution found in 2019 based on the plan (chemical oxidation) accepted by authorities
Mitsubishi Tanabe Pharma Factory Yoshitomi Plant	Soil contamination survey (Geo-historical survey)	Updated geo-historical surveys for the entire site (updated the survey conducted in 2012)

Prevention of Noise, Vibration, and Odor

At our domestic bases, we monitor noise, vibration, and odor in accordance with related laws and regulations and confirm that they are within the established standards.

PRTR Substances and VOCs

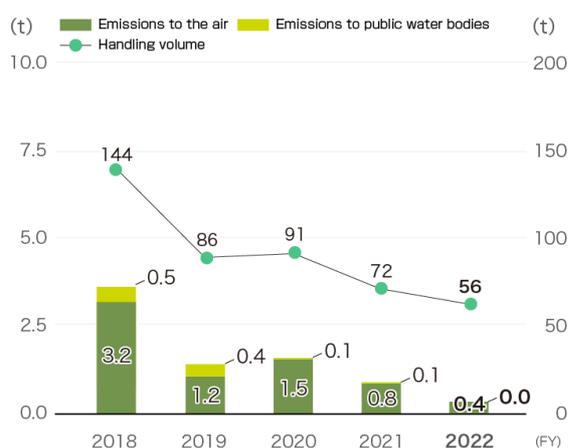
Based on the Law concerning Pollutant Release and Transfer Register/PRTR Law, the Group manages the amount of PRTR substances handled at our facilities and the emissions to the environment, and properly notifies the prefectures where we are located.

All organic waste solvents containing PRTR substances discharged from the research centers are treated as industrial waste to minimize the discharge to public water areas.

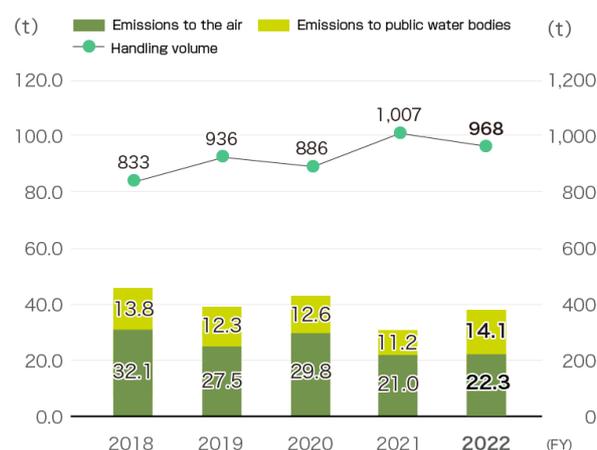
We are also studying the manufacturing processes and reducing the amount of target organic solvents used.

We are reducing VOC emissions by managing emissions and the amount handled, setting up collection facilities, and reducing emissions into the natural environment.

Emission of PRTR substances (domestic)



Emission of VOC (excluding PRTR substances) (domestic)



PCB Disposal

We completed disposal of high-concentration PCB (polychlorinated biphenyl) devices at the Group's domestic bases by the disposal deadline.

Furthermore, we are conducting a confirmation survey of items with a low concentration of PCBs, including notification from the Ministry of Economy, Trade and Industry (March 31, 2022), and plan to move ahead steadily to complete disposal by March 31, 2027, the disposal deadline.

Asbestos

Surveys for sprayed asbestos have been conducted at domestic Group bases in the past under the Ordinance on Prevention of Asbestos Hazards, and we are taking relevant measures to prevent asbestos scattering. Additionally, when removing facilities, we check for the presence of asbestos in the sprayed materials, insulation, and building materials to be moved, and report the results of these checks to the government.

Genetically Modified Organisms, Pathogens, etc.

The Group is engaged in drug discovery research aimed at various modalities, and opportunities to handle various research materials and samples are increasing. In the use of genetically modified organisms, we have established in-house regulations based on relevant government and ministerial ordinances, such as the "Law Concerning the Conservation and Sustainable Use of Biological Diversity through Regulations on the Use of Living Modified Organisms (Cartagena Act)," which we comply with. Moreover, the in-house Ethics Review Committee prevents the spread of living modified organisms by receiving preliminary reviews of measures to prevent the spread of these organisms into the environment.

In addition, regarding the use of pathogens and research materials and samples that may contain them, we have established internal regulations based on laws and regulations including the "Act on the Prevention of Infectious Diseases and Medical Care for Patients with Infectious Diseases (the Infectious Diseases Control Law)" and prevent the leakage of pathogens.



Environment

Biodiversity Initiatives

The Mitsubishi Tanabe Pharma Group recognizes that the sound maintenance and preservation of biodiversity is essential to the pursuit of sustainable business, and the Mitsubishi Chemical Group (the MCG Group) is engaged in the maintenance and preservation of biodiversity through a wide range of activities such as reducing its environmental impact, promoting appropriate usage of inherited resources, fostering harmonious coexistence with nature and society, and raising awareness within the Group. Furthermore, we have set targets for biodiversity preservation in the Medium-Term Environmental Action 21-25, and are working to achieve them.

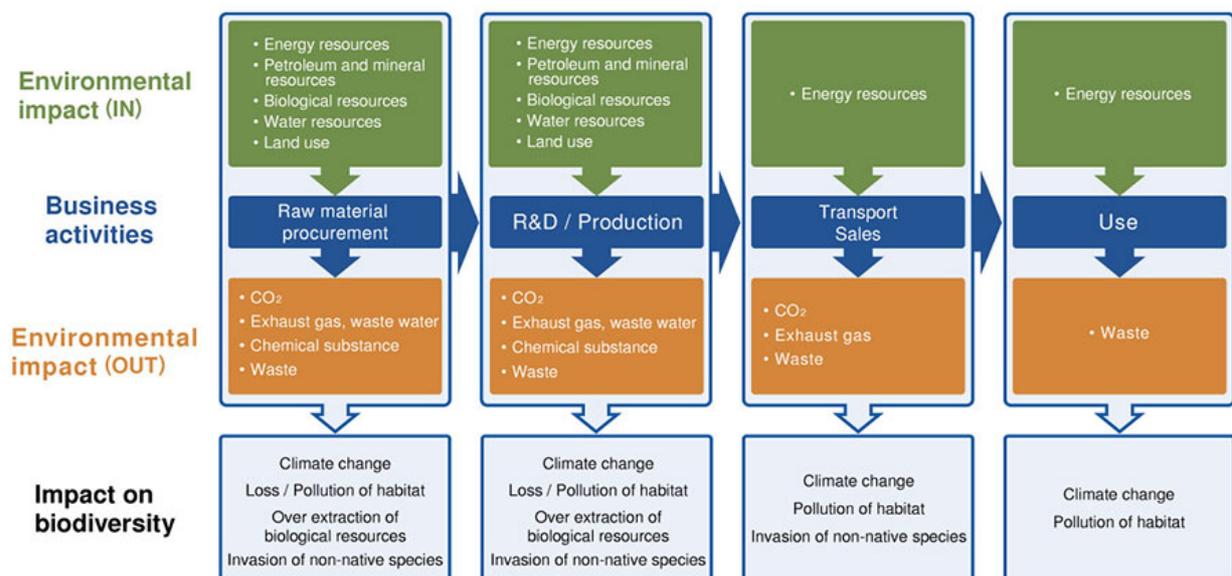
Relationship between Business Activities and Biodiversity

It is important to understand the relationship between business activities and biodiversity and work to preserve it. To that end, the Group strives to understand its environmental impact in the value chain in terms of both its use of resources (IN) and its discharge of waste and by-products (OUT). We are deepening our understanding of our impact and dependence on the biodiversity of business. In addition, we monitor waste and by-product emissions, evaluating these in conjunction with the MOS index*.

* An index that identifies important issues for the MCG Group to address, sets goals for the issues identified, and measures associated progress

<https://www.mcgc.com/english/sustainability/kpi.html>

Map of relationship between our business and biodiversity



* Created by referencing the Business & Biodiversity Interrelationship Map of the Japan Business Initiative for Biodiversity (JBIB)

Activities to Preserve Biodiversity and the Natural Environment

To understand the importance of biodiversity and the natural environment and preserve them, the Group has participated in Tokyo Greenship Action*¹ and the Ikoma Mountain Range “Folding Screen of Flowers” Project*² and has continued its involvement in these activities.

Although the spread of COVID-19 prompted us to suspend its participation in these activities, it resumed participating again after a three-year hiatus as the MCG Group. In Tokyo Greenship Action, participants maintained bamboo groves and trimmed trees, While the Folder Screen of Flowers project saw participants involved in cleanup activities and tree planting.



Tokyo Greenship Action



Gathering firewood



“Folding Screen of Flowers” activity in the Ikoma Mountain Range



Tree planting

*1 Activities to conserve the natural environment conducted by the Tokyo Metropolitan Government in collaboration with companies and the NPO Shizen Kankyo Academy in a woodland conservation area. We have been participating in these activities since 2006.

*2 Environmental event held by Osaka Prefecture that we have been participating in since 2009.

Additionally, as part of activities to conserve tropical rainforests in Indonesia, Mitsubishi Tanabe Pharma Indonesia participated in the “Arkhim Reforestation 2023” project to plant trees and reforest a forest reserve in West Java Province. In addition to donating 500 Sumatran pine and other saplings, 10 employees engaged in tree planting and reforestation areas in the protected area.

* Although Indonesia is home to vast areas of forest, they are in ongoing decline. As trees are cut down there is less forest available to absorb large amounts of carbon dioxide, resulting in climate change.



Conservation of tropical rainforest (Indonesia)

Campaign to Promote Environmental Conservation Activities

To further promote biodiversity conservation activities, we have conducted a campaign to promote environmental conservation activities since fiscal 2017. In this campaign, we distributed the Company's original towel scarf on which "For the Environment" was printed to participants and all employees who worked together to promote environmental conservation activities. Through clean-up activities, we are working to beautify the town and prevent environmental pollution by removing plastics and other waste that had been swept out to the ocean.

- **43rd clean operation (Yoshitomi Plant)**

As part of its contribution to the local community, the Yoshitomi Plant continues to conduct "clean operation" every year. In fiscal 2022, 113 people cleaned up the area around the office, collecting combustibles including plastic bottles, other bottles, and glass.



Yoshitomi Clean Operation



Cleanup activities

> [Click here to view other activities.](#)



Environment

Environmental Accounting

The Group promotes effective and efficient environmental management by monitoring and analyzing the costs and effects of environmental conservation activities (reduction of impact and economic effect).

Environmental conservation costs

Item	Invested (millions of yen)	Expended (millions of yen)
Pollution prevention	68	278
Global environmental protection	101	16
Recycling and reuse of resources	3	98
Upstream and downstream activities	—	1
Administrative activities	—	127
Research and development	—	—
Community activities	—	—
Environmental damage compensation	—	1
Total	172	521

Environmental conservation effects

Domestic environmental performance indicator (Units)	Environmental load		Percentage change from previous year
	FY2021	FY2022	
Energy used (thousand GJ)	1,080	1,009	-6.6%
Amount of water withdrawal (thousand m ³)	4,056	3,706	-8.6%
Scope 1 + 2 greenhouse gas emissions (thousand tons-CO ₂ eq)	56	53	-5.4%
SOx emissions (tons)	1.9	1.8	-5.3%
NOx emissions (tons)	6.1	5.0	-18.0%
Amount of waste generation (tons)	1,843	1,529	-17.0%
Amount of waste recycled (tons)	996	905	-9.1%
Amount of final waste disposed (tons)	39	18	-53.8%
Amount of wastewater (thousand m ³)	3,937	3,497	-11.2%
Amount of PRTR substances handled (tons)	72	56	-22.2%
BOD pollution load (tons)	4.2	5.7	35.7%
COD pollution load (tons)	8.7	10.9	25.3%

Economic benefits related to environmental protection

Content of environmental conservation initiatives	Economic effect (thousands of yen)
Cost reductions through energy conservation and updating to high-efficiency equipment	6,829
Income from recycling	18,351
Cost reductions through recycling and conservation of resources	547
Total	25,727