Environment

Environmental Management

Piolax Global Environmental Policy

The Piolax Group updates its Global Environmental Policy every three years to ensure that it reflects environmental trends.
In January 2023, we created a new environmental policy, clarifying that our business activities contribute to natural capital and the SDGs. Its Action Guidelines refer to risks and opportunities based on the TCFD Recommendations, which we support as a framework for ESG information disclosure, as well as our efforts for carbon neutrality. We will comply with environmental laws and regulations and work to minimize the impact of our corporate activities on the global environment.


PIOLAX

Environmental Policy

Basic Policy

Slogan

We will grow in harmony with the environment.

Action Guideline

<Major Actions>

June 25, 2024

President:

June 25, 2024
Satoshi Yamada, President

Piolax Global Environmental Policy

Targets, Results and KPIs

The Piolax Group identifies energy, emissions to the atmosphere, and waste as critical environmental issues. We are committed to the 3Rs (Reduce, Reuse, Recycle) in our business operations to achieve our reduction targets for greenhouse gases (GHG) and waste across the entire supply chain. Our goal is to mitigate and adapt to climate change and to make effective use of resources, including water.

In 2021, we created a roadmap for achieving carbon neutrality by 2050 within our business areas in Japan. In 2024, we expanded the target areas to include overseas business operations, setting medium- to long-term greenhouse gas reduction goals for the entire Group to drive our business activities forward.

Medium- to Long-Term Goals and Roadmap for Carbon Neutrality

Carbon neutrality goals and achievements	
Long-term goal	Achieve carbon neutrality for Scope 1 and 2 CO_2 emissions by FY2050.
Medium-term goal	Reduce Scope 1 and 2 CO_2 emissions by 46% from FY2019 by FY2030.

Entity to work on: Piolax Group

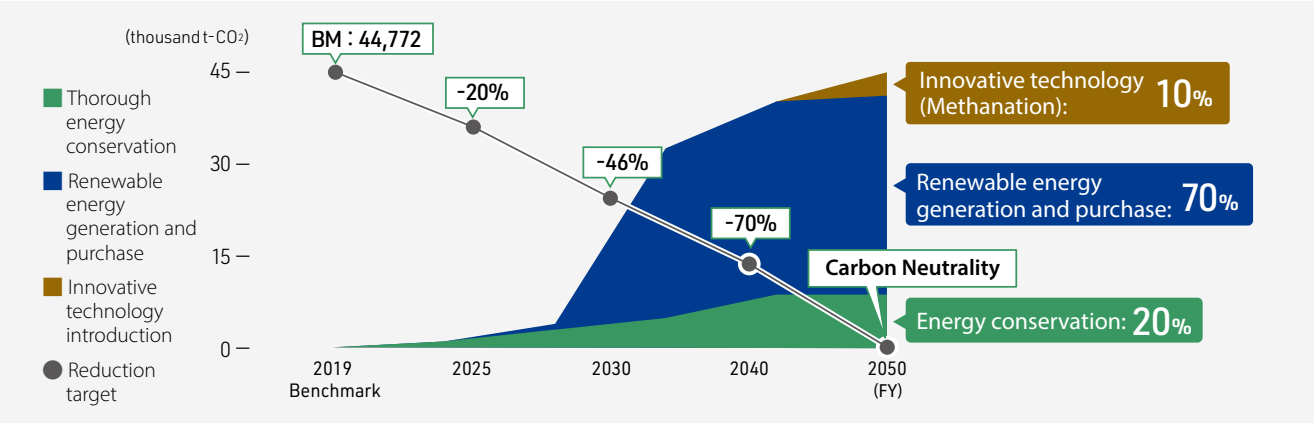
Our medium- to long-term goals are to reduce Scope 1 and 2 emissions from Japanese and international business operations by 46% by FY2030 and achieve 100% reduction by 2050, using the FY2019 emission's level as the benchmark (BM). We plan to achieve this through energy-saving initiatives, the introduction of renewable energy, and the accumulation of innovative technologies.

In FY2024, we achieved a 43% reduction in emissions compared to FY2019 (Scope 2: market-based criteria), meeting our target.

We will consider reducing Scope 3 emissions across the supply chain in the future.

Environmental Management

Roadmap for Carbon Neutrality



Entity to work on: Piolax Group

Activities toward Carbon Neutrality (P.24)

Medium-Term Environmental Targets and KPIs

As a group, we have set the 8th Medium-Term Environmental Targets for a three-year period starting in 2023. These targets apply to Piolax and its subsidiaries in Japan.

Progress in GHG Reduction in Business Activities (P.25)

Total Waste Discharge and Recycling Rate (P.28)

Effective Use of Resources (P.28)

8th Medium-Term Environmental Targets

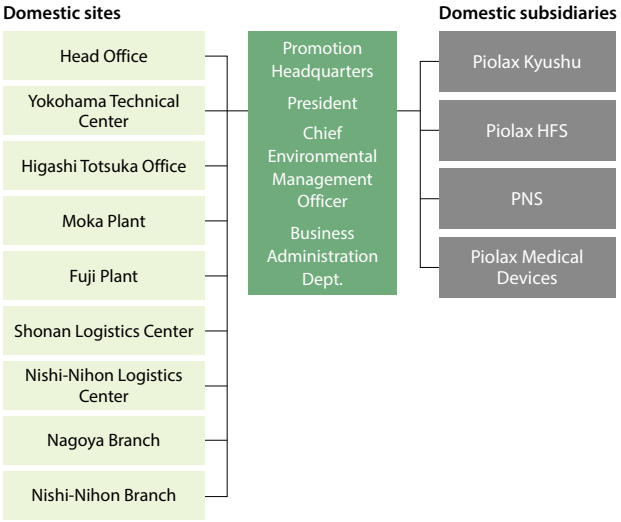
Priority activities	KPIs	Targets by 2025
Thorough energy conservation Activities toward carbon neutrality	Reduction in Scope 1 and 2 emissions	20% reduction (from FY2019)
Improvement rate of energy efficiency and efficient use of natural resources	Reduction of electricity consumption per unit production	3% reduction (from FY2022)
Adaptation to a circular society Waste reduction	Reduction of waste emissions	6% reduction (from FY2022)
Adaptation to a circular society	Improvement of recycling rate	80%

Entity to work on: Piolax and its subsidiaries in Japan

Environmental Promotion System

Each of our offices and subsidiaries in Japan has a meeting structure led by a person responsible for environment and secretariats to promote environmental measures. This meeting structure oversees and operates the management system.

Environmental Promotion System in Japan



Operation of Environmental Management Based on ISO14001

We operate an environmental management system based on ISO14001, conducting regular internal audits and third-party reviews, with the results reported to management through management reviews.

Piolax obtained ISO14001 certification in April 2002. Since then, as of April 2025, 14 out of our 16 manufacturing sites in Japan and overseas, or 88%, have been certified. We plan to expand this coverage to 100% in the future.

Environmental Management

ISO14001 Certification Status

	As of April 2025
Total number of manufacturing sites	16
Number of ISO14001 certified sites	14
Coverage rate	88%

Organizations Registered for International Certification

Environmental Patrols

The Piolax Group conducts environmental patrols led by environmental management officers at sites where there have been significant changes in environmental impact. In FY2024, we conducted patrols of the new Plastic Building, which has commenced operations at the Moka Plant. In FY2025, we plan to inspect the new building at the Moka Plant and the new Head Office.

Environmental Education

We conduct training and e-learning sessions for all employees to deepen their understanding of business activities and environmental issues. This initiative aims to achieve our environmental goals as a united group.

Environmental Education

Types of training	Target audience	Overview
SDGs	New employees	Group discussions and other training centered on "Our Role in SDGs"
Environmental awareness	All employees	Awareness raising of environmental policies and each site's environmental activity plans
Biodiversity awareness	Employees of Piolax and its subsidiaries in Japan	Classroom-style education on biodiversity and its impact on business activities

Compliance with Environmental Laws and Regulations

In 2022, one of our subsidiaries in China received a notice from the Dongguan Environmental Protection Bureau regarding the reporting of the disposal amount of metal container waste. A fine of 190,000 yuan was paid following the administrative penalty notice. The issue was promptly corrected, and the reporting is now being handled appropriately.

Apart from this incident, there have been no significant legal violations, fines, penalties, or spills at our business sites in Japan or overseas in the past three years. No legal complaints regarding environmental issues have been filed against us.

We will continue to ensure strict compliance with environmental laws and regulations.

Green Procurement

Our Group's Green Procurement Guidelines are intended to reduce environmental impact throughout the entire product lifecycle, from raw material procurement to manufacturing, sales, use, disposal, and recycling. We promote the procurement of environmentally friendly products, components, raw materials, and auxiliary materials.

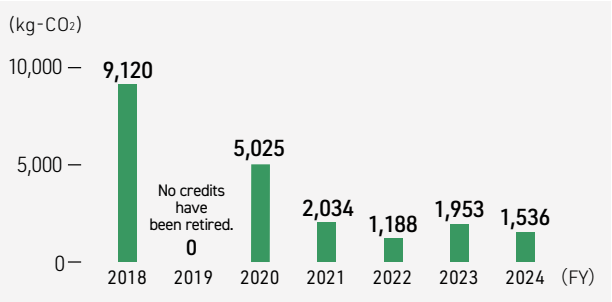
Outline of Green Procurement Guidelines

1) Procure products that comply with the laws and regulations of the countries and regions where we operate as well as the Piolax Environmental Policy.
2) Procure products with low environmental impact.
3) Prioritize procurement from companies that actively engage in environmental considerations.

Green Procurement Guidelines

In recent years, we have been purchasing carbon offset uniforms. The carbon credits for this purchase in FY2024 were generated by the CO_2 Emission Reduction Project through Residential Fuel Cell Deployment.

Carbon Offset Amount for Uniform



Environmental Management

Collaboration with External Organizations

As part of our efforts to reduce CO_2 emissions, we are exploring the use of biomass materials and expanding the recycling of resin materials. Food packaging bags and detergent containers, which have a silver aluminum inner layer and a plastic outer layer, have been posing a significant recycling challenge to the industry due to the difficulty in separating the metal from the plastic.

The Advanced Material Recycle and Innovation Alliance was established in 2022 as a joint industry-government-academia effort to find solutions to such difficult-to-recycle plastic materials and implement them in society.

Piolax is participating in this project and considering the use of factory waste as packing materials for daily necessities (PIR*1). We are also considering the use of recycled materials from discarded automobiles (PCR*2). To realize a resource recycling society, we will continue our research in collaborating with other industries.

*1 PIR (Post-Industrial Recycle): Recycling and reusing materials generated in the manufacturing process of products before they are released on the market
*2 PCR (Post-Consumer Recycle): Recycling and reusing products or materials discarded by consumers after use.

Prototypes utilizing waste materials from packaging manufacturing process

Environmentally Friendly Products

The Product Development Division plays a central role in developing products that contribute to the environment. Our criteria for eco-friendly products include "light weight, reduced number of components, integration, and selecting materials that are compatible with a recycling-oriented society."

We are advancing initiatives aimed at realizing a sustainable society across all processes, including reducing CO_2 emissions during the manufacturing process, reducing work load during part installation, and designing for easier disassembly.

CASE
Light Weight

Damping Stopper

Our efforts to create new value pursuing weight saving are not limited to our product level. We are making such proposals to customers at the "vehicle level," too.

As a solution for muffled noise in the low-frequency band in vehicles, we are developing a damping stopper which uses a material with a damping function.

Using materials with damping functions in the stopper rubber, this product will make the dynamic damper unnecessary, achieving a weight reduction of 0.3 kg to 1.8 kg per vehicle.

CASE
Reducing material waste

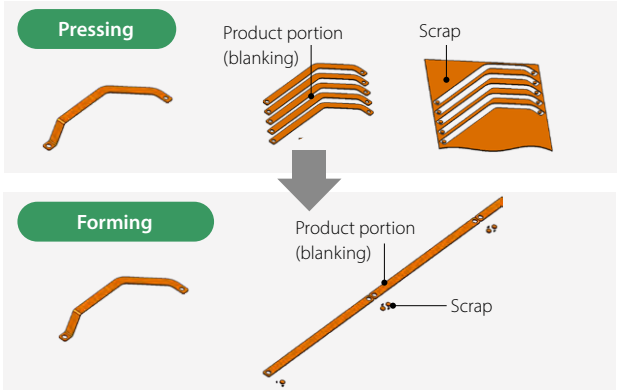
Busbar

Recent mobility devices, including EVs, use many electronic and electrical units. Busbars are attracting attention as conductive functional parts for these units. Compared to conventional wire harnesses, they are believed to be space-saving and highly efficient.

Busbars are primarily made of copper due to its excellent conductivity. However, most busbars are punched out from copper plates using a press, generating a significant amount of scrap. To use materials thoroughly, we have started producing them with forming machines.

By bending plates in the direction of the plate width, which would be impossible with a press, we have successfully reduced the scrap generated from the base material to less than 5%.

Forming Busbars



Busbars produced with a forming machine

Environmental Management

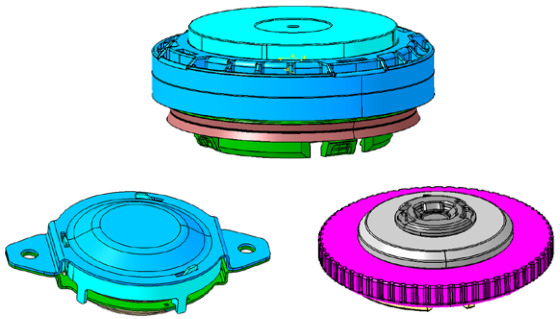
CASE
Light weight / Simplified assembly

Gas Vent Valve for EV Battery

In the rapidly expanding EV market, automobile manufacturers are paying close attention to battery safety and researching safety devices.

To meet this demand, we have developed gas vent valves for EVs, leveraging our long-cultivated fuel valve technology.

Conventional valves are bolted to the battery casing, but our new valves can be installed without bolts, reducing weight and simplifying assembly work. Additionally, we are developing variations that will withstand higher gas flow and higher temperatures, to meet various needs.



Gas vent valves for battery

Use of Sustainable Materials

We are actively introducing sustainable materials to reduce environmental impact and support a circular economy. We are expanding the use of low-CO_2 materials, such as biomass-based resins and recycled materials, particularly for automotive interior and exterior products.

The introduction of sustainable materials presents several challenges, including material performance, durability, processability, and cost.

Our core automotive products must meet strict standards of safety and quality. This requires careful product design and material selection to satisfy these performance requirements, which demand significant time and investment. Accordingly, our development and production engineering teams work closely together to evaluate materials and optimize processing technologies.

We are also strengthening our sourcing strategy through collaboration with suppliers.

Case Studies

1 Easy-to-Dismantle Design

We are advancing easy-to-dismantle design to ensure that automotive parts can be efficiently disassembled and separated at the end-of-life or recycling stage. Together with our business partners, we visit end-of-life vehicle (ELV) treatment facilities and talk directly with the people who perform the dismantling work.

These conversations help us identify challenges in material separation and reuse, along with issues faced during day-to-day operations. We then incorporate these insights into product design from the outset to improve recyclability.

2 Biomass Material Initiatives — Balancing effective use of renewable resources with reducing environmental impact—

We have produced prototype hooks using a biomass material that contains more than 50% wood powder. We are using these prototypes for product promotion.

These hooks not only reduce environmental impact, but also, their natural wood texture and a subtle wood scent in some applications enhance the product's appeal as added value.

Hook using a biomass material

Activities toward Carbon Neutrality

Basic Approach

As the Piolax Group, we recognize that climate change is such a serious social issue that it is our responsibility to address this global problem through collaboration with suppliers and customers. We work to mitigate and adapt to climate change, protect the environment, and prevent environmental pollution in all our business areas. We are committed to improving environmental performance and continuously enhancing our environmental management system.

Response to TCFD Recommendations

In line with the recommendations of the Task Force on Climate-related Financial Disclosures (TCFD), we conducted scenario analyses for Japan, North America including Mexico, China, and the medical device business. Our business strategies are based on various scenarios for future climate change predictions.

Recognizing the uncertainties in each scenario due to changes in various factors, we believe that clarifying the risks and opportunities of each scenario will enable sustainable corporate management.

We have clearly articulated our strategy towards the electrification of the automotive industry. We are working on infrastructure development to enhance the resilience of our business sites and are trying to reduce risks and create opportunities for further product development.

TCFD TASK FORCE ON CLIMATE-RELATED FINANCIAL DISCLOSURES

Overview of Our Efforts on Each TCFD Recommendation

Requirements of TCFD Recommendations and Piolax's Responses

	Governance	Strategy	Risk management	Metrics and targets
Requirements of TCFD Recommendations	The organization's governance around climate related-risks and opportunities	The actual and potential impacts of climate-related risks and opportunities on the organization's businesses, strategy, and financial planning	How the organization identifies, assesses, and manages climate-related risks	The metrics and targets used to assess and manage relevant climate-related risks and opportunities
Piolax's responses	● The Sustainability Committee, chaired by the President and composed primarily of Directors, deliberates on sustainability issues, including responses to climate change. ● After deliberation, the company-wide policies and objectives, as well as specific measures to address the risks and opportunities related to climate change, are finalized by the Board of Directors.	● We identified risks and opportunities for our core business related to automobiles on a timeline extending to 2050. ● We announced goals for achieving carbon neutrality by 2050 within our business areas in Japan and overseas.	● The Sustainability Committee identifies risks and opportunities related to climate change that may impact our business activities, formulates response plans based on their significance, and monitors progress. ● We work to manage risks and opportunities related to climate change appropriately by considering and constantly reviewing medium- to long-term response plans.	● We aim to achieve carbon neutrality for Scope 1 and 2 CO_2 emissions by FY2050. ● We will reduce Scope 1 and 2 CO_2 emissions by 46% compared to FY2019 levels by FY2030. ● Our reduction targets for Scope 3 emissions are under consideration. (Entity to work on: Piolax Group)

Information Disclosure Based on the Recommendation of TCFD (Updated on June 12, 2025)

GHG Emission Reduction Targets and Results in Business Activities

To achieve carbon neutrality in Scope 1 and 2 emissions within our business areas, we aim to reduce CO_2 emissions by 46% by FY2030 and 100% by FY2050, using FY2019 as a benchmark. As an intermediate step, we are implementing measures to achieve zero Scope 2 CO_2 emissions by 2030 for our Japanese Group and by 2040 for our overseas Group.

To increase our use of renewable energy, in addition to introducing solar panel power generation, we switched to carbonfree electricity contracts at our manufacturing sites in Japan. Furthermore, we implemented carbon offsetting through green power certificates at our overseas bases, expanding our use of renewable energy.

As a result, we achieved a 43% reduction in CO_2 emissions for FY2024, surpassing our target of a 17% reduction.

We are undergoing third-party verification to assess the validity of our Scope 1, Scope 2, and renewable energy quantities. Additionally, since FY2022, we have reported non-energy GHG emissions separately in Scope 1.

As part of our activities towards carbon neutrality, we set a target of a 17% reduction in CO_2 emissions in our 8th Medium-Term Environmental Targets for our business areas in Japan, yet we achieved a 77% reduction. The energy consumption per unit was reduced by 1.86%, falling short of the target reduction of 2%, due to the impact of decreased production at our main plants.

We will continue to accelerate our efforts towards carbon neutrality.

Third-Party Verification Report

Carbon Neutrality Targets

Medium- to long-term targets	FY2024 results
We will achieve carbon neutrality for Scope 1 and 2 CO_2 emissions by FY2050.	43% reduction (from FY2019)
46% compared to FY2019 levels by FY2030.	

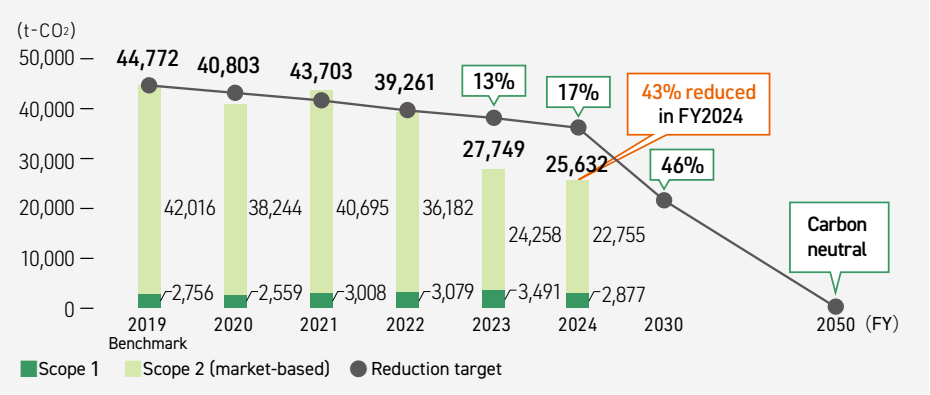
Entity to work on: the Piolax Group

8th Medium-Term Environmental Targets

KPIs	Targets by FY2024	FY2024 results
Emission reduction in Scopes 1 and 2	17% reduction (from FY2019)	77% reduction (from FY2019)
Reduction of electricity consumption per unit production	2% reduction (from FY2022)	1.9% reduction (from FY2022)

Entity to work on: Piolax and its subsidiaries in Japan

Changes in Scope 1 and 2 Emissions



Unit: t-CO_2)

	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024
Scope 1*1						
Energy-origin emissions	2,756	2,559	3,008	3,064	3,118	2,167
Non energy-origin emissions	—	—	—	15	373	710
Scope 2 *2						
Location-based	45,016	40,389	40,676	34,707	37,800	35,410
Market-based	42,016	38,244	40,695	36,182	24,258	22,755
Total of Scopes 1 and 2						
Market-based	44,772	40,803	43,703	39,261	27,749	25,632

Entity to work on: Piolax Group

*1 Scope 1: GHG emissions directly emitted by the Piolax Group's corporate activities, as defined by the GHG Protocol. Since FY2022, data from non-energy sources has been included in the calculation.
The emission factors for FY2024 were calculated based on the GHG Emissions Calculation and Reporting Manual (Ver 6.0) and the Act on the Rational Use of Energy.
GHG from non-energy sources: HFC and CO_2 generated in the manufacturing process.

*2 Scope 2: GHG emissions indirectly emitted by the Piolax Group's corporate activities, as defined by the GHG Protocol. For indirect emissions from electricity, we have adopted the market-based approach.
FY2024 emission factor in Japan: Calculated using emission factors by electricity suppliers (for calculating GHG emissions of specific emitters). The FY2023 result is based on the Ministry of the Environment and the Ministry of Economy, Trade and Industry's publication on March 18, 2025, and adjusted emission factors by contracted electricity suppliers.
FY2024 emission factors in overseas: Calculated using the latest emission factors confirmed in each country. For regions where obtaining these factors is difficult, the location-based approach is used (IGES, carbon footprint, 中华人民共和国生态环境部政府信息公开 环办气候函 [2023]43, Thailand Greenhouse Gas Management Organization Emission Factor).

Activities toward Carbon Neutrality

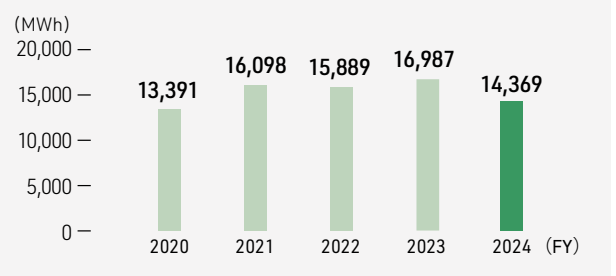
Changes in Scope 3* Emissions

(Unit: t-CO_2)

Category	Content		FY2023	FY2024
Scope 3			131,047	137,005
Category 1	Purchased products and services	Materials procured: Piolax Group Others: Excluding overseas bases	104,478	109,059
Category 2	Capital goods	Equipment and mold investment: Piolax Group	19,546	21,558
Category 3	Activities related to fuel and energy not included in Scope 1 or 2	Electricity, gas, and kerosene: Piolax Group	97	277
Category 4	Transportation and delivery (Upstream)	(Ton-kilometer method): excluding overseas bases	1,332	1,134
Category 5	Waste from business operations	Industrial and general waste: excluding verseas bases	1,459	352
Category 6	Business trips	Piolax Group (Excluding overseas bases for FY2023)	127	386
Category 7	Employee commuting	Piolax Group (Excluding overseas bases for FY2023)	443	1,524
Category 8	Lease assets (Upstream)	Contract warehouses for production plants in Japan	731	622
Category 9	Transportation and delivery (Downstream)	(Ton-kilometer method): excluding overseas bases	2,834	2,093
Category 10	Processing of products sold	Related but not calculated	NA	NA
Category 11	Use of products sold	Related but not calculated	NA	NA
Category 12	Disposal of products sold	Related but not calculated	NA	NA
Category 13	Lease assets (Downstream)	NA	NA	NA
Category 14	Franchise	NA	NA	NA
Category 15	Investment	NA	NA	NA

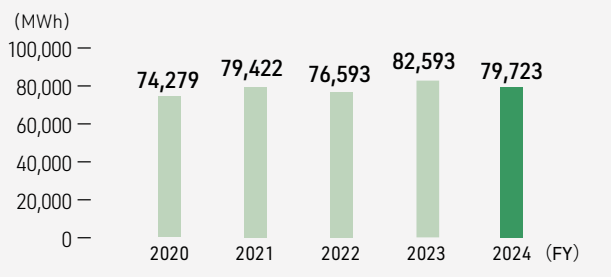
* Scope 3: The basic guidelines for calculating GHG emissions through the supply chain (ver. 2.7) are referred to.
For emission factors in Japan, the emissions basic unit database provided by the Ministry of the Environment for calculating an organization's GHG emissions through the supply chain, is referred to. See Emission Intensity Database (Ver. 3.5). LCI database IDEAv2 (for calculating GHG emissions from the supply chain) is referred to.

Changes in Direct Energy Use



Entity to work on: Piolax Group

Changes in Indirect Energy Use



Entity to work on: Piolax Group

Activities toward Carbon Neutrality

Introduction of Renewable Energy

Our Group is promoting the use of on-site renewable energy through solar panels at sites in Japan and overseas.

2017: Introduced at our UK site
2020: Introduced at our Thailand site
2022: Expanded capacity at our UK site
2023: Completed Phase 1 construction at our US site
2024: Introduced at the new Moka Plant (Tochigi) and Fuji Plant (Shizuoka)

In the United States, we are implementing a five-phase installation plan scheduled for completion by 2030. Phase 2 construction began in 2024, with operation targeted for 2025.

In FY2024, solar panels across our Group generated 3,195 MWh of electricity.

Transition to CO_2-Free Electricity

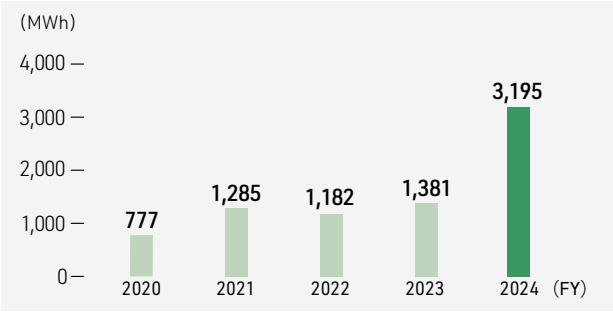
As part of our efforts to achieve carbon neutrality, our Group began introducing CO_2-free electricity in FY2023. The switch to CO_2-free electricity reduced our Group's CO_2 emissions by 10,216 t-CO_2 in FY2024.

2023: Introduced at the Moka Plant, Fuji Plant, and our medical device subsidiary
2024: Introduced at domestic logistics sites, PHFS, and our UK site

Carbon Offsetting through Energy Attribute Certificates

Since 2023, our Group has been implementing carbon offsetting through Energy Attribute Certificates at sites in India and other regions. In FY2024, these certificates resulted in a CO_2 reduction equivalent to 2,916 t-CO_2. We will continue to strengthen our CO_2-reduction initiatives while also considering the use of carbon credits such as these as a viable option.

Usage of Renewal Energy(Solar PowerGeneration)



Entity to work on: Piolax Group

Solar panels at the new Moka Plant

Solar panels in the US

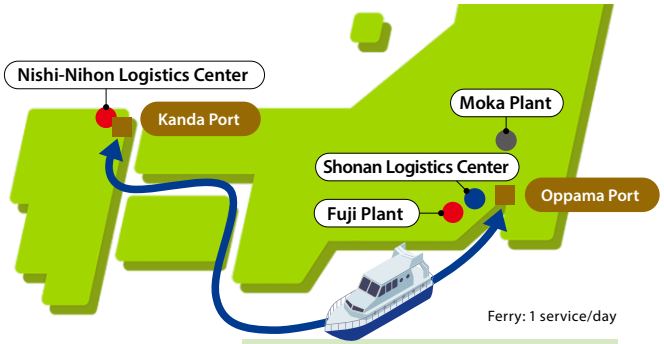
Energy-Saving Activities

The Piolax Group is engaged in activities to improve energy saving. For example, we have adopted LED lighting, highefficiency motors and inverter control at our plant facilities and manufacturing equipment.

Energy saving in heating cylinders of injection machines

Logistics Department Initiatives (Modal Shift)

As part of our efforts to reduce GHG emissions generated during the transportation of products to customers, we have introduced modal shift transportation by ferry in the logistics between our production plants in Honshu and customers in the Chugoku and Kyushu regions. This resulted in a reduction of 273 tons of CO_2 in FY2024. Additionally, we have reduced the number of cargo containers (and thus the number of transport trips) by increasing filling rate of product containers and cargo containers, and by using high-cube containers.



Distance
Kanto⬌Kyushu
Approx. 1,100km

Cargo volume
Kanto⬌Kyushu Approx. 26,200 boxes/month (Approx. 730 m³/month)
Kyushu⬌Kanto Approx. 5,000 boxes/month (Approx. 160m³/month)
* Excluding empty boxes

Efforts for Environmental Conservation

Waste Reduction

We have set and are tracking a KPI for reducing total waste emissions as one of our key activities.

We are studying the possibility of monitoring the amount and proportion of recyclable materials within our waste to help us meet future reduction targets.

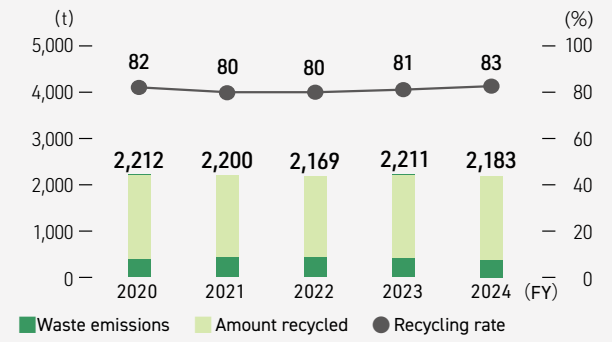
Medium-Term Environmental Targets and Results

The 8th Medium-Term Environmental Targets state that Piolax and its subsidiaries in Japan will reduce waste and improve recycling rate aiming to create a circular society. In FY2024, the total amount of waste generated reduced by 6.0% compared to FY2022, achieving the target. The recycling rate reached 83% compared to FY2022, also meeting the target.

Targets and Results

KPIs	FY2024 targets	FY2024 results
Total waste emissions per unit of production	-4% (from FY2022)	-6% (from FY2022)
Improving recycling rate	80%	83%

Waste Emissions (Including Recycled Waste)



Entity to work on: Piolax and its subsidiaries in Japan

Handling Hazardous Waste and Air Pollution Prevention

In April 2024, we demolished the former resin building at the Moka Plant as part of its renovation project. The 15 m^3 of asbestos used in the building was properly disposed of as specially controlled industrial waste. We will continue to ensure full compliance with environmental regulations.

We also monitor emissions of air pollutants, such as VOCs*, from our business activities. We recognize that certain components contained in chemicals used for raw materials, painting, and industrial mold maintenance may release VOCs, which contribute to photochemical oxidants. In FY2024, VOC emissions derived from polyacetal—one of our raw materials—totaled 10.7 kg.

*VOC: Volatile Organic Compounds

The former resin building at the Moka Plant

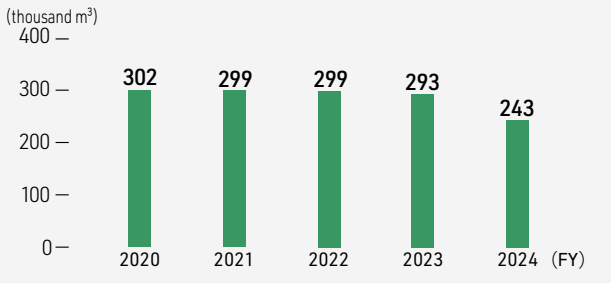
Water Use Management

The Piolax Group monitors water intake data for each water source. The total water intake for FY2024 was 243,000 m^3, a decrease of 17% from the previous fiscal year.

The percentage of water intake from third-party water sources and renewable groundwater is approximately 50% each. Since FY2023, we have been assessing water abstraction associated with the Piolax supply chain. In FY2024, total withdrawal amounted to 43,000 m^3.

Additionally, the water intake data of the Piolax Group has been subject to third-party verification to assess its validity since FY2023.

Water Withdrawal



Scope: Piolax Group

Water Risks

We assess water risks related to water stress and river flood risk using both the WRI's Aqueduct Water Risk Atlas (hereinafter referred to as "Aqueduct") and Japan's hazard maps. These assessments are also applied as inputs for physical risks in risk management disclosures based on the TCFD Recommendations.

According to the Aqueduct, our production base in India is in an area with extremely high water stress. Its water intake is limited to industrial water supplied by the industrial park. In FY 2024, it took 2,040 m^3 of water, accounting for only 0.007 % of the state government's water allocation for the region. This impact was negligible.

Overseas, we have identified significant river flood risks at our production bases in India and Indonesia. Accordingly, we have assessed the distance and elevation difference from the nearest rivers. In Japan, the hazard maps indicate risks at the Fuji Plant, which faces the banks of the Fuji River.

We have begun using the Water Security Compass (beta 1.1) * adding an impact index and score based on water intake and water stress indicators. Taking recent extreme weather events into account, we are strengthening measures to address our water-related risks.

* Source: Global Water Security Compass (Global Edition) provided by the "Global Water Cycle Society Collaboration Course" at the University of Tokyo (URL: https://water-sc.diasjp.net, accessed on July 22, 2025)

Efforts for Environmental Conservation

Results of Water Risk Assessment at Production Bases

		Aqueduct Ver.4.0		Water Security Compass beta1.1		Hazard maps
		Water stress	River flood risks	Impact index	Impact score	Estimation of maximum flood depth
Japan	Head Office, Technical Center	M-H	L-M	—	—	0.5-3m
	Moka Plant	M-H	L	0.75	1	No data
	Fuji Plant	M-H	L-M	0.11	4	5-10m
	Piolax Medical Devices	M-H	L-M	0.05	7	No data
	Piolax Kyushu	L-M	M-H	0.02	12	No data
	Piolax H.F.S.	M-H	L	0.05	8	No data
	P.N.S.	L-M	L-M	0.01	13	Below 0.5m
US		H	L	0.02	11	
UK		L	L	0.00	15	
Mexico		H	M-H	0.03	9	
China	Dongguan	L	M–H	0.14	3	
	Wuhan	L	H	0.00	16	
Korea	Head Office / Songdo Plant	M–H	L–M	0.06	6	
	Namdong Plant	M-H	L-M	0.00	14	
Thailand		H	L-M	0.15	2	
Indonesia		H	EH	0.07	5	
India		EH	EH	0.03	10	

L: Low L–M: Low–Medium M–H: Medium–high H: High EH: Extremely high

Efforts to Prevent Water Pollution

— Proper Wastewater Treatment (Moka Plant)

As a Group, we recognize the potential impact of our corporate activities on water resources. All of our production bases in Japan and overseas monitor water intake and comply with environmental assessment laws and regulations in each country, including treatment and discharge of wastewater.

At Moka Plant, we upgraded our wastewater treatment facility in response to the environmental standard for nitrate nitrogen contained in wastewater from heat treatment. The facility now employs a biological denitrification process, using microorganisms to remove nitrogen compounds, instead of the previous acid-alkali wastewater treatment.

This saves approximately 170 m. of water a day and contributes to environmental protection and biodiversity in the Kinugawa River basin, where the plant is located.

Moka Plant: biological denitrification wastewater treatment

Environmental Data (P.59)

Management of Environmentally Hazardous Substances

Initiatives to Reduce Environmental Impact of Chemical Substances

Piolax and its Japanese subsidiaries are actively working to monitor and report the emissions and transfer of substances regulated under the PRTR (Pollutant Release and Transfer Register) system of the Act on Confirmation, etc. of Release Amounts of Specific Chemical Substances in the Environment and Promotion of Improvements to the Management Thereof (Chemical Substances Control Law), in order to reduce these emissions and transfers.

Efforts to Prevent Water Pollution

As part of our Environmental Management System, we, as a Group, have established the Regulations for Emergency Preparedness and Response. Based on these regulations, each department that handles chemical substances prepares response manuals to adequately address the risk of environmental pollution from chemical leaks or spills. They also conduct regular drills to ensure swift and proper action in case of such an emergency.

Biodiversity

The Piolax Group thinks that minimizing environmental impact of its products and corporate activities is the greatest contribution to biodiversity conservation and has set "contribution to the Sustainable Development Goals (SDGs)" as one of the key themes of the Piolax Global Environmental Policy.

Biodiversity Risk Assessment

Our Group recognizes the environmental impact of its business activities on the surrounding communities as a significant issue and is working to assess their impact on biodiversity. We evaluate biodiversity risks within a 50-km radius of all production sites in Japan and overseas, as well as at our Head Office and Technical Center (in total, 17 sites across 9 countries). This evaluation uses the Integrated Biodiversity Assessment Tool (IBAT*). IBAT draws on four primary data layers:

- **IUCN Red List of Threatened Species™:** Distribution of species classified as CR (Critically Endangered), EN (Endangered), or VU (Vulnerable)
- **Protected Planet (World Database on Protected Areas):** UNESCO World Heritage sites, Ramsar wetlands, and UNESCO MAB (Man and the Biosphere Programme) areas
- **KBA (Key Biodiversity Areas):** Sites of global importance for biodiversity
- **STAR (Species Threat Abatement and Restoration) Metric:** Indicators for species threat reduction and recovery

Using these data, we assess the risks and impacts that our operations may have on biodiversity at each site and as needed, link the findings to appropriate conservation activities.

* Integrated Biodiversity Assessment Tool (IBAT) is a tool to assess biodiversity risks, developed and provided by BirdLife International, Conservation International, nternational Union for Conservation of Nature (IUCN) and United Nations Environment Programme World Conservation Monitoring Centre (UNEP-WCMC).

Biodiversity Impact Study of Areas Surrounding Our Business Sites

		IUCN Red List of Threatened Species			Protected Planet			KBA		STAR	
		CR	EN	VU	World Heritage	Ramsar	MAB	AZE	OTHER	STAR-T	STAR-R
Japan	Head Office, Yokohama Technical Center	12	98	70	0	2	0	1	7	0.00	0.15
	Moka Plant	2	8	15	0	2	0	1	12	0.02	0.38
	Fuji Plant	11	100	75	0	0	1	0	5	0.11	0.01
	Piolax Medical Devices	12	98	70	0	1	0	1	7	0.00	0.41
	Piolax Kyushu	12	88	76	0	0	0	0	5	0.00	0.03
	Piolax H.F.S.	1	7	19	0	1	2	1	3	0.06	0.05
	P.N.S.	0	11	19	0	0	0	0	6	0.14	0.04
US		4	17	27	0	0	0	0	0	0.06	0.01
UK		10	17	66	0	5	0	0	6	0.00	0.00
Mexico		4	11	25	0	0	1	1	0	0.01	0.01
China	Dongguan	29	94	95	0	1	0	1	4	0.07	0.14
	Wuhan	3	7	21	0	1	0	0	1	0.00	0.08
Korea	Head Office / Songdo Plant	6	42	53	0	3	0	0	11	0.36	0.01
	Namdong Plant	6	41	54	0	3	1	0	12	0.21	0.10
Thailand		30	162	108	0	0	0	0	0	0.00	0.18
Indonesia		26	252	123	0	0	0	0	4	0.00	1.24
India		27	51	74	0	0	0	0	2	0.00	0.02

IUCN: International Union for Conservation of Nature, CR: Critically Endangered, EN: Endangered, VU: VulnerableProtected Planet (Protected Areas)
World Heritage: UNESCO World Heritage Sites, Ramsar: Ramsar Wetlands, MAB: UNESCO Man and the Biosphere Programme
KBA (Key Biodiversity Areas) AZE: Alliance for Zero Extinction sites,
OTHER: important areas not formally recognized under international criteria but essential for flexible and inclusive biodiversity conservation
STAR (Species Threat Abatement and Restoration) Threat Abatement: reducing threats, Restoration: species recovery

Activities

When conducting business activities, we recognize that emissions of greenhouse gases and pollutants are the main factors harming biodiversity. We are also aware that waste, land use, and water use can also impact biodiversity. Therefore, we practice the rational use of energy, the sustainable and effective utilization of resources, and the 3Rs (Reduce, Reuse, Recycle) in line with a circular economy.