

Environmental Report 2026



Photo: North Ground, Kakogawa Plant, Harima Chemicals, Inc.



HARIMA CHEMICALS GROUP

Leading the Way with Pine Chemicals

Harima Chemicals Group is a chemical manufacturer built on products developed using pine chemical resources like rosin, fatty acids, turpentine and other materials all obtained from pine trees. We transform these key active ingredients into daily essentials.

Our products are used in a variety of fields, as resins for printing inks, paints and adhesives, emulsifiers for synthetic rubber, paper chemicals, solders used in electronic devices, and flavor and fragrance ingredients.

Indispensable everyday products derived in some way from pine trees are all around us:
Printed items such as newspapers, books and catalogues
Paints used to coat buildings and cars
Adhesives used for glues and packing tapes
Synthetic rubber used in car tires
Paper goods including notebooks, books and cardboard
Electronic devices such as computers and mobile phones
Cosmetics and perfumes, etc.

And now with an international network of manufacturing bases in various countries, we meet the needs of our customers all over the world.

Corporate Philosophy

Harima is a company which strives to cooperate with nature in the utilization of its blessings to enhance the quality of life.

Our mission is to help build a productive and humanistic society, with our goal being the creation of a truly global company which places a premium on its people and technology.

Our policy is to provide a cooperative atmosphere in which we seek mutual understanding and trust, and to intelligently and responsibly meet all challenges.

In the depth of our sincerity, we're number one.

Harima Chemicals Group Overview (as of March 31, 2026)

Company Overview

Company name: Harima Chemicals Group, Inc.
Founded: November 18, 1947
Capital stock : 10,000 million yen
Tokyo Head Office: 3-8-4 Nihonbashi, Chuo-ku, Tokyo
Osaka Head Office: 4-4-7 Imabashi, Chuo-ku, Osaka
Number of employees (consolidated) : 1,691
Subsidiaries (consolidated) : 33

Business Description

Manufacture and sale of products developed using pine chemical resources such as rosin, fatty acids and turpentine

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Report Overview

Editorial Policy

This report outlines Harima Chemicals Group's approach and initiatives regarding its impact on society, including customers, local communities, and employees, and on the environment and global environmental protection arising from its business activities. The Group recognizes environmental initiatives as a key corporate social responsibility and promotes activities from a global perspective.

Reporting Period

April 1, 2025 – March 31, 2026

* Some information outside the reporting period is also included.

Reporting Scope

The report covers Harima Chemicals Group and its Japanese and overseas consolidated subsidiaries. Unless otherwise indicated, the activities described in this report relate to Harima Chemicals, Inc. and Harima M.I.D. Co. Where other consolidated subsidiaries are included, this is indicated in the relevant box.

In this report, "Harima Chemicals Group" and "Harima Chemicals" are used according to the following definitions.

- Harima Chemicals Group : Same as the reporting scope above
- Harima Chemicals : Harima Chemicals, Inc.
- Harima Chemicals Group (Japan Operations) : Harima Chemicals and Other domestic consolidated subsidiaries
- Harima Chemicals Group (Overseas Operations) : overseas consolidated subsidiaries

* Harima Chemicals, Inc., Hokkaido Plant was closed in March 2022.

* Harima do Brasil Indústria Química Ltda. was excluded from consolidation after its shares were transferred to Brazilian employees in June 2024.

(Note1)

● Harima Foods, Inc. became a consolidated subsidiary and has been included in the reporting scope since FY2023.

● An external company previously operated Sakushu Musashi Country Club and Hotel Sakushu Musashi, but since Harima Trading, Inc., the facility owner, began direct operation, the facilities have been consolidated subsidiaries and have been included in the reporting scope since FY2023.

(Note 2)

Environmental performance data do not include overseas consolidated subsidiaries.

The scope of aggregation is indicated for each item.

Referenced Guidelines

MOE, "Environmental Reporting Guidelines (2018 Edition)"

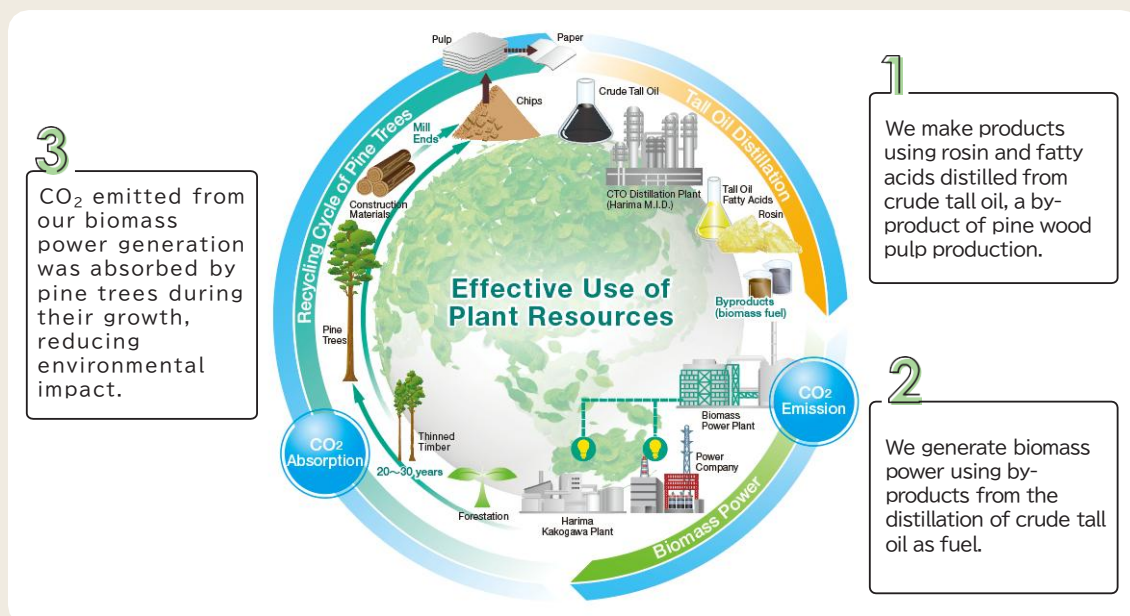
Next planned publication

July 2027

Guided by our corporate philosophy of
“Utilizing the blessings of nature to enhance the quality of life,”
we are working toward the realization of a sustainable society.

Our Circular Business Model

Benefiting from the blessings of nature, such as sunlight and water, we engage in the pine chemical※ business using pine-derived materials that are regenerated for future generations, thereby operating an environmentally friendly, circular business.



Eco-friendly Product Development

Products Made with Plant-derived Raw Materials

We produce tall oil products derived from useful chemicals obtained from pine trees, the blessings of nature. We also develop products using these tall oil products, including coating, ink, and adhesive resins, with some products in our lineup containing 40–80% tall oil.

People-friendly, Air-quality-improving Water-based Resins

We develop water-based resins with improved performance that use no organic solvents, aiming for safer manufacturing and reducing impacts on air pollution and global warming in coatings, inks, adhesives, and brazing materials.

Addressing Marine Plastic Pollution

As part of efforts to address marine plastic pollution, food packaging films are being replaced with paper products.

We are developing coating agents that endow paper with film-like properties, including water and oil resistance, heat-sealability, and moisture resistance.

Compliance with Global Food Safety Regulations

For papermaking chemicals used in food packaging paper, we are expanding our lineup of safe products compliant with global regulations for indirect food additives. Our sizing agents, which control paper absorbency, meet standards set by the U.S. Food and Drug Administration, German Federal Institute for Risk Assessment, and China’s GB9685 regulations. We have also developed new paper-strengthening agents certified by the FDA and BfR.

※ Pine chemicals: The field of chemistry dealing with useful substances from pine trees, such as rosin, fatty acids, and turpentine.

Sustainability Management Initiatives

-Utilizing the blessings of nature with heart and technology to deliver a sustainable future worldwide-

Toward the Development of a Sustainable Society

As part of efforts to strengthen governance and build a framework for sustainable management, we have established a Sustainability Committee and are advancing various initiatives across the Group.

Sustainability in Harima Chemicals Group

Guided by the corporate philosophy of “Utilizing the blessings of nature to enhance the quality of life”, Harima is working toward contributing to the realization of a sustainable society through the resolution of social issues, while also enhancing corporate value.

- ① Strengthen Business Base with a Focus on Sustainability.
- ② Promote a Business Model that Contributes to Reducing Environmental Load.
- ③ Foster a Diverse, Safe and Active Workplace Environment.
- ④ Enhance Governance and Promote Transparent Information Disclosure

Achieving GHG Reduction Targets Three Years Early

We aim to achieve the Japanese government’s 46% GHG reduction target (vs. FY2013) three years early in 2027, reach a 50% reduction by 2030, and achieve carbon neutrality by 2050.

Mid- to Long-term Targets Toward Achieving Carbon Neutrality by 2050 for Harima Chemicals Group (Japan Operations)

Greenhouse Gas (GHG) Reduction Roadmap (CO₂ Conversion)

Scope: Harima Chemicals Group (Japan operations), Scope 1 and Scope 2

FY2050: Achievement of carbon neutrality (aiming for net-zero emissions)

FY2030: 50% reduction in GHG emissions (vs. FY2013)

FY2027: 46% reduction in GHG emissions (vs. FY2013)

- Expanded use of biomass fuels
- Expanded use of renewable energy
- Improved energy efficiency
- Introduction of innovative technologies

Engagement with International Agencies and Industry-Government-Academia Partnerships

We actively engage with international agencies and industry-government-academia while pursuing international sustainability certifications.

Support for the Recommendations of the TCFD (Task Force on Climate-related Financial Disclosures)

In December 2021, we endorsed the recommendations of the TCFD, established by the Financial Stability Board. Beyond reducing the Group’s own emissions, we are addressing environmental impacts across the entire supply chain, from raw materials to product disposal, while further strengthening the development and supply of products that contribute to decarbonization. We are currently assessing Scope 3* GHG emissions in line with TCFD guidance and will continue striving to provide clear and accessible disclosure.



* Scope3: Indirect GHG emissions generated across the supply chain through activities such as raw material procurement, manufacturing, logistics, sales, and disposal.
(Direct GHG emissions from a company’s own operations are classed as Scope 1, while GHG emissions from purchased energy (mainly electricity) are classed as Scope 2.)

Support for the GX League Basic Concept

In March 2022, we expressed support for the GX (Green Transformation) League Basic Concept announced by the Ministry of Economy, Trade and Industry (METI).

The GX League was established as a platform for companies proactively pursuing GX work to collaborate with government, academia, and financial agencies to discuss the transformation of the overall economic/social system and create new markets. Participating companies are expected not only to significantly reduce GHG emissions toward achieving carbon neutrality by 2050, but also to lead broader transformation across society and economy together with various stakeholders.



Contributing to Solutions for Social Issues

Through our business activities, we contribute to the United Nations Sustainable Development Goals (SDGs) adopted at the 2015 UN Summit, and aim to achieve sustainable growth together with society.



How Harima Chemicals Group's Business and Environmental Activities Relate to the SDGs

SDGs Target	Initiatives
3 GOOD HEALTH AND WELL-BEING Ensure healthy lives and promote well-being for all at all ages	● To properly convey chemical safety information, we manage raw materials and products through a chemical substance management system. ● We implement initiatives in accordance with the Pollutant Release and Transfer Register (PRTR) system. ● We implement specific measures to prevent contamination by hazardous substances regulated by law. ● We make efforts to prevent air pollution, noise, vibration, and odors.
4 QUALITY EDUCATION Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all	● We conduct internal environmental education and awareness activities, including climate change lectures by external experts and in-house study sessions. ● Employees participate in e-learning
6 CLEAN WATER AND SANITATION Ensure availability and sustainable management of water and sanitation for all	● We regularly conduct wastewater monitoring, measurement, and inspection of treatment facilities to ensure proper management. ● We promote the reuse and recycling of water resources.
7 AFFORDABLE AND CLEAN ENERGY Ensure access to affordable, reliable, sustainable and modern energy for all	● We use electricity and steam generated from biomass power facilities, and sell surplus electricity to power companies as renewable energy (Kakogawa Plant). ● We generate solar power to support the spread and expansion of renewable energy (utilizing the Feed-in Tariff (FIT) system). ● We monitor energy consumption and promote energy conservation in equipment and manufacturing processes.
8 DECENT WORK AND ECONOMIC GROWTH Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all	● We implement specific measures to prevent occupational accidents.
9 INDUSTRY, INNOVATION AND INFRASTRUCTURE Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation	● We actively implement advanced technologies and develop materials that promote resource conservation, energy savings, and harmony with the natural environment.
11 SUSTAINABLE CITIES AND COMMUNITIES Make cities and human settlements inclusive, safe, resilient and sustainable	● We engage in greening activities around our factories. ● We consider townscapes and landscapes. ● We communicate with local residents regarding CSR activities.
12 RESPONSIBLE CONSUMPTION AND PRODUCTION Ensure sustainable consumption and production patterns	● We effectively use plant-based resources by producing products from pine-derived substances and using by-products as biomass fuel for power generation. ● We practice the 3Rs of waste management: Reduce, Reuse, and Recycle. ● We actively use biomass raw materials that reduce CO₂ emissions and develop people- and eco-friendly products that support energy savings, waste reduction, and a recycling-oriented society.
13 CLIMATE ACTION Take urgent action to combat climate change and its impacts	● We are working to cut CO₂ emissions by 46% by 2027 and 50% by 2030 compared with FY2013 and achieve carbon neutrality by 2050.
14 LIFE BELOW WATER Conserve and sustainably use the oceans, seas and marine resources for sustainable development	● We participate in the Clean Ocean Material Alliance (CLOMA), a corporate collaboration initiative to address marine plastic waste issues. (CLOMA is a platform that strengthens cross-industry collaboration among a wide range of stakeholders and accelerates innovation to help solve the marine plastic waste issue.)
16 PEACE, JUSTICE AND STRONG INSTITUTIONS Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels	● We are committed to avoiding the use of conflict minerals that could fund armed groups.
17 PARTNERSHIPS FOR THE GOALS Strengthen the means of implementation and revitalize the Global Partnership for Sustainable Development	● We support the GX League Basic Concept and work with participating companies to promote social transformation and create new markets toward carbon neutrality. ● We give presentations and proposals on eco-friendly product development at international conferences.

*The content is limited to what aligns with the editorial policy.



Environmental Conservation Initiatives

In light of our corporate philosophy, "Utilizing nature's blessings to enhance the quality of life", we are committed to actively contributing to the realization of a circular society, through provision of indispensable pine chemical products developed using natural and renewable resources.

For Environmental Conservation

Basic Approach to the Environment

We are actively working to prevent environmental pollution and reduce environmental impact, and are promoting environmental management throughout the Company.

Harima Chemicals Group Environmental Policy

(Revised on September 4, 2017)

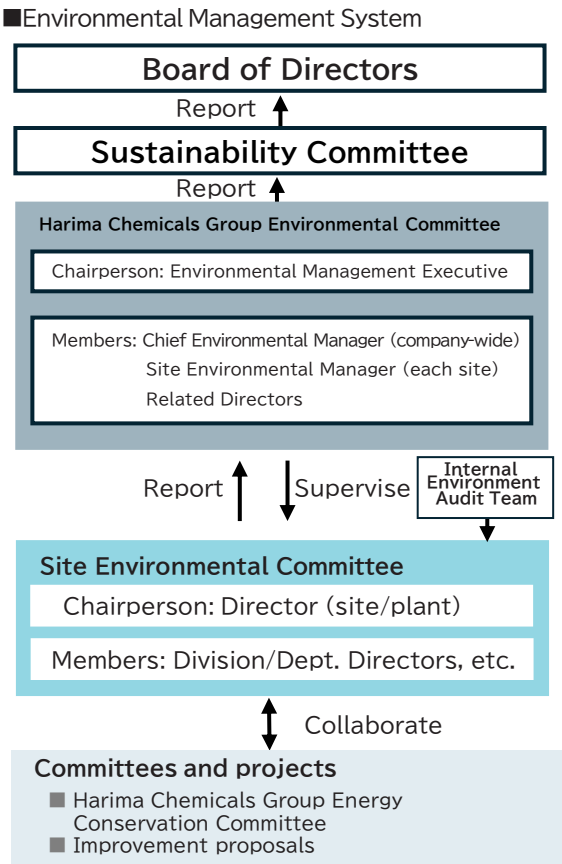
In light of our corporate philosophy "Utilizing the blessings of nature to enhance the quality of life", we urge our employees to actively and continuously promote environmental conservation according to the Environmental Policy./

1. With an awareness that the pine chemical business makes effective use of renewable natural resources, we strive to develop environmentally friendly products that take into account their life cycle from production to use and disposal.
2. We comply with related laws and regulations, agreements, and other requirements agreed by each Group company, relating to our business activities, products, and services and work to prevent environmental pollution and accidents.
3. We established environmental targets and aim to continuously improve our environmental performance and environmental management system.
 - ①Reduction of environmental impact (energy, waste, environmental pollution/air and water quality)
 - ②Appropriate management of hazardous chemicals
 - ③Conservation and management of greenery
4. Through environmental education and awareness-raising activities, we ensure that environmental management is thoroughly disseminated, and all of those who work at Harima Chemicals Group will act in an environmentally conscious manner both internally and externally.
5. Recognizing that biodiversity is an important foundation for a sustainable circular society, we conduct business activities in harmony with society and nature, taking into consideration natural ecosystems.
6. This environmental policy is disclosed to stakeholders including related companies and local residents, as well as to the general public.

Environmental Management Structure

In order to promote environmental management and to thoroughly conduct environmental management activities, we established the Harima Chemicals Group Environmental Committee that oversees the entire Company and environmental committees at each site.

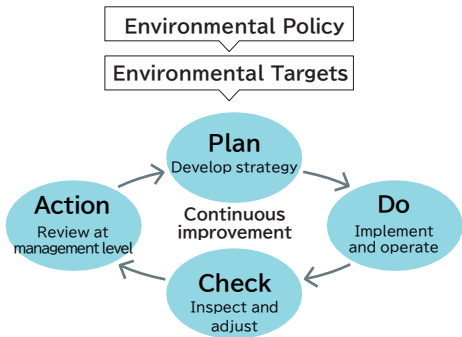
- Sustainability Committee
The Sustainability Committee submits proposals and reports to the Board of Directors on key management issues related to sustainability promotion.
- Harima Chemicals Group Environmental Committee:
Deliberates on and determines the Company's environmental policy, targets and plans, and manages their progress.
- Environmental Committee at Each Site:Based on the matters determined by the Harima Chemicals Group Environmental Committee, develops activities suited to the environment at each location.



Environmental Management System

In accordance with our Environmental Policy and ISO 14001, the international standard for environmental management systems, each division and department sets targets for the fiscal year and conducts activities that reduce environmental impact and preserve the environment.

Operations
We strive to continuously improve the environmental management system and reduce environmental impact by implementing the PDCA cycle based on our Environmental Policy and Targets.



Environmental Targets and Results

For each theme, we have established mid-term environmental targets (FY2030 targets) and promote initiatives by setting specific annual goals to achieve them.

Scope: Harima Chemicals Group
(Tokyo Head Office, Osaka Head Office)
Harima Chemicals, Harima M.I.D.

FY2025 Results and Mid-Term Environmental Targets (FY2030 Environmental Targets)

Evaluation Criteria: ○ Achieved / × Not Achieved

Themes and Related SDGs	FY2025 Targets	FY2025 Results	Evaluation	FY2030 Targets
Climate Change Mitigation   	3% reduction in electricity consumption intensity YoY	Intensity increased by 0.1%	×	Reduce energy intensity by 1% annually
	1% reduction in fuel consumption intensity YoY	Intensity reduced by 2.8%	○	
	4% reduction in CO ₂ emissions YoY	CO ₂ emissions reduced by 4.2%	○	Reduce CO ₂ emissions by 50% compared with FY2013
Effective use of resources  	1% reduction in waste generation intensity YoY	Intensity reduced by 2.3%	○	Continue achieving zero final landfill waste disposal
	Continued zero emissions (0%)	Continued zero emissions (0%)	○	
Chemical substance management   	Compliance with environmental regulations in Japan and overseas	Implementation of Small Quantity New Chemical Substance Notifications and REACH registrations	○	・Compliance with domestic and overseas registration requirements ・Centralized management through a chemical substance management system (including management of the latest SDS versions for raw materials and products)
	Establishment of systems to ensure reliable compliance with legal revisions	Introduced a new system to enhance the management of environmental impact data for raw materials and products. Updated SDSs in accordance with amendments to the Industrial Safety and Health Act. Total PRTR emissions: reduced by 23.6%.	○	
Crisis management 	Strengthened pollution prevention monitoring (Environmental complaints: zero)	Environmental complaints: 1 (Up 1 case YoY)	×	Strengthening disaster prevention systems through risk management
	Development of emergency response manuals	Reviewed manuals and conducted training at each site	○	
Other initiatives  	Development of eco-friendly products	Advanced the development of water-based resins, asphalt recycling additives, high-concentration paper-strengthening agents, halogen-free pastes, and bioprocess technologies	○	Expand sales of sustainable products (that reduce environmental impact and help address social issues such as those targeted by the SDGs)
	Improvement of environmental awareness and knowledge	Conducted environmental seminars on environmental laws and regulations, along with other environmental education initiatives. Achieved a "B" rating in the CDP 2025 Climate Change and Water Security assessments.	○	Improve environmental awareness through education

* The electricity consumption intensity under the "Global Warming Prevention" category was not achieved because purchased electricity consumption increased due to reduced use of biomass fuel. In contrast, the fuel consumption intensity and CO₂ emissions targets were achieved through energy conservation initiatives (including improved productivity and reduced energy losses through centralized production), fuel switching, replacing equipment with high-efficiency models, and using non-fossil electricity.

* The target for the "Effective Use of Resources" category (waste generation intensity) was achieved because the volume of valuable materials recovered increased and waste generation decreased due to changes in the product mix.

ISO14001 Internal Environmental Audit

Internal audits focus on whether measures and action plans for achieving targets are clearly defined and verified, whether risk identification and legal compliance assessments and procedures are appropriate, and whether corrective actions have been taken to address issues identified in previous internal and external audits.

Environmental Education

In order to improve environmental awareness in the workplace, we conduct workshops and lectures.

In FY2025, we conducted an in-house online environmental seminar titled "Environmental Laws and Regulations and the Current Status of the Kakogawa Site." We also hold periodic meetings to report

environmental impact at each site, as well as workshops and study sessions for energy conservation and recycling.

ISO 14001 Certification (as of March 31, 2026)

We encourage all sites to commit to ISO 14001 as part of our continuous effort for environmental conservation.

Harima Chemicals Group (Sites in Japan)	Number of ISO-certified sites
Harima Chemicals	6
domestic consolidated subsidiaries	2

Harima Chemicals Group (Sites Outside Japan)	Number of ISO-certified sites
LAWTER	5
overseas consolidated subsidiaries	7



Environmental Conservation Initiatives

Acquired EcoVadis Certification

USA	Plasmine Technology, Inc.
Global	LAWTER

Plasmine Technology Inc. and LAWTER were awarded EcoVadis Silver Medals.



▲Plasmine Technology, Inc.

▲LAWTER

EcoVadis is a trusted provider of sustainability assessments that evaluates companies' sustainability performance and supply chain management using its own criteria based on international standards. To date, it has evaluated more than 130,000 companies and organizations across 200 industries in 180 countries, promoting growth and innovation while enhancing business transparency.

Both companies received high ratings in the four assessment areas—"Environment," "Ethics," "Labor & Human Rights," and "Sustainable Procurement"—and were awarded EcoVadis Silver Medals. This places them among the top 15% of all companies evaluated by EcoVadis.

We will continue strengthening our sustainability initiatives to further improve our EcoVadis rating.

Acquired a B score in CDP 2025 for "Climate Change" and "Water Security"

Harima Chemicals Group (Japan) received a "B (Management Level)" rating in both the "Climate Change" and "Water Security" categories in the CDP FY2025 assessment. A Management Level rating indicates that the company understands its environmental risks and impacts and is taking action to address them. This marks the third consecutive year that the company has received a "B" rating in the "Climate Change" category and the second consecutive year in the "Water Security" category.

CDP is an international non-profit organization that operates the world's leading environmental disclosure system. It collects and analyzes environmental information disclosed by companies worldwide and evaluates their performance using an eight-point rating scale (A, A-, B, B-, C, C-, D, D-). CDP's assessment framework is widely recognized as the global standard for corporate environmental disclosure. In 2025, more than 22,100 companies worldwide responded to the CDP questionnaires. We will continue enhancing the transparency of our disclosures on climate change and natural capital, contributing to the realization of a sustainable society while enhancing corporate value and strengthening our sustainability initiatives.



Participation in the Hyogo Field Pavilion Festival at the Osaka-Kansai Expo

Harima Chemicals participated in the Hyogo Field Pavilion Festival, held from May 26 to 30, 2025, at Expo 2025 Osaka, Kansai. The festival was organized to attract visitors to Hyogo Prefecture by allowing certified organizations to showcase the prefecture's attractions and SDG-related initiatives through exhibition booths and stage presentations. On May 28, Harima Chemicals welcomed more than 500 visitors, introducing its products and key initiatives as well as its newly certified sightseeing tours.



▲Outdoor stage

The Hyogo Field Pavilion is an initiative led by Hyogo Prefecture in conjunction with Expo 2025 Osaka, Kansai. It treats the entire prefecture as a pavilion, where local residents showcase the actual sites ("fields") of SDG-related activities, allowing visitors to see, learn about, and experience the region firsthand. Harima Chemicals has been certified as a participating organization in this experiential regional SDGs initiative.

Certification for Energy Management Systems

Belgium	LAWTER - Kallo
The Netherlands	LAWTER - Maastricht

In January 2018, LAWTER's Kallo Research Center and Plant obtained ISO 50001 certification, the international standard for energy management systems, and established a framework to promote energy management and continuous improvement. The facility has also set a target to reduce CO₂ emissions by 30% by 2030 compared with 2017 levels and is implementing a range of energy-saving initiatives. LAWTER's Maastricht Research Center and Plant obtained ISO 50001 certification in November 2025. This is the second ISO 50001 certification within the Harima Chemicals Group, following the certification of LAWTER's Kallo Research Center and Plant.



▲ISO 50001 Certificate acquired

Environmental Flowchart

We strive to accurately understand the environmental impact of our business activities, from material procurement and production to disposal and recycling.

INPUT

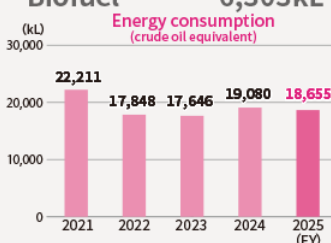
Raw Materials

79,000t



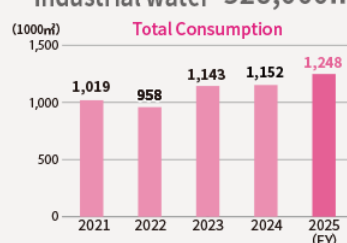
Energy

Electricity 17,000MWh
Fossil fuel 8,526kL
Biofuel 6,303kL



Water

Tap water 99,000m³
Sewage 229,000m³
Industrial water 920,000m³



Harima's Business Operations in Japan

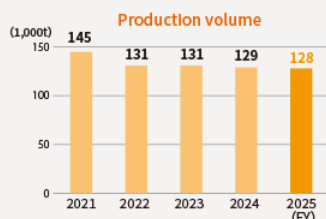
Environmental data for Sakushu Musashi Country Club and Hotel Sakushu Musashi, operated directly by Harima Foods and Harima Trading, have been included in aggregated data since FY2023. Past data have not been revised retroactively.

Scope: Harima Chemicals group
(Tokyo Head Office, Osaka Head Office),
Harima Chemicals, Harima M.I.D.,
Harima Trading, Seven Rivers,
Nippon Filler Metals, Harima Foods

OUTPUT

Product

128,000t



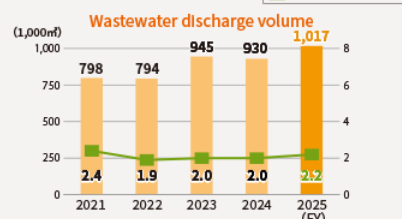
Electricity

Electricity sold 1,656MWh



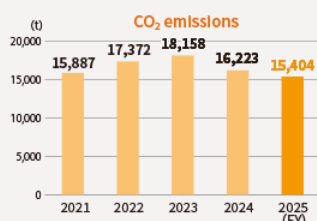
Water bodies

Wastewater discharge Volume 1,017,000m³
COD ※1 2.2t

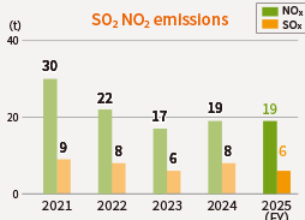


Atmosphere

CO₂ 15,404t

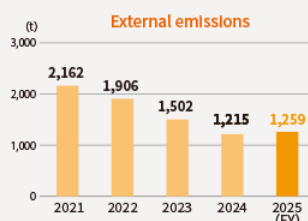


NOx ※2 19t SOx ※3 6t



Waste

External emissions 1,259t



※1 COD: The amount of oxygen required to oxidize and stabilize pollutants in water chemically. Higher values indicate greater water pollution.

※2 NOx: Nitrogen oxides contained in combustion exhaust gases from boilers and incinerators. They initiate photochemical reactions under ultraviolet light and generate photochemical oxidants.

※3 SOx: Sulfur oxides contained in combustion exhaust gases from boilers and incinerators. They are also a cause of acid rain.



Environmental Conservation Initiatives

Reduction of Environmentally Hazardous Substances

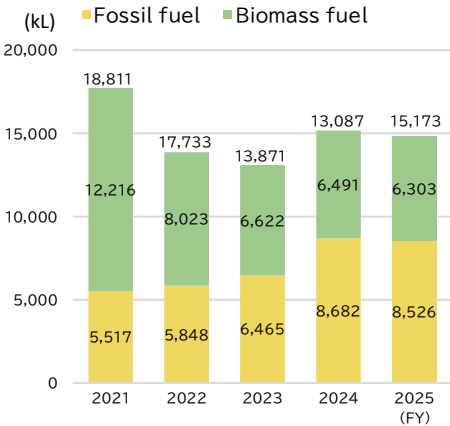
Fuel Consumption

We use by-products from crude tall oil※¹ refining as biomass※² fuel. Since launching biomass power generation at the Kakogawa Plant in FY2005, biomass fuel has accounted for over 60% of total energy consumption from FY2009.

In recent years, biomass fuel use has declined due to supply shortages caused by the COVID-19 pandemic and rising demand. Fossil fuel consumption also increased from FY2023 following the inclusion of Harima Foods, Sakushu Musashi Country Club, and Hotel Sakushu Musashi as consolidated subsidiaries.

In FY2025, biomass fuel usage declined further, while consumption of heavy oil and kerosene decreased in non-biomass boilers. We will continue reducing environmental impact through conversion to natural gas and renewable energy, together with thorough energy-saving efforts.

Fuel Consumption Trends



Scope: Harima Chemicals (Tokyo Head Office, Osaka Head Office), Harima Chemicals, Harima M.I.D., Seven Rivers, Harima Trading, Nippon Filler Metals, Harima Foods

Initiatives for Climate Action

Basic Approach to Climate Action

While energy use is now an indispensable part of everyday life, we continue to explore energy sources that can successfully replace fossil fuels such as oil, coal and natural gas. Renewable energy※³ is instrumental in achieving this goal, as it derives from natural sources that are constantly replenished and can be used stably and sustainably. Having worked closely with nature ever since our founding, we are committed to making efficient use of renewable resources and reducing environmental impact.

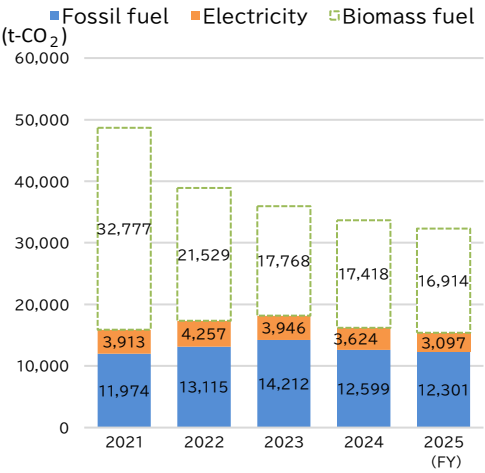
CO₂ Emissions

Our use of biomass fuel has contributed significantly to reducing CO₂ emissions. In 2005, we opened a biomass power plant at Kakogawa Site with the capacity to fulfill all steam and power needs of the site, and any surplus power is supplied to local electricity companies as green energy.

In FY2024, despite lower biomass fuel usage, we reduced CO₂ emissions year-on-year through energy-saving efforts and the use of renewable energy programs and J-Credits. We will continue advancing CO₂ reduction measures.

Greenhouse Gas Emissions

We are reducing CO₂ emissions by using biomass fuel.



Scope: Harima Chemicals (Tokyo Head Office, Osaka Head Office), Harima Chemicals, Harima M.I.D., Seven Rivers, Harima Trading, Nippon Filler Metals, Harima Foods



▲Biomass power plant at Kakogawa Site

※¹ **crude tall oil**: Plant-derived oil (mainly composed of rosin and fatty acids) obtained by acid decomposition of black liquor, a by-product generated during pulp production for the paper industry.

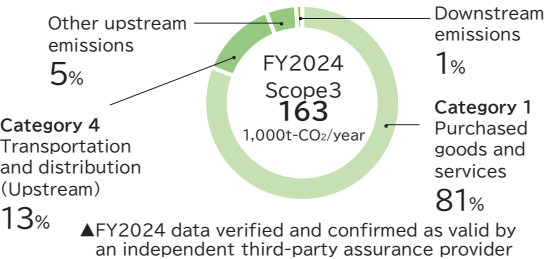
※² **Biomass**: Biomass is a concept representing the quantity (mass) of biological resources (bio), generally referring to renewable, biologically derived organic resources excluding fossil resources.

※³ **Renewable energy**: energy derived from naturally occurring and continuously replenished sources, such as sunlight and wind, unlike finite fossil fuels such as oil and coal.

Value Chain Emissions

We are currently calculating Scope 3 greenhouse gas (GHG) emissions for the Harima Chemicals Group (Tokyo and Osaka Head Office), Harima Chemicals, and Harima M.I.D. for FY2025. Once the calculations are complete, we plan to have SOCOTEC Certification Japan, an independent third-party certification body, conduct a limited assurance verification in accordance with ISO 14064-3:2019."

Of Scope 1 (direct greenhouse gas emissions from the company's own operations), Scope 2 (indirect greenhouse gas emissions associated with the use of electricity, heat, and steam supplied by other companies), and Scope 3 (other indirect greenhouse gas emissions related to the company's activities), Scope 3 is expected to account for more than 90 percent of total emissions, with Category 1 (purchased products and services) representing the largest share, consistent with FY2024. Going forward, we will continue to improve the accuracy of our emissions calculations and identify and implement effective measures to reduce greenhouse gas emissions throughout our value chain.



Scope: Harima Chemicals Group(Tokyo Head Office, Osaka Head Office), Harima Chemicals, Harima M.I.D.

CO₂ Emissions Reduction(Manufacturing operations)

Transition to Greener Energy Sources

As municipal gas and liquefied natural gas (LNG) emit significantly less CO₂ than heavy oil and kerosene, we are actively involved in converting to these cleaner fuels in our operations. In FY2025, the Kakogawa Site completed the replacement of its steam boilers and converted its fuel from heavy oil to natural gas, with the new facilities commencing operations.



Replaced steam boiler at the Kakogawa Site

Saving Energy Through Visualization

We have implemented a monitoring system that helps visualize energy consumption at our production sites, to detect energy loss and optimize manufacturing processes. Visualization also raises awareness among employees and encourages improvements in the workplace.

CO₂ Emissions Reduction (Distribution operations)

As a specified consignor under the Act on the Rational Use of Energy and the Transition to Non-Fossil Energy, we monitor transportation energy use and develop energy-saving plans to improve logistics efficiency. We work with logistics companies to reduce transportation energy consumption and have partially implemented modal shifts^{※4} to rail and marine transport, which generate lower CO₂ emissions than trucking. In FY2025, energy intensity improved by 2.1% year on year, driven by a greater shift from road transport to rail and coastal shipping, as well as shorter transport distances, particularly for shipments between manufacturing sites.

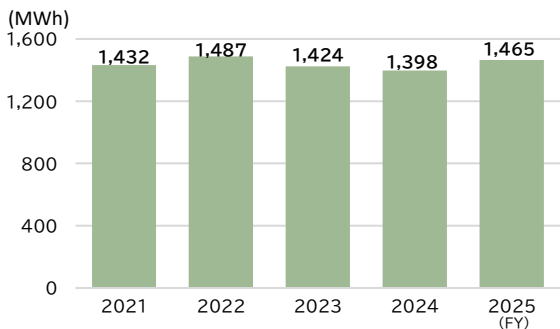
Scope: Harima Chemicals, Harima M.I.D

	Unit	FY2021	FY2022	FY2023	FY2024	FY2025
energy intensity ^{※5}	kL / 10,000 ton-km	69.3	66.6	67.1	81.6	79.9
CO ₂ emissions	t-CO ₂	2,983	2,564	2,595	3,085	3,180

Solar Power Plant at Iho Site

In December 2014, we opened a solar power plant with a capacity of 1,129kW at the Iho Site in Japan. Through the "FIT^{※6}" policy that guarantees a fixed price for electricity sale, all generated power is distributed to local electricity companies. By utilizing our facility to generate solar power, we contribute to the promotion of green energy and reduction of CO₂ emissions, also in light of the latest related initiatives promoted by the Japanese government.

Solar Power Generation at the Iho site(Takasago City)



▲Solar panels at the Iho Site,

※4 modal shift : shifting transportation from automobiles and aircraft to lower-impact modes such as rail and shipping.

※5 energy intensity : crude oil equivalent, kL per 10,000 tons of transportation volume

※6 FIT: Feed-in Tariff Scheme for Renewable Energy



Environmental Conservation Initiatives

Floating Solar-Power Generation Business

In March 2023, Harima started its first floating solar-power generation business on a reservoir located in the vicinity of the Kakogawa Plant. Our approx. 1,700 solar panels installed on structures on the surface of the reservoir generate an annual 1 million kWh, representing enough power to supply the electricity needs of 250 homes, also reducing carbon dioxide emissions by about 380 tons.



▲Aerial view of the site



▲Floating solar panel arrangement

This project is partially funded by the Ministry of the Environment, Japan (MOEJ) through an emission mitigation grant program, and in April 2023, was acclaimed as a model case for solar power facilities implemented in innovative locations such as farmland, reservoirs and waste treatment plants. It is featured on the MOEJ website, recognized for its significant contributions to the environment and the community, as well as disaster resilience through the distribution of electricity for everyday and emergency use.

By generating solar power, a renewable energy source, we contribute to expanding natural energy and to reducing CO₂ emissions, as promoted by the government. As a company growing together with society and local communities, we will continue advancing sustainability management and addressing environmental and social challenges through our business activities.

Solar Power System Installation

Japan Harima Trading, Inc.
Kakogawa Sales Office

The Kakogawa office of Harima Trading introduced a solar-power system in December 2023. The office runs warehouse management operations that cater to customers from a variety of industries, assisting them in the distribution of goods in a timely and efficient manner. The introduction of a solar-power system means that a portion of the power used at the facility will be replaced with green electricity, as part of a larger plan to strengthen environmental preservation activities. The office also intends to replace all its electricity with eco alternatives in the near future.



Achieving Zero Emissions from Electricity Use

At the Kakogawa Site, non-fossil fuel certificates have been procured since April 2025 to cover all electricity purchased from external suppliers, excluding electricity generated by the plant's own biomass and solar power facilities. In addition, other sites, including the Ibaraki Plant (Inashiki District, Ibaraki Prefecture), the Tokyo Plant (Soka City, Saitama Prefecture), the Fuji Plant (Fuji City, Shizuoka Prefecture), and the Tsukuba Research Laboratory (Tsukuba City, Ibaraki Prefecture) have adopted the "Green Basic Plan" provided by Tokyo Electric Power Energy Partners, a zero-CO₂ electricity plan combining FIT non-fossil certificates with designated renewable energy non-FIT non-fossil certificates. Through this plan, a portion of the purchased electricity has been switched to renewable energy, and the share of renewable energy continues to increase each year.

Solar Power Generation for On-Site Use

Argentina LAWTER - Concordia

In an effort to reduce CO₂ emissions, LAWTER - Concordia has implemented a solar power system on its premises. The power is generated for on-site use, contributing to the further promotion of renewable energy.



Solar Power System Installation Requirements in Belgium

Belgium LAWTER - Kallo

The Belgian government requires companies to install solar power systems on buildings in the Flemish Region—specifically buildings such as factories, offices, and warehouses that consume electricity—whose annual electricity consumption has exceeded 1,000 MWh since 2021. This requirement also applies to LAWTER’s Kallo Research Center and Plant. Specifically, the regulation requires a minimum installed solar PV capacity based on each building’s horizontal roof area, to be installed and operational by specified deadlines. To comply with this requirement, the project has been divided into multiple phases. Phase 1 was completed in December 2025, ahead of the March 2026 compliance deadline. Going forward, we will implement the remaining phases in accordance with the regulatory requirements.

<Reference>

Phase 2: Additional solar PV panel installations; deadline: January 2030.

Phase 3: Additional solar PV panel installations; deadline: January 2035.



Installation of a Solar Power System Compliant with the Dutch SCIOS Scope 12 Standards

The Netherlands LAWTER - Maastricht

In April 2024, we installed a solar power system compliant with the Dutch SCIOS Scope 12 standards. The electricity generated is used for on-site consumption. SCIOS (Stichting Certificatie Inspectie en Onderhoud Stookinstallaties) Scope 12 is a certification and inspection scheme unique to the Netherlands that provides specialized safety inspections for solar power systems, focusing on electrical safety and fire risk. In the Netherlands, the rapid expansion of solar power systems led to an increase in fires caused by faulty installation and defective wiring. In response, Dutch insurers and industry organizations jointly established the SCIOS Scope 12 standard to minimize fire risk and ensure electrical safety.



Operation of Third-Party-Owned Solar PV Facilities

China LAWTER - Nanping

In September 2024, we installed a solar power system. The system was financed, installed, and is owned by a third-party provider. Under a contract with the service provider, LAWTER Nanping uses the electricity generated by the system for on-site consumption, reducing annual electricity costs and contributing to lower CO₂ emissions through renewable energy.



Environmental Conservation Initiatives

Carbon-Offset City Gas

Since FY2022, we have used Carbon-Offset City Gas supplied by Osaka Gas Co., Ltd. at the Kakogawa Site, Harima M.I.D. (Kakogawa City, Hyogo Prefecture), and the Iho Site (Takasago City, Hyogo Prefecture). Carbon-Offset City Gas is natural gas supplied with carbon offsets that compensate for the CO₂ emissions generated throughout its lifecycle—from natural gas extraction to combustion—using carbon credits certified under recognized standards. These carbon credits are issued based on verified environmental conservation projects, enabling indirect offsetting of lifecycle CO₂ emissions.



▲Carbon-Offset City Gas Supply Certificate

Selected as a Kakogawa Zero Carbon Partner

We have been selected as a “Zero Carbon Partner,” working with Kakogawa City — the birthplace of our company — to achieve net-zero CO₂ emissions by 2050.

Under this program, businesses supporting Kakogawa City’s 2022 Zero Carbon City Declaration collaborate to promote decarbonization initiatives. Through the city’s energy-saving diagnostic program, we are also strengthening environmental initiatives such as reducing utility costs and introducing renewable energy.

At our Kakogawa Works, we actively promote GHG reduction through biomass power generation facilities (maximum output: 4,000 kW) operating since 2005, a floating solar power business launched in March 2023, and the introduction of the renewable energy support program “Ene Green Plan.”



“Kakogawa Zero Carbon” logo designed by Juri Ueno, Tourism Ambassador for Kakogawa

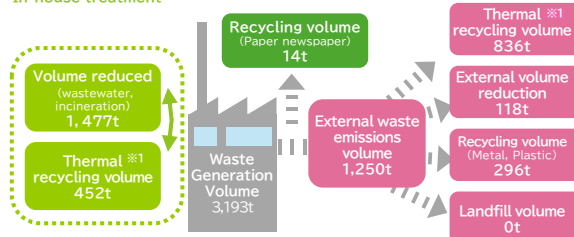
Initiatives for Waste Reduction

We stay true to our circular business model by strictly managing waste, in addition to reducing waste generation and encouraging recycling.

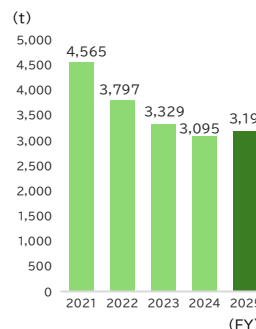
Breakdown and Trends in Waste Generation Volume

■FY2025 Waste Flow and Results

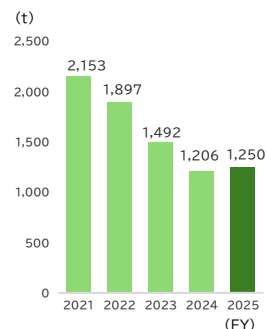
In-house treatment



Waste Generation Trends



Off-site Waste Generation Trends



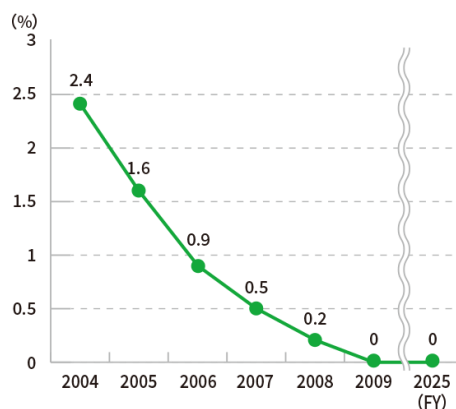
Scope: Harima Chemicals Group (Tokyo Head Office, Osaka Head Office), Harima Chemicals, Harima M.I.D.

※1 Thermal recycling: Recovering and utilizing heat energy generated during waste incineration instead of simply burning waste for disposal.

Zero-Emissions※2

Maintaining Zero-Emission Operations

We achieved a 0% final landfill disposal rate in 2011 and have maintained this level ever since.



※2 Zero emissions: A concept proposed by the United Nations University that promotes a recycling-oriented society by utilizing waste from one industry as resources for other industries and ultimately eliminates waste. We aim to keep landfill waste to 1% or less of total general and industrial waste generated at our sites..

Emissions of PRTR※3-regulated substances

We use the PRTR system not only to fulfill government reporting obligations for regulated substances, but also to collect accurate data and promote emission reductions. There are no soil emissions.

■PRTR-Regulated Substance Emissions and Transfers Unit: kg (However, dioxins are expressed in mg-TEQ)

Reference Number	Chemical Substance Name	FY2022		FY2023		FY2024	
		Air Emissions	Transfer Volume	Air Emissions	Transfer Volume	Air Emissions	Transfer Volume
2	Acrylamide	5.8	1.2	5.6	1.2	5.4	1.6
3	Ethyl acrylate	24.9	0.0	48.6	0.0	102.0	0.0
4	Acrylic acid	3.6	0.0	3.5	0.0	3.5	0.0
7	n-Butyl acrylate	21.0	0.0	19.1	0.0	20.3	0.0
9	Acrylonitrile	24.2	0.0	23.9	0.0	24.3	0.0
53	Ethylbenzene	1,627.4	19,953.8	1,395.5	21,802.6	2,114.3	14,553.1
59	Ethylenediamine	1.8	0.0	1.9	0.0	1.8	0.0
65	Epichlorohydrin	0.3	0.0	0.3	0.0	0.2	0.0
74	p-Octylphenol	3.1	61.6	2.9	3.0	2.9	20.7
80	Xylene	1,570.2	19,953.8	1,383.1	21,802.6	2,103.5	14,553.1
83	Cumene	4.4	0.0	4.0	0.0	5.2	0.0
134	Vinyl acetate	4.0	0.0	4.0	0.0	4.2	0.0
240	Styrene	73.6	0.0	74.7	0.0	82.3	0.0
277	Triethylamine	6.0	0.0	4.3	0.0	5.6	0.0
300	Toluene	2,156.5	6,881.1	1,218.4	9,326.7	1,236.0	8,455.3
320	Nonylphenol	0.5	12.6	0.5	0.0	0.4	1.9
395	Water-soluble salts of peroxodisulfuric acid	0.0	0.1	0.0	0.0		
411	Formaldehyde	0.0	0.1	0.1	0.0		
413	Phthalic anhydride	0.9	0.0	1.4	0.0	0.9	0.0
415	Methacrylic acid	0.2	0.0	0.3	0.0	0.3	0.0
418	2-Dimethylaminoethyl methacrylate	4.3	0.0	3.7	0.0	3.9	0.0
420	Methyl methacrylate	104.7	0.0	124.5	0.0	199.9	0.0
564	2-Ethylhexyl acrylate	2.9	0.0	2.4	0.0	2.5	0.0
568	Acetylacetone			1.5	0.0	4.7	0.0
594	Ethylene glycol monobutyl ether (Butyl Cellosolve)	4.8	0.0	4.7	0.0	4.7	0.0
601	Octamethylcyclotetrasiloxane	0.2	0.0	0.2	0.0	0.2	0.0
691	Trimethylbenzene	256.1	0.0	358.3	0.0	474.0	0.0
697	Lead and its compounds	0.0	16.6	0.0	16.9	0.0	33.1
699	Paraformaldehyde	50.4	0.0	45.0	0.0	48.6	0.0
712	tert-Butyl peroxy-2-ethylhexanoate			0.1	0.0	0.0	0.0
720	Ethylene glycol mono-tert-butyl ether	1.4	0.0	1.2	0.0	1.2	0.0
737	Methyl isobutyl ketone	12.2	1,230.0	27.7	2,040.0	15.2	1,560.0
Total		5,965.4	48,110.9	4,761.3	54,993.0	6,468.0	39,178.8
243	Dioxins	0.0	0.0	0.0	0.0	0.0	0.0

※Compared with FY2024, atmospheric emissions in FY 2025 increased by 35.8% due to higher production of products containing PRTR-designated substances. However, the volume of waste transported decreased by 28.8% as a result of waste reduction initiatives, resulting in an overall reduction of 23.6%. We will continue to ensure the appropriate management of PRTR-designated substances..

Environmental Accounting※4

We use environmental accounting to support effective environmental management by identifying and analyzing the environmental conservation costs and benefits associated with business activities.

■Environmental Conservation Costs

Category	Key Initiatives	FY2023		FY2024		FY2025	
		Investment Amount	Expense Amount	Investment Amount	Expense Amount	Investment Amount	Expense Amount
1. Business area costs		92	405	211	552	260	546
breakdown	(1) Pollution prevention costs	6	71	12	80	18	77
	(2) Global environmental conservation costs	86	205	198	341	241	339
	(3) Resource recycling costs	0	129	1	131	1	130
2. Upstream and downstream costs	Reduction of labels, packaging materials, etc.	0	3	1	3	1	3
3. Management activity costs	Maintenance of ISO 14001, environmental monitoring, etc.	4	47	27	51	30	45
4. Research and development costs	Research and development of eco-friendly products, etc.	13	1,064	15	1,075	17	1,090
5. Social activity costs	Donations to environmental organizations, support for community activities, etc.	0	1	0	1	0	1
6. Environmental damage costs	None in particular	0	0	0	0	0	0
Total		109	1,520	254	1,682	308	1,685

■ Environmental Conservation Effects (Physical Effects)

Description of Effects	Indicators	Unit	FY2023	FY2024	FY2025
Effects related to resource inputs in business activities	Energy consumption (crude oil equivalent)	kL	16,180	17,791	17,429
	Water consumption	1,000m ³	1,030	1,090	1,186
	CO ₂ emissions volume	t	15,087	13,360	12,824
Effects related to environmental loads and waste generated from business activities	SO _x emissions volume	t	6.5	8.2	5.5
	NO _x emissions volume	t	17.5	18.9	19.1
	Air emissions of PRTR-designated substances	kg	5,965	4,761	6,468
	Wastewater discharge volume	1,000m ³	832	869	955
	COD emissions volume	t	2.0	2.0	2.2
	Waste generation volume	t	1,496	1,210	1,253
	Waste landfill volume	t	0	0	0

■Economic Effects of Environmental Conservation Activities (Actual Effects)

Economic Benefit Items	FY2023	FY2024	FY2025
Revenue from recycling	39	35	36
Cost reductions through energy savings	20	19	25
Cost reductions through waste reduction	4	7	8

Scope: Harima Chemicals Group (Tokyo Head Office, Osaka Head Office) , Harima Chemicals, Harima M.I.D.

※4 Environmental Accounting: Environmental accounting is a system for promoting environmental conservation activities by identifying related costs and benefits and measuring and communicating them quantitatively in monetary or physical terms. Calculation Method: The calculation standards are based on the "Environmental Accounting Guidelines (2005)" issued by the Ministry of the Environment and the "Environmental Accounting Guidelines for Chemical Companies" published by the Japan Chemical Industry Association.

Safety Initiatives for Chemicals and Products

Proper management of chemical substances, prevention of environmental pollution, and reduction of environmental impact are part of our corporate social responsibility. We are working to comply with regulations in Japan and overseas.

Chemical Substance Management Initiatives

To properly manage chemical substances, we strictly check and control not only products but also raw materials, by-products, and waste for their effects on human health and the environment.

Chemical Substance Management System

Development

- Confirmation of product safety, legal compliance, and environmental impact
- Operation of chemical substance handling management regulations



Procurement

- Operation of the green procurement system
- Acquisition of SDSs*1 for raw materials



Production

- Maintenance and improvement of safety, environment, and quality
- Implementation of various maintenance activities



Products

- Management of environmentally hazardous substances in products



Transportation

- Information disclosure (issuance of Yellow Cards and legally required labeling)



Customers

- Information disclosure (issuance of product SDSs and preparation of chemSHERPA*2 data sheets)

Regulation Compliance

Green Procurement

Harima has established the "Green Procurement Standards", working together with suppliers to enhance product eco-friendliness and protect the environment.

Chemical Substance Management System

Our "Chemical Substance Management System" comprehensively organizes information on product composition, safety and regulations. The data is used to respond to customer inquiries, check for restricted substances and prepare Safety Data Sheets in compliance with the "Globally Harmonized System of Classification and Labelling of Chemicals" (GHS*3).

Compliance with International Laws and Regulations

We ensure adherence to increasingly complex regulations, such as the EU's "Registration, Evaluation, Authorization and Restriction of Chemicals" (REACH*4) and "Classification, Labelling and Packaging of Substances and Mixtures" (CLP*6), as well as China's "Measures for the Environmental Management Registration of New Chemical Substances" (MEE*5), by accurately monitoring information and strengthening cooperation with each country.

Export Control

Advanced products and technologies are constantly at risk of being misused by individuals and organizations that threaten the safety of the global community. To combat this issue, Japanese regulations require companies to surveil the destinations and intended uses of their export products.

As an enterprise that exports chemical substances, we have established the "Harima Export Control Committee", an internal organization that ensures compliance with said regulations. In addition, we offer in-house seminars and study sessions where employees can familiarize themselves with existing protocols.

■ Voluntary Internal Rules for Export Control

We have established internal rules for export control (CP) and submitted them to the Ministry of Economy, Trade and Industry (METI). The CP defines procedures for exports and technology provision to ensure legal compliance and prevent violations. The Harima Chemicals Group has developed a voluntary security export control system, and its name is published on the METI website.

Measures Against Conflict Minerals

Conflict minerals such as tantalum, tin, gold and tungsten, which can be found in such products as electronics, have long fueled armed conflicts in the Democratic Republic of Congo and neighboring countries, causing mass destruction of people and the environment. Harima Chemicals Group is strongly against these inhumane acts and has confirmed in investigations to date, that we do not use minerals mined in the region. We have confirmed, through our investigations to date, that no minerals sourced from the specified region are used in our raw materials. Going forward, we will continue to conduct surveys and confirmations when adopting new raw materials and further strengthen our initiatives.

*1 SDS (Safety Data Sheet): Called a "Safety Data Sheet (SDS)," it contains information necessary for the safe handling of chemical substances.

*2 chemSHERPA: A new scheme for communicating information on chemical substances in products throughout the supply chain, developed under METI leadership, using a common format across manufacturing industries to simplify information sharing.

*3 GHS (Globally Harmonized System of Classification and Labelling of Chemicals): A system for classifying chemical hazards according to standardized criteria and communicating them through pictograms and labeling, with results reflected in product labels and SDSs to help prevent accidents and protect human health and the environment.

*4 REACH (Registration, Evaluation, Authorization and Restriction of Chemicals): A regulation of the European Parliament and Council governing chemical substances and their use to protect human health and the environment in the EU.

*5 Measures for the Environmental Management Registration of New Chemical Substances: A law governing the management of new chemical substances manufactured or imported in China.

*6 CLP (Classification, Labelling and Packaging of substances and mixtures): A regulation of the European Parliament and Council on the classification, labeling, and packaging of substances and mixtures.

Site Report

Trends in Greenhouse Gas Emissions (Scopes 1, 2, and 3)

■Coverage of Scope 3 Emissions Calculations

Based on the FY2023 results, we began calculating Scope 3 greenhouse gas (GHG) emissions for the Harima Chemicals Group (Tokyo and Osaka Head Office), Harima Chemicals, and Harima M.I.D. This section presents the results for these reporting entities. As the calculations for FY2025 are still in progress, only the results for FY2023 and FY2024 are presented. Going forward, we will continue to explore expanding the scope of these calculations to cover the entire Group.

Japan	Kakogawa Plant, Harima Chemicals, Inc. Harima M.I.D., Inc.					
	UNIT	FY2021	FY2022	FY2023	FY2024	FY2025
Scope 1	t-CO ₂	5,878	7,422	7,430	7,126	7,009
Scope 2	t-CO ₂	736	1,257	28	30	29
Scope 3	t-CO ₂	—	—	79,759	81,452	Under Calculation

Japan	Fuji Plant, Harima Chemicals, Inc.					
	UNIT	FY2021	FY2022	FY2023	FY2024	FY2025
Scope 1	t-CO ₂	3,690	3,687	3,781	3,076	2,966
Scope 2	t-CO ₂	1,613	1,676	1,177	970	699
Scope 3	t-CO ₂	—	—	40,306	30,393	Under Calculation

Japan	Tokyo Plant, Harima Chemicals, Inc.					
	UNIT	FY2021	FY2022	FY2023	FY2024	FY2025
Scope 1	t-CO ₂	969	744	635	350	343
Scope 2	t-CO ₂	469	424	382	325	250
Scope 3	t-CO ₂	—	—	11,007	8,886	Under Calculation

Japan	Ibaraki Plant, Harima Chemicals, Inc.					
	UNIT	FY2021	FY2022	FY2023	FY2024	FY2025
Scope 1	t-CO ₂	804	738	643	514	529
Scope 2	t-CO ₂	301	302	218	164	138
Scope 3	t-CO ₂	—	—	10,597	8,644	Under Calculation

Japan	Hokkaido Plant, Harima Chemicals, Inc.					
	UNIT	FY2021	FY2022	FY2023	FY2024	FY2025
Scope 1	t-CO ₂	59	0	Closed in March 2022		
Scope 2	t-CO ₂	84	2			

Japan	Sendai Plant, Harima Chemicals, Inc.					
	UNIT	FY2021	FY2022	FY2023	FY2024	FY2025
Scope 1	t-CO ₂	293	280	312	325	322
Scope 2	t-CO ₂	133	123	121	109	129
Scope 3	t-CO ₂	—	—	8,119	23,702	Under Calculation

Japan	Shikoku Plant, Harima Chemicals, Inc.					
	UNIT	FY2021	FY2022	FY2023	FY2024	FY2025
Scope 1	t-CO ₂	158	120	131	130	151
Scope 2	t-CO ₂	123	96	89	89	102
Scope 3	t-CO ₂	—	—	20,533	4,549	Under Calculation

Japan	Harima Chemicals Group, Inc. Offices, Harima Chemicals, Inc.					
	UNIT	FY2021	FY2022	FY2023	FY2024	FY2025
Scope 1	t-CO ₂	1	1	1	1	0
Scope 2	t-CO ₂	204	157	140	153	158
Scope 3	t-CO ₂	—	—	4,914	5,410	Under Calculation

Japan	Harima Trading, Inc.					
	UNIT	FY2021	FY2022	FY2023	FY2024	FY2025
Scope 1	t-CO ₂	0	0	658	492	478
Scope 2	t-CO ₂	56	49	1,300	1,301	1,141

※Sakushu Musashi Country Club and Hotel Sakushu Musashi were consolidated as subsidiaries in FY2023.

Japan	Seven Rivers, Inc.					
	UNIT	FY2021	FY2022	FY2023	FY2024	FY2025
Scope 1	t-CO ₂	49	49	136	119	90
Scope 2	t-CO ₂	105	88	101	99	88

Japan	Nippon Filler Metals, Ltd.					
	UNIT	FY2021	FY2022	FY2023	FY2024	FY2025
Scope 1	t-CO ₂	72	75	76	77	82
Scope 2	t-CO ₂	89	83	70	74	82

Japan	Harima Foods, Inc.					
	UNIT	FY2021	FY2022	FY2023	FY2024	FY2025
Scope 1	t-CO ₂	0	0	410	391	337
Scope 2	t-CO ₂	0	0	319	310	281

※Consolidated as subsidiaries in FY2023

Czech Rep.	Harimatec Czech, s.r.o.					
	UNIT	FY2021	FY2022	FY2023	FY2024	FY2025
Scope 1	t-CO ₂	45	38	26	32	41
Scope 2	t-CO ₂	30	29	33	47	78

Belgium	LAWTER - Kallo					
	UNIT	FY2021	FY2022	FY2023	FY2024	FY2025
Scope 1	t-CO ₂	3,761	3,687	3,157	3,348	3,367
Scope 2	t-CO ₂	734	648	630	639	506

The Netherlands	LAWTER - Maastricht					
	UNIT	FY2021	FY2022	FY2023	FY2024	FY2025
Scope 1	t-CO ₂	3,805	3,718	3,496	3,445	3,239
Scope 2	t-CO ₂	807	773	589	567	361

China	Harimatec Hangzhou Co., Ltd.					
	UNIT	FY2021	FY2022	FY2023	FY2024	FY2025
Scope 1	t-CO ₂	0	0	0	0	0
Scope 2	t-CO ₂	27	28	38	47	60

China	Hangzhou Hanghua Harima Chemicals Co., Ltd.					
	UNIT	FY2021	FY2022	FY2023	FY2024	FY2025
Scope 1	t-CO ₂	1,127	1,257	1,332	1,416	1,330
Scope 2	t-CO ₂	942	895	931	898	929



※Period covered by environmental performance data
 Harima Chemicals Group (Japan Operations): April 2025 to March 2026
 Harima Chemicals Group (Overseas Operations): January 2025 to December 2025

China	Dongguan Hanghua Harima Paper Chemicals Co., Ltd.					
	UNIT	FY2021	FY2022	FY2023	FY2024	FY2025
Scope 1	t-CO ₂	533	658	633	546	396
Scope 2	t-CO ₂	295	378	396	433	507

China	Shandong Hanghua Harima Chemicals Co., Ltd.					
	UNIT	FY2021	FY2022	FY2023	FY2024	FY2025
Scope 1	t-CO ₂	485	605	489	429	428
Scope 2	t-CO ₂	458	432	475	443	421

China	LAWTER - Shanghai					
	UNIT	FY2021	FY2022	FY2023	FY2024	FY2025
Scope 1	t-CO ₂	—	—	—	0	0
Scope 2	t-CO ₂	—	—	—	10	10

China	LAWTER - Nanping					
	UNIT	FY2021	FY2022	FY2023	FY2024	FY2025
Scope 1	t-CO ₂	2,731	2,236	1,521	1,245	1,454
Scope 2	t-CO ₂	1,259	1,164	940	925	1,036

China	LAWTER - Fengkai					
	UNIT	FY2021	FY2022	FY2023	FY2024	FY2025
Scope 1	t-CO ₂	399	495	279	382	292
Scope 2	t-CO ₂	354	373	316	336	274

China	LAWTER - Nanning					
	UNIT	FY2021	FY2022	FY2023	FY2024	FY2025
Scope 1	t-CO ₂	650	475	487	491	534
Scope 2	t-CO ₂	677	568	474	526	578

Korea	LAWTER - Gunsan					
	UNIT	FY2021	FY2022	FY2023	FY2024	FY2025
Scope 1	t-CO ₂	337	258	232	272	375
Scope 2	t-CO ₂	269	127	94	128	29

Malaysia	Harimatec Malaysia Sdn. Bhd.					
	UNIT	FY2021	FY2022	FY2023	FY2024	FY2025
Scope 1	t-CO ₂	337	258	232	272	375
Scope 2	t-CO ₂	269	127	94	128	29

New Zealand	LAWTER - Mt. Maunganui					
	UNIT	FY2021	FY2022	FY2023	FY2024	FY2025
Scope 1	t-CO ₂	3,235	3,496	3,469	3,207	2,159
Scope 2	t-CO ₂	525	317	288	458	365

U.S.A.	Head Office, Plasmine Technology, Inc.					
	UNIT	FY2021	FY2022	FY2023	FY2024	FY2025
Scope 1	t-CO ₂	0	0	0	0	0
Scope 2	t-CO ₂	0	43	38	28	23

U.S.A.	Bay Minette Plant, Plasmine Technology, Inc.					
	UNIT	FY2021	FY2022	FY2023	FY2024	FY2025
Scope 1	t-CO ₂	2,947	3,360	3,765	3,860	5,197
Scope 2	t-CO ₂	918	986	907	1,202	1,286

U.S.A.	Harimatec Inc. Harima USA, Inc.					
	UNIT	FY2021	FY2022	FY2023	FY2024	FY2025
Scope 1	t-CO ₂	12	12	12	15	18
Scope 2	t-CO ₂	37	39	38	41	47

U.S.A.	LAWTER - Elgin, IL					
	UNIT	FY2021	FY2022	FY2023	FY2024	FY2025
Scope 1	t-CO ₂	—	—	—	85	179
Scope 2	t-CO ₂	—	—	—	81	115

U.S.A.	LAWTER - Baxley, GA					
	UNIT	FY2021	FY2022	FY2023	FY2024	FY2025
Scope 1	t-CO ₂	9,177	9,123	8,216	8,454	9,641
Scope 2	t-CO ₂	2,564	2,414	2,169	2,170	2,231

Brazil	Head Office / Parana Plant, Harima do Brasil Industria Quimica Ltda.					
	UNIT	FY2021	FY2022	FY2023	FY2024	FY2025
Scope 1	t-CO ₂	474	585	561	—	—
Scope 2	t-CO ₂	375	422	419	—	—

Argentina	LAWTER - Concordia					
	UNIT	FY2021	FY2022	FY2023	FY2024	FY2025
Scope 1	t-CO ₂	2,748	2,354	2,342	2,045	2,135
Scope 2	t-CO ₂	670	633	595	412	285

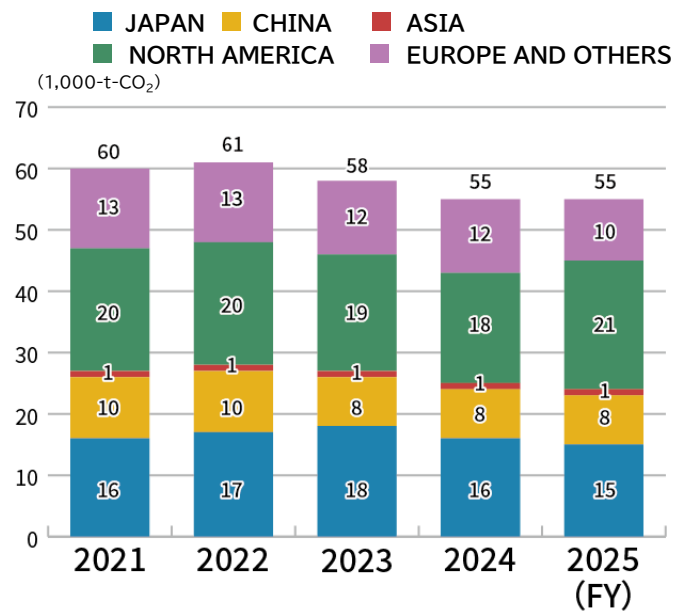
Calculation of Scope 1 and Scope 2 emissions for LAWTER
 Calculated based on the GHG Protocol, the international standard for greenhouse gas emissions accounting and reporting.

Calculation of Scope 1 and Scope 2 emissions for overseas consolidated subsidiaries

Electricity: Calculated using the latest substitute emission factors specified under Japan's greenhouse gas emissions accounting, reporting, and disclosure system (applied when it is difficult to use actual utility-specific or measured emission factors).

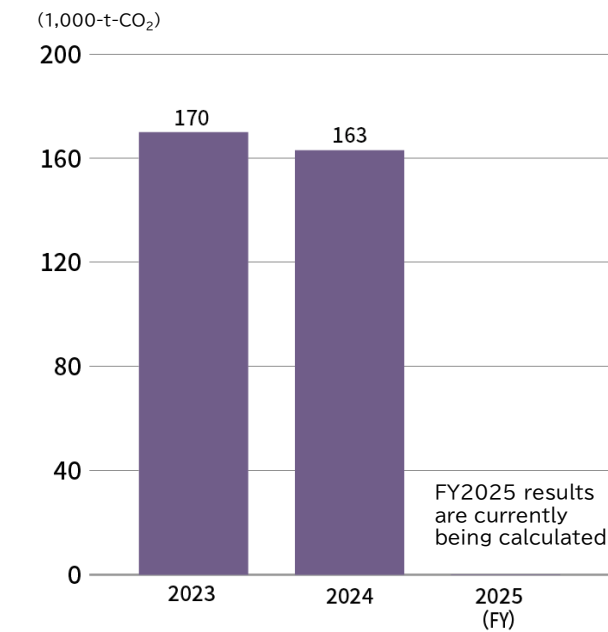
Fuel: Calculated using factors specified in the Greenhouse Gas Emissions Accounting and Reporting Manual under the Act on Promotion of Global Warming Countermeasures.

Trends in Scope 1 and 2 Greenhouse Gas Emissions



Trends in Scope 3 Greenhouse Gas Emissions

Kakogawa Plant, Harima M.I.D.





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