

# Environmentally Friendly Products and Technologies that Contribute to a Sustainable Future

## Natural food dyes

“Natural food dyes” are products made from naturally occurring materials, with consideration for human safety and the environment. Food colorants add color to foods, enriching our dietary lives. Additionally, some products have obtained “Halal certification,” meeting the expectations of customers in Islamic regions. Furthermore, we are advancing the expansion into industrial applications, not limited to food uses.



## Bio-PTG (Polymer materials)



PTG, one type of polyol that is a polyurethane raw material, is an indispensable raw material for spandex and other products. With a proven track record of over 10 years, Hodogaya Chemical was the first company in Japan to develop and sell Bio-PTG, which possesses the same quality as traditional PTG but is environmentally friendly because the main raw materials were switched from petroleum-derived ones to plant-derived ones. In addition, we are developing a special grade of plant-derived products.

## ODI (Phosgene derivative)

Octadecylisocyanate (ODI), a raw material for release agents, paints, and coating materials, is made from vegetable oil and fat, and meets the needs of customers from all over the world. Because it is derived from vegetables, it helps control the occurrence of environmental CO<sub>2</sub>, which is said to be a cause of climate change.



In addition, in April 2024, we obtained RSPO certification\*.

\*RSPO: Roundtable on Sustainable Palm Oil

## Hydrogen peroxide

In addition to its traditional uses as a paper pulp bleach and industrial chemical, hydrogen peroxide is used as an oxidizing agent in the chemical oxidative decomposition method for decontaminating soil. It is possible to directly decompose oils in the soil through oxidation by injecting an oxidizing agent into or stirring it into contaminated soil. Hydrogen peroxide, which breaks down into water and oxygen, is a clean, environmentally friendly oxidizing agent, and it is expected that broader application of it will be made in the future.



## Peracetic acid formulation

The peracetic acid formulation OXYATTACK (disinfectant agent for food products), a hydrogen peroxide derivative, was introduced into the market in 2017. While having powerful anti-bacterial effects on vegetables, fruit and meat, it is broken down into acetic acid and water after use, and does not generate chlorine either, making it an environmentally friendly product that has won the approval of customers.



## Oxygen supply materials (Agricultural materials)

In recent years, extreme weather conditions, including torrential rains and typhoons have become more frequent with each passing year. In addition to the direct damage that these events cause to farmland, crop yield are also affected due to moisture damage. As an application of hydrogen peroxide derivatives in the agricultural field, we provide customers with oxygen supply materials that promote healthy growth by supplying oxygen to soil harmed by bad weather and other factors, thereby improving the growing environment for crops as a countermeasure against moisture damage. These are also environmentally friendly products that do not contaminate farm land.



# Hodogaya Chemical Group’s Sustainability

## Basic approach

The Hodogaya Chemical Group actively promotes sustainability activities based on the concept of balancing the pursuit of economic value and solutions to social issues and providing value to all stakeholders to fulfill its responsibility to realize a sustainable world and society in the medium- to long-term in line with the PURPOSE (Management Philosophy) and VISION (Target Corporate Image).

## Sustainability policy

The Hodogaya Chemical Group has formulated the Sustainability Policy as a comprehensive policy on issues surrounding sustainability. This policy outlines our basic approach as well as related policies to each issue. As a chemical company, we declared our commitment to engaging in responsible care (RC) in 1997 and have been actively and continuously working to protect and improve the global environment. At the same time, the Group has also been addressing with considerable resolve such issues as risk management for natural disasters, etc., the establishment of fair and proper supply chains, human resources management that enhances job satisfaction, and respect for human rights through the established policies and regulations.

## Philosophy Structure

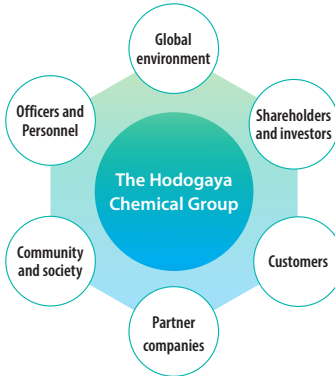


## Sustainability Promotion Structure

As an organization working on sustainability-related issues, we view sustainability as an overarching concept that encompasses CSR, ESG, and the SDGs. Therefore, we established the Sustainability Development Committee. In addition to the RC & QM Subcommittee, which deliberates on such issues as the environment, safety, and quality assurance, the Sustainability Development Committee established the Global Environment Subcommittee and the TCFD Subcommittee to address specific issues. Details of Committee agenda items are regularly reported to and deliberated by the Board of Directors and the Management Committee for approval.

## Collaborative Value Creation with Stakeholders

In addition to its shareholders, investors, customers, partner companies, personnel, local communities and society, the Hodogaya Chemical Group considers the global environment as one of its stakeholders. We are engaging in a variety of initiatives to promote collaborative creation of value with all stakeholders, which we recognize is indispensable for corporate activities based on our management philosophy as well as contributions to the resolution of social issues.



## The Hodogaya Chemical Group’s Stakeholders

Stakeholder	Basic approach
Global environment	We are committed to continuous improvement and regard it as an important responsibility of a chemical manufacturer to continuously reduce the amount of all chemical substances discharged into the earth and the amount of waste generated during our business activities.
Shareholders and investors	In order to maintain and improve the trust of all of our stakeholder groups in the future, we have positioned ourselves to ensure the soundness and legality of management, improving efficiency as one of the most important management issues. We are working to enhance and strengthen corporate governance.
Customers	In addition to providing a stable supply of safe and reliable products, we are committed to providing new products and services that meet our customers’ expectations for a safe, secure, comfortable, and prosperous life.
Partner companies	As a good partner of the Hodogaya Chemical Group, we work together to address social issues, not only in the purchase of raw materials, products, and consignment goods, but also in the purchase of facilities and equipment.
Community and society	In the course of the Hodogaya Chemical Group’s business activities, we consider contribution to the sustainable development of communities an important activity as a corporate citizen, and are engaged in various community contribution activities.
Officers and Personnel	In order to achieve the Hodogaya Chemical Group PURPOSE (Management Philosophy) and VISION (Target Corporate Image) while also boosting corporate value, we aim to facilitate job satisfaction (feeling motivation to work and enjoying a comfortable work environment) for all officers and personnel.

# Disclosure of Information Related to Climate Change Based on TCFD

## Basic approach

The Hodogaya Chemical Group will actively move forward based on the idea of balancing the pursuit of economic value and solutions to social issues and providing value to all stakeholders to fulfill its responsibilities related to creating a sustainable world/society as given in the VISION (Target Corporate Image) appearing in the Mid-term Management Plan SPEED 25/30, which started from FY2021.

As a chemical company, Hodogaya Chemical is resolutely confronting climate change in accordance with the guidance by the TCFD, while proactively striving for information disclosure.



## Governance and Risk Management

The Sustainability Development Committee is a committee organization that actively promotes responsibility toward the realization of a sustainable earth and society in accordance with the Management Philosophy and Corporate Action Guidelines. We established the Global Environment Subcommittee, which promotes activities related to preservation and improvement of the global environment, and the TCFD Subcommittee, which promotes disclosure activities in response to guidance from the TCFD, in addition to the conventional RC/QM Subcommittee.

The Risk Management Committee discusses Companywide risk recognition, evaluation and mitigation measures. The Risk Management Committee also discuss environmental risks, such as climate-related risks, opportunities and countermeasures

recognized by the TCFD Subcommittee.

The content of discussions in each committee and subcommittee is submitted and reported to the Board of Directors and Management Committee.



## Strategies and Risk Analysis

In pursuing the Mid-term Management Plan SPEED 25/30 business strategy of developing a new portfolio, we expect production volume to increase. We have classified the risks projected from a long-term

perspective, looking ahead to 2030, into TCFD risk categories, are proceeding with climate scenario analysis, and from the results of our analysis, we are promoting new initiatives and opportunities for transition risks and physical risks.

## Scenario Analysis

Risks and Opportunities		Risks	Opportunities	Measures	Impact on business
Transitional risk 1.5°C scenario	Policy/Regulation	• Strengthening energy-related laws and regulations • CO <sub>2</sub> reduction	○	• Promoting energy saving • Use of renewable energy • Review of manufacturing process	Increase in energy costs and raw material procurement costs due to the introduction of a carbon tax, etc.
	Technology	Strengthening environment management	○	Strengthen the internal structure by leveraging the knowledge gained thus far	Increased cost burden for maintenance and improvement of management system
	Market	Creation of new technologies for environmental friendliness	○	• Strengthen R&D to meet demands • Strengthen production technology capabilities by reviewing manufacturing processes, etc.	[Risk] Increase in R&D and manufacturing costs [Opportunity] Maintain and expand market share by providing products and services that meet demand
	Reputation	Eco-friendly market formation	○	Revise and strengthen business strategies by deepening market and customer needs, and improve R&D and manufacturing technology capabilities corresponding to them	[Risk] Increase in R&D and manufacturing costs [Opportunity] Maintain and expand market share by providing products and services that meet demand
Physical risk 4°C scenario	Chronic	Stakeholders making environment as important matters	○	Enhancing dialogue with local communities, personnel, and shareholders and securing a system	—
	Acute	Rise in average temperature Increase in earthquakes, typhoons, and floods	○	Labor saving and automation of manufacturing equipment Promote multiple purchases, strengthen BCP	[Risks and Opportunities] Response to market changes, especially in the agrochemicals business Shutting down of factories and inability to procure raw materials

## Major business opportunities in transition

Segment	Opportunities
Functional Colorants Segment	• Aluminum coloring dyes Expand sales by developing eco-friendly products • Bio business Expansion from materials for PCR diagnostic kits to medical use
Specialty Polymers Segment	• PTG (urethane materials) Promoting green chemistry through biotechnology
Basic Chemicals Segment	• Hydrogen Expanding business opportunities due to the advent of the hydrogen society
Agro-Science Segment	• Hydrogen peroxide and derivatives Expanding applications to the field of agricultural materials

## Targets and Indicators

The Hodogaya Chemical Group has set the following non-financial targets (climate change-related) in its Medium-term Management Plan SPEED 25/30:

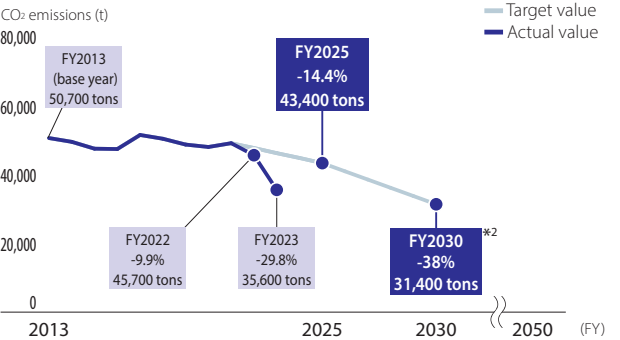
- Reduction of carbon dioxide emissions (achieve FY2025 target)
- Reduction of energy intensity (achieve FY2025 target)
- Reduction of industrial waste volumes (achieve less than the previous fiscal year's generation)

These are being discussed by the Global Environment Subcommittee, debated in the Sustainability Development Committee, and progress is confirmed by the Board of Directors and Management Committee.

## Responding to Climate Change

Most of the greenhouse gases (GHG) emitted by Hodogaya Chemical are carbon dioxide\*1. The GHG emissions for FY2023 are 35,600 t-CO<sub>2</sub> (Scope 1\*2 + Scope 2\*3). In anticipation of increased production volumes in the future, we will address climate change from both mitigation and adaptation perspectives with a long-term view towards FY2030.

## CO<sub>2</sub> emissions trend\*1



\*1 Non-energy-originated CO<sub>2</sub> emissions are not included  
\*2 Reduction targets for FY2030 are based on government-announced reduction targets by industry.

Details on TCFD can be found on our website.  
<https://www.hodogaya.co.jp/english/csr/eco/tcfd/>

## Non-financial Targets

	FY2022 results	FY2023 results	FY2025 management targets
CO <sub>2</sub> emissions (CO <sub>2</sub> emission intensity)	45,700 t-CO <sub>2</sub> (1.055 tons/net sales million JPY)	35,600 t-CO <sub>2</sub> (0.805t tons/net sales million JPY)	43,400 t-CO <sub>2</sub> (0.868 tons/net sales million JPY)
Reduction of energy intensity	0.636 kl/net sales million JPY	0.495 kl/net sales million JPY	0.606 kl/net sales million JPY
Reduction of industrial waste volumes	3,477t	2,523t	Less than the amount generated in the previous year

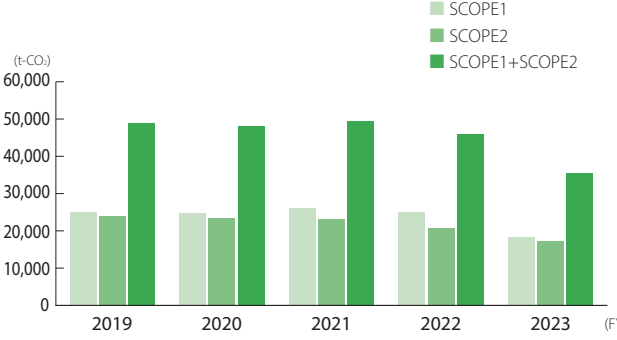
\* The CO<sub>2</sub> emission intensity and energy intensity for FY2023 are affected by changes in product composition

To promote the reduction of carbon dioxide emissions, we have also started implementing ICP (Internal Carbon Pricing), which assigns a price to carbon emissions, from FY2022.

We have established a system that can support investment as a response to climate change towards a low-carbon society.

\*1 Non-energy-originated CO<sub>2</sub> emissions are not included  
\*2 Scope 1: Direct emissions  
\*3 Scope 2: Energy-originated indirect emissions

## CO<sub>2</sub> emissions



## Roadmap for Reducing CO<sub>2</sub> Emissions

		2030 Toward achieving future goals	2050 Development of hydrogen society and challenge to carbon neutrality
Promotion of technological innovation	Process	• Efforts to save energy — Promotion of high efficiency through process improvement — Promotion of waste heat recovery (heat pump)	• Study of hydrogen plant CO <sub>2</sub> recovery and use • External procurement of green hydrogen
Emissions from own production activities (Scope 1)	Steam boiler	• Efforts to save energy — Active use of waste heat	• Improvement of electrification rate of heat source • External procurement of green hydrogen • Fuel conversion (LNG → hydrogen) — Hydrogen-fired boilers introduced at all plants • Introduction of cogeneration (hydrogen mixture → hydrogen-only combustion)
Expansion of use of renewable energy	Electricity	• Efforts to create energy — Introduction of renewable energy • Efforts to save energy — Promotion of high efficiency • Gradual switch to CO <sub>2</sub> -free power sources using renewable energy	
Utilizing the ICP system	—	• Promoting ICP system • Continue switching to LED lighting equipment • Continue to introduce top-runner equipment • Reduction of heat loss through appropriate management of heat insulating materials and traps • Efficient operation	
Daily improvement through energy saving	—		



# Responsible Care (RC)

Related Materiality

- Responding to climate change
- Maintaining air, water, soil environments

## Message from the Executive Officer in charge of Production



The Hodogaya Chemical Group is engaged in all aspects of environmental conservation, security and disaster prevention, workplace safety and health, chemical and product safety, quality assurance, logistics safety, and dialogue with society under the basic philosophy to “ensuring environmental conservation, health and safety, and product quality is fundamental to corporate management and the basis for all business activities.”

In an era where the focus on “environment, safety, and health” is increasingly important, with greater attention paid to global environmental issues and self-directed chemical substance management, we are required to take responsible voluntary actions more than ever before. Against this background, the Hodogaya Chemical Group incorporates the Responsible Care philosophy and basic policies into specific action plans, voluntarily ensures “environment, safety, and health” throughout all processes from the development of chemical substances to manufacturing, logistics, use, final consumption, and disposal, publishes the results of activities, and actively engages in activities to conduct dialogue and communication with society.

Kaoru Kasahara Director and Senior Managing Executive Officer

Environment Basic approach

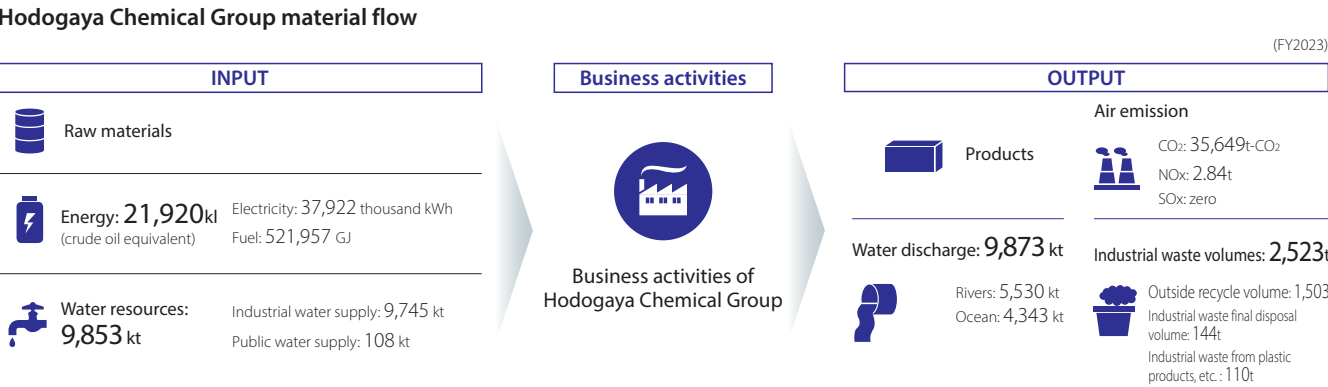
In protecting the environment, the Hodogaya Chemical Group continuously reduces the emission volumes of all chemical substances released into the air, water, and soil, and the volume of waste discharged in the course of its business operations. As its implementation structure, under the Basic Philosophy of Responsible Care (RC) the Group obtained integrated certification for the ISO 14001 environmental management system covering all Hodogaya Chemical offices and Group company offices located in Japan.

ISO 14001: 2015 Environmental management systems

Certification body	Japan Chemical Quality Assurance
Registration no.	JCQA-E-0330
Compatible standards	JIS Q 14001:2015/ISO 14001:2015
Date of acquisition	2001.12.25

Details of environmental data from the past 10 years can be found on our website.

[https://www.hodogaya.co.jp/english/csr/eco/environmental\\_data/](https://www.hodogaya.co.jp/english/csr/eco/environmental_data/)



## Initiatives to Reduce Greenhouse Gas (GHG) Emissions

The Hodogaya Chemical Group considers responding to climate change to be a crucial management challenge. We have been actively promoting initiatives to reduce greenhouse gas (GHG) emissions, in order to fulfill our responsibilities toward the realization of a sustainable planet and society as set forth in the VISION of our Mid-term Management Plan.

Most of the GHG emitted by Hodogaya Chemical is CO<sub>2</sub>\*<sup>1</sup>. The GHG emissions for FY2023 are 35,649 t-CO<sub>2</sub> (Scope 1\*<sup>2</sup> + Scope 2\*<sup>3</sup>). We will continue to work on reducing emissions through the

introduction of energy-saving equipment and switching to renewable energy sources based on long-term decarbonization investments to reduce energy intensity. Regarding Scope 3\*<sup>4</sup>, we are currently at the stage of gathering information on other companies’ initiatives.

We will continue to grasp our GHG emissions for each Scope, analyze the results, formulate reduction plans, and strive to reduce GHG emissions according to the plans.

\*1 Non-energy-originated CO<sub>2</sub> emissions are not included  
\*2 Scope 1: Direct emissions  
\*3 Scope 2: Energy-originated indirect emissions  
\*4 Scope 3: Other indirect emissions, classified into 15 categories

Details on Responsible Care can be found on our website.  
[https://www.hodogaya.co.jp/english/csr/eco/safety\\_responsible/](https://www.hodogaya.co.jp/english/csr/eco/safety_responsible/)

Details on PRTR can be found on our website.  
[https://www.hodogaya.co.jp/english/csr/eco/environmental\\_data/#a21](https://www.hodogaya.co.jp/english/csr/eco/environmental_data/#a21)

## Initiatives to Lower Environmental Impacts

The water resources consumed, and the chemical substances released into the air, water, and soil during the course of business operations by the Hodogaya Chemical Group have the potential to impact the global environment. Taking into consideration the global environment and each of its stakeholders, the Hodogaya Chemical Group strives to lessen the environmental burden accompanying its business activities.

**Prevention of air pollution**

SO<sub>x</sub> (sulfur oxides), NO<sub>x</sub> (nitrogen oxides), and dust are discharged from our factories from the burning of fuel and other aspects of chemical manufacturing.

In FY2011, Hodogaya Chemical completed a switch to city gas for the raw fuel used in our plants, which has allowed us to continue to achieve zero emission of SO<sub>x</sub> since FY2012. We are also achieving significant reduction of NO<sub>x</sub> and dust emissions through measures such as adopting dust collectors and scrubbing towers, and using catalyzers. This has allowed us to mitigate discharge of these substances into the atmosphere.

**Protection of water resources and prevention of water pollution**

Hodogaya Chemical considers the securing of high-quality water resources and the prevention of water pollution from wastewater important for business continuity. 99% of the industrial water used by Hodogaya Chemical is procured from rivers and streams and only a small amount of public water (tap water) is used as drinking water. Furthermore, the Company does not use water from other sources, such as groundwater, which could cause land subsidence, or seawater.

Water released during the manufacturing process is treated in an advanced manner at the on-site wastewater treatment facility within the plant, and released into the public water bodies after the water quality clears regulatory values. Going forward, we will continue to thoroughly manage wastewater treatment facilities and work to reduce the environmental impact risks to oceans and rivers where wastewater is discharged.

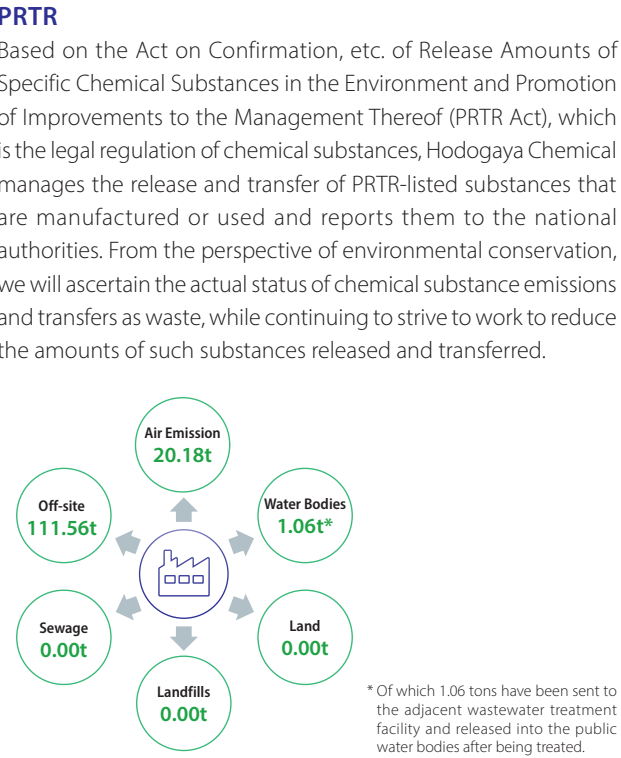
**Environmental accounting initiatives**

Of the major expenditures related to environmental conservation in FY2023, the largest expense was resource circulation cost, which amounted to 138 million JPY.

Environmental Accounting Data 2024 P.61

**Industrial waste reduction**

The Hodogaya Chemical Group promotes the 3R+Renewable initiative (reduce, reuse, recycle, renewable) and we have set a target to reduce the volume of industrial waste generated compared with the previous fiscal year, with initiatives underway. The total emissions and final disposal volume for FY2023 decreased by 27% and increased by 69% respectively compared to the previous fiscal year. While there are influences from differences in production item composition, we take seriously the fact that the final disposal volume has increased and will strengthen our efforts to reduce industrial waste.



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**Initiatives for CO<sub>2</sub> Reduction**

In recent years, global warming has become a serious issue. As economic activities develop, CO<sub>2</sub> emissions increase, and consequently, the global average temperature rises. As a result, extreme weather events such as concentrated heavy rainfall and high temperatures are occurring worldwide, causing serious impacts.

In light of this situation, the Yokohama Plant has been working on CO<sub>2</sub> reduction by switching to CO<sub>2</sub>-free electricity for power trading since April 2022. We are also working on reducing power consumption by replacing mercury lamps and fluorescent lights with LEDs. In our current efforts, we are also responding to external requests for power savings.

While the plant implements various initiatives for “environmentally friendly manufacturing,” I believe the most important thing is for each employee working at the plant to act with awareness. In the future, we would like to continue working on reducing environmental impact throughout the entire plant.

(T.S., Manufacturing Department, Yokohama Plant)

Responsible Care (RC)

Related Materiality

● Improving product value and reliability

● Promoting health and productivity management and workplace safety and health

● Ensuring product and chemical safety

Workplace Safety and Health, Security and Disaster Prevention

Basic approach

The Hodogaya Chemical Group places highest priority on ensuring workplace safety and health as the basis of its production activities, and ensures thorough compliance with laws and regulations related to safety and health, to achieve disaster-free operation. In order to promote workplace safety and health, and security and disaster prevention, we spell out the basic rules on actions to be taken by the Hodogaya Chemical Group based on relevant laws and regulations in the Safety and Health Management Rules, the Disaster Prevention Rules, and the Logistic Safety Management Rules.

Initiatives for Workplace Safety and Health

The Safety and Health Management Rules set forth the basic rules on safety and health management to prevent occupational disasters and health disorders of all personnel. The aim is to engage both personnel and employers to collaborate in ensuring the safety and health of all personnel in the workplace, and to promote creating a more comfortable work environment, while streamlining operations and contributing to improving productivity.

Furthermore, the Group has designated February 3 as the Group's annual Safety Day to prevent personnel forgetting the fire accident at the Yokohama Plant on February 3, 2012, and the lessons learned from it, to enhance the culture of safety, and to spread among all personnel of the Group the efforts in structurally establishing safety in the business operation.

In FY2023, as a result of continuing to strengthen initiatives for each measure, the Hodogaya Chemical Group and subcontracting companies achieved zero lost-time injuries.



Initiatives for Disaster Prevention

The Group conducts its activities in accordance with its basic principle to deliver security and safety, including environmental conservation to the local communities and society. The Disaster Prevention Rules stipulate that education and training be carried out on a regular basis in preparation for an accident or other emergency. In addition to conducting disaster drills, fire extinguisher training, emergency lifesaving drills jointly with fire departments and other first responders, we are striving to instill an awareness of safety and disaster prevention among all personnel and enhance their ability to sense danger.

We are continuing the conventional KYT (Kiken Yochi Training, risk prediction training) and PYT (process error prediction training) activities, and conduct safety patrols, 3S (Sort, Set in Order, Shine) and inspection visits among offices. In internal audits of RC activities, the basis of activities was expanded to the five actuals (place, thing, fact, principle, rule) to implement safety measures and safety education that include mechanism and law principles, and rules such as routines and orders.

Personnel from plants are active participants in competitions in which teams pit their firefighting and disaster prevention skills against teams from other plants located in the same area.

Occurrence of Lost-time Injuries

	Hodogaya Chemical Group			Subcontracting companies		
FY occurred	2021	2022	2023	2021	2022	2023
Number of accidents / incidents	0	0	0	0	0	0
Number of work-related fatalities and injuries	0	0	0	0	0	0
Frequency rate	0.00	0.00	0.00	0.00	0.00	0.00
Severity rate	0.00	0.00	0.00	0.00	0.00	0.00

Frequency rate = Number of work-related fatalities and injuries / Total work hours x 1,000,000  
Severity rate = Total number of working days lost / Total work hours x 1,000

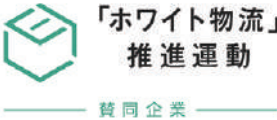
Initiatives for Logistic Safety

Hodogaya Chemical endorsed the spirit of the White Logistics Promotion Campaign\* advocated by the Ministry of Land, Infrastructure, Transport and Tourism, Ministry of Economy, Trade and Industry, and Ministry of Agriculture, Forestry and Fisheries in January 2021 and submitted a voluntary action declaration to the White Logistics Promotion Campaign Secretariat. In the voluntary action declaration, we reviewed the content of transportation, including greater logistics efficiency and modal shift, and listed our efforts to standardize contracts and ensure safety.

For the purpose of ensuring safety, we help maintain the safety and

health of all local residents, including those involved in logistics, and protect the local environment by following Logistic Safety Management Rules, which stipulate basic items concerning preventing accidents and disasters in logistics related to Group products and other items and measures in the case of an accident or disaster.

\* White Logistics Promotion Campaign  
This is a campaign to realize not only greater productivity and more efficient logistics, particularly in truck transportation, but also a work environment welcoming to female and older drivers so as to ensure stable logistics, which are necessary for the lives of Japanese and industrial activities, in response to the shortage of drivers that is growing more serious and to contribute to economic growth.



For more information on workplace safety and health and security and disaster prevention, please visit our website  
[https://www.hodogaya.co.jp/english/csr/eco/safety\\_health\\_logistics/](https://www.hodogaya.co.jp/english/csr/eco/safety_health_logistics/)

For more information on chemical and product safety, please visit our website  
[https://www.hodogaya.co.jp/english/csr/eco/chemical\\_product\\_safety/](https://www.hodogaya.co.jp/english/csr/eco/chemical_product_safety/)

Chemicals and Product Safety

Basic approach

The Hodogaya Chemical Group sets forth a set of internal rules on the use of chemical substances and measures to control the content in products, etc. based on the Basic Philosophy of Responsible Care (RC) to ensure environmental conservation, safety and health, and product quality, which forms the basis for all business activities. The aim of these rules is to voluntarily manage chemical substances that are likely to injure human health or impact the global environment in each process, from development, manufacturing, transportation, and use to disposal.

Chemical Substance Management

From the perspectives of environmental conservation, security and disaster prevention, workplace safety and health, and product safety, the Hodogaya Chemical Group manages chemical substances in all phases, from development, raw materials procurement, manufacturing, and use to disposal.

To the controlled chemical substances designated under national laws and regulations have been added those requested under customers' RoHS and REACH directive as well as green procurement policies.

The substances are categorized into three groups: prohibited substances, the manufacture, import and use of which are prohibited in principle under domestic law; release-restricted substances, on which domestic laws require that restrictions be placed on their release into the environment or that their environmental impact be reduced; and controlled substances in products, those that customers have requested either not be present in products or that the amounts contained be controlled. Having been made into a database, this system provides integrated management of information on all products, raw materials, and chemical substances handled by the Hodogaya Chemical Group.

We also ensure that information is provided to our customers in a standardized format, including confirmation of legal compliances with national and foreign laws and regulations, the automated production of safety data sheets (SDSs) and product labels in multiple languages as well as the compiling of safety information on the chemicals contained in our products.

Compliance with Global Laws and Regulations

In addition to the conventional regulations such as TSCA (USA) and REACH (Europe), Asian countries including China, South Korea and Taiwan are actively enforcing new laws and regulations.

With an eye on expanding its business globally, the Hodogaya Chemical Group not only works in close collaboration with foreign affiliate companies and representative offices, but also takes active part in various industry activities to keep track of the latest trends in chemical substance management policies and legislation of other countries to be prepared to respond in a timely manner. We share this legislative information and responses from other countries with the entire Hodogaya Chemical Group.

Risk Assessment of Chemicals

The Hodogaya Chemical Group formulates procedures for risk assessments to prevent accidents and disasters, and measures to reduce risks based on the assessment results. The Group also sets forth the Risk Assessment Guidelines to clearly identify risks and take precise measures, and implements them on a regular basis. The substances to be subjected to risk assessments are divided into two categories—the risk assessment of operations and the risk assessment of handling chemical substances—to enable the clearer identification of risks and more precise measures to be taken. In addition, based on the recent revision of the Industrial Safety and Health Act, we are working to strengthen our self-directed "chemical substance management system," "information transmission," and "risk assessment" to prevent workplace accidents caused by chemical substances.

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Turning training into opportunities to imagine and consider potential dangers

We must, above all, keep in mind that errors in production sites can lead to irreversible situations. Precisely because we cannot experience failures, opportunities to imagine and consider through KYT and PYT are important. As a technical staff member, I approach manufacturing department training with a focus on chemical perspectives. I believe that sharing opinions from various viewpoints within each person's position and role leads to a more multifaceted understanding of potential dangers, enhancing safety awareness and sensitivity, and leading to actions that protect our colleagues.

While no two situations in daily life are exactly the same, such training leads to timely communication and caution in our daily activities. Expanding the circle of safety culture, I want to contribute to stakeholders as a chemical manufacturer with a higher safety awareness, always keeping in mind that "safety is the foundation of production activities."

(S.M., Manufacturing Department, Koriyama Plant)



Responsible Care (RC)

Quality Assurance Basic approach

The Hodogaya Chemical Group's quality policy is commitment to quality-first, quality from our customer's perspective. The aim is to meet the demands of our customers and partner companies through our products, commercial goods, and OEM products, through which we contribute to society and business growth.

Initiatives for Quality Assurance

The Hodogaya Chemical Group practices quality assurance activities in accordance with the "RC Basic Philosophy" and "RC Basic Policy."

By carefully grasping facts, judging from facts, and acting based on facts, we can thoroughly implement a quality-focused mindset and provide high-function, high-value-added products and services that meet our customers' trust and satisfaction.

To guarantee customer satisfaction with quality, we have divided quality assurance activities related to products handled by the Hodogaya Chemical Group into four systems by purpose, covering all stages from planning, research and development, production, to sales. We engage in quality assurance activities through necessary reviews, audits, and management systems appropriate for each system, such as creating annual plans aimed at improvement and reporting and discussing results in the RC and QM subcommittees. We are working to raise employees' compliance awareness regarding quality through planned and continuous quality education.

November of each year is Quality Month, and during the month we hold the All Company QC Presentation Meeting for the whole Hodogaya Chemical Group. We continue to manage and improve the quality of products, services, work, and other elements through QC circle activities. We tie the results of these circle activities to personal development, mutual development, and workplace vitalization by having reports and Q&A sessions at the All Company QC Presentation Meetings.

Four quality assurance activity system

- 1. Quality assurance activity system from the planning stage to stable production of products
- 2. Quality assurance activity system for the steady production operation of products
- 3. Quality assurance activity system for commercial goods and OEM products
- 4. Activity system to review the quality assurance activities



FY2023 All Company QC Presentation Meeting

Quality Day

November has traditionally been Quality Improvement Month at Hodogaya Chemical, and the Company has generally designated the third Friday of November as Quality Day since 2020 so as to further improve quality management. This was triggered by the organizational restructuring in October 2018, where the Quality Assurance Department was separated from the Environment and Safety & Quality Assurance Department to establish a new department responsible for quality assurance activities, based on the Hodogaya Chemical Group's belief that "quality is the source of trust" and to improve quality management functions and clarify their roles and responsibilities. Quality Day is an activity where all officers and employees of the Hodogaya Chemical Group gather to recite the Quality Pledge, share recognition of quality maintenance, improvement, and compliance, and lead to customer satisfaction.

Quality Management

Today, corporate quality management systems with international qualities and standards have come to be recognized as the norm. Each of the Hodogaya Chemical offices have acquired ISO 9001 certification, the international standard for quality management systems. Then in 2010, the Group integrated the individual management systems of each office and successfully achieved an integrated certification as the Hodogaya Chemical Group that expanded the scope of certification to include domestic affiliated companies. Our group company, SFC in Korea, has also obtained ISO certification. When renewing the Hodogaya Chemical Group's integrated certification in 2019, we expanded the certification scope to include HODOGAYA CHEMICAL KOREA, our overseas research base, which also obtained ISO certification.

Also, to effectively operate the quality management system, we recognize increasing the number of internal auditors and improving their competence as challenges, and are conducting ISO internal auditor education with external lecturers in addition to in-house education.

ISO 9001: 2015 Quality management systems	
Certification body	Japan Chemical Quality Assurance
Registration no.	JCQA-0184
Compatible standards	JIS Q 9001:2015/ISO 9001:2015
Date of acquisition	December 25, 1996

Procurement Activities Basic approach

The Hodogaya Chemical Group specifies its commitment to the realization of a fair and appropriate supply chain in the Sustainability Policy, and implements the activities of procurement based on the Compliance Action Policy and the Procurement Policy. We have a fair deal with all partner companies in good faith when purchasing raw materials, products/consigned products, and facilities/equipment. We regard them as our good business partners in jointly addressing social issues.


Procurement policies

The Hodogaya Chemical Group has established the Procurement Policy and Procurement Guidelines. In addition to having a fair deal in good faith, the concept of sustainable procurement, that is, giving consideration to the environment while deepening mutual communication was incorporated into the Procurement Policy. The Hodogaya Chemical Group conducts procurement in line with this policy


In the basic purchasing contract concluded when doing business with the Hodogaya Chemical Group, there is a clause that covers compliance with the Procurement Guidelines. By having them comply with the terms of these guidelines, we work with our partner companies to conform with environmental, social, and governance needs, such as reducing the environmental impacts from raw material quality and the management and manufacture of chemical substances as well as respecting human rights throughout the supply chain, health and safety management, and ethics. Thus, the Hodogaya Chemical Group promotes compliance together with its partner companies.

Procurement Policy

- 1. Compliance with Laws and Regulations and Social Norms
- 2. Implementation of Environmentally Conscious Procurement Activities
- 3. Provision of Fair Transaction Opportunities
- 4. Deepening of Communications with Supply Chain



Details on the Procurement Policy can be found on our website.  
<https://www.hodogaya.co.jp/english/company/philosophy/#a8>



Promotion of Sustainable Procurement


When procuring raw materials, facilities and equipment as well as other items, we endeavor to establish robust supply chains. From a global perspective, we search for financially sound partner companies that are capable of continuous transactions, including respect for human rights and compliance with society's ESG requirements. In particular, we work to secure multiple suppliers for each raw material and to diversify the countries from which we procure.

For those business partner companies whose purchasing transactions exceed a certain amount, we regularly use a Procurement Guidelines Implementation Status Survey Sheet to confirm whether the compliance items listed in the Procurement Guidelines are being properly implemented. In parallel with confirmation by means of the survey sheet, we also conduct visiting audits of business partner companies and work to deepen mutual understanding and establish relationships of trust with them while conducting improvement activities.


The personnel of the Purchasing Department are provided with the training necessary to put sustainable procurement activities into practice.

In April 2024, we obtained RSPO certification and are working on the procurement of sustainable palm oil.

The Hodogaya Chemical Group is also striving for responsible mineral resource procurement. We do not handle conflict minerals that are sources of funding for human rights violations or armed groups.



Details on Procurement Guidelines can be found on our website.  
[https://www.hodogaya.co.jp/english/wp/wp-content/uploads/2018/09/procurement\\_guidelines\\_20180918.pdf](https://www.hodogaya.co.jp/english/wp/wp-content/uploads/2018/09/procurement_guidelines_20180918.pdf)



VOICE



Towards realizing a sustainable supply chain

In 2024, Hodogaya Chemical obtained RSPO (Roundtable on Sustainable Palm Oil) certification from ODI. RSPO certification is an international certification system that proves palm oil production is carried out with consideration for environmental protection, workers' rights, and community welfare.

In the process of pursuing RSPO certification, I became more aware as a consumer about not just the products I purchase, but also their background, such as where they come from and whether they are produced in ways that consider the environment and human rights.

Through product sales and production, I want to continue thinking about what we can do to strengthen relationships of trust with our business partners and build a sustainable society together.  
(M.K., Functional Chemicals Business Division, Head Office)

# Human Resource Strategy

Related Materiality	
● Improving job satisfaction ● Promoting diversity	● Promoting the health and productivity management and workplace safety and health

## Message from the Executive Officer in charge of the HR Department



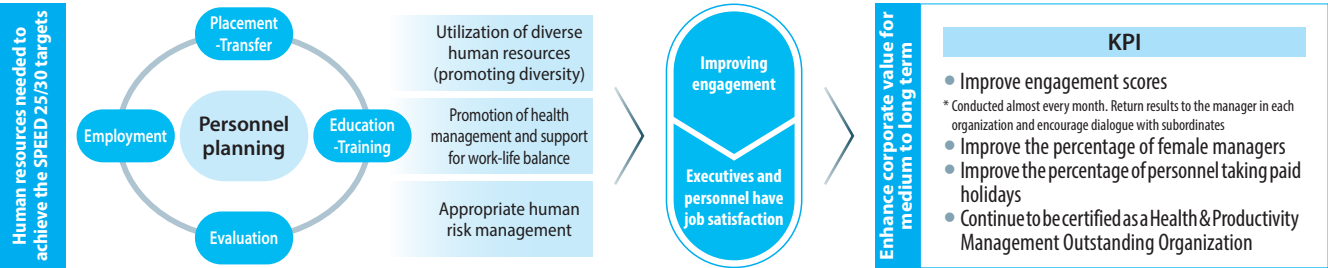
In June 2024, Japan's ranked 38th in world competitiveness according to IMD (International Institute for Management Development, Switzerland), down 3 places from the previous year. The Hodogaya Chemical Group believes that people are the drivers of value creation, and that demonstrating the power of human resources leads to improved competitiveness and mid- to long-term enhancement of corporate value. At the same time, we deeply recognize that demonstrating the power of human resources can solve social issues and contribute to the realization of a sustainable society. We will work to achieve the Mid-term Management Plan SPEED 25/30 by expanding human capital.

Shinichi Sato Director and Managing Executive Officer

## Mid-term Management Plan SPEED 25/30 HR Strategy

From the standpoint of maximizing the use of human resources, who are the driving forces behind value creation, we believe it is important to enhance human capital in order to increase corporate value over the medium to long term. Specifically, the Hodogaya Chemical Group is steadily implementing the personnel planning

linked to enhancement of corporate value as shown in the following diagram to promote the hiring and development of personnel who can learn, think and act on their own with a desire to grow, take on challenges, and innovate. We have set the goal of improving engagement, also shown in the diagram that follows. Our strategic goal in the SPEED 25/30 is to ensure that all officers and personnel can feel job satisfaction.




## Main Policies in the Mid-term Management Plan SPEED 25/30

To achieve "enhancement of engagement that: all executives and personnel can feel job satisfaction" as stated in SPEED 25/30, we are working on the following measures from the perspectives of feeling of motivation to work and ease of work.

### Improving feeling of motivation to work - Utilizing diverse human resources (promoting diversity)

The Hodogaya Chemical Group recognizes that the purpose of promoting diversity is to promote innovation in a challenging competitive environment, flexibly reorganize businesses, and strengthen adaptability to changes in order to enhance corporate value. In particular, to promote the active participation of women, we conduct training for female employees to help them develop their aptitudes and abilities and become aware of their role as leaders, and we also conduct training for male employees to reform their awareness, thereby working to create an organizational culture where both men and women can play active roles without distinction. Regarding mid-career hires, we make appointments based on a comprehensive assessment of experience, abilities, and skills without distinguishing them from new graduate hires. At the same time, we are working to create an environment in which personnel can maximize their individual talents and skills. The

election of a female Outside Director was approved at the Annual General Meeting of Shareholders in June 2023, and in June 2024, we promoted a female Executive Officer from within the company. In addition, promoting diversity will increase the number of personnel with diverse personalities and values to help expand the diversity of the organization; hence, it is important to unify the organization and personnel. We believe that the Hodogaya Chemical Group's PURPOSE (Management Philosophy) and VISION (Target Corporate Image) can fully unify the organization and personnel.



Details can be found on our website.  
<https://www.hodogaya.co.jp/english/csr/stakeholder/employee/#a41>

### Improving feeling of motivation to work - Initiatives for self-growth

The Hodogaya Chemical Group has established an education system to promote human resource development and support the self-growth of executives and personnel. Recently, as part of fostering a culture of continuous learning in the organization, enhancing intellectual capabilities of executives and personnel, and responding to human capital management, we have rolled out a "book summary service" for executives and personnel who are interested.


### Improving ease of work - Promoting health and productivity management, initiatives for work-life balance

The Hodogaya Chemical Group recognizes initiatives to improve the health of executives and personnel as a management issue. By strategically practicing health and productivity management, including guidance and education for health promotion, and collaboration with the Hodogaya Chemical Health Insurance Society and industrial physicians, we were certified as a "Health & Productivity Management Outstanding Organization 2024" in FY2023 (for the fourth consecutive year). We will continue to prioritize the physical and mental health of our executives and personnel.

In addition, we are actively working on work-life balance initiatives, such as increasing the percentage of personnel taking paid holidays and the percentage of male personnel taking childcare leave, a 5-day consecutive refreshment leave system separate from annual paid leave, establishing telework

regulations, and expanding the flex-time system. We will continue to strive to enable all executives and personnel to maximize their abilities and skills by balancing work and life.





Details on the system can be found on our website.  
<https://www.hodogaya.co.jp/english/csr/stakeholder/employee/#a9>

### Human Risk Management

To preserve the corporate value of the Hodogaya Chemical Group, we recognize that the occurrence of human risks (violation of labor laws, harassment, outflow of personnel, individual troubles, etc.) may lead to significant losses in the management of the Hodogaya Chemical Group, and we strive to adequately manage human risks to prevent, avoid, and mitigate future losses.

### Key Human Resources Investments and Initiatives through FY2023

• Revision of personnel evaluation system (restructuring of behavior and ability assessment)	• Introduction of a new personnel front system (utilization of HR technology)	• Introduction of training for next-generation management personnel
• Transition to performance-linked bonuses (introduction of a transparent reward method)	• Introduction of the Come-back entry System (Reemployment Applicants Registration)	• Introduction of a multi-assessment system (multifaceted evaluation system) (expanded target in FY2023)
• Establishment of a new education system for managers (improvement of management literacy)	• Measurement of engagement scores and implementation of training to improve engagement	• Introduction of employee stock benefit trust (J-ESOP)
• Revision of retirement benefit system (full transition to defined contribution (DC) pension plan)	• Formulation of telework regulations (compatible with diverse work styles)	• Decision to introduce a "book summary service" (to improve knowledge and skills)
		• Decision to trial expansion of the flex-time system

### Human capital investment and measures in FY2023

#### Implementation of a multi-assessment system (multifaceted evaluation system)

In FY2022, we introduced a multi-assessment system (multifaceted evaluation system) for department heads and above, and in FY2023, we expanded the target to include all managers and above. With the aim of providing new insights to individuals and opportunities for self-transformation, we conducted assessments based on 16 assessment criteria x 10-point scale, provided feedback to individuals on the assessment results and company-wide averages, etc., and then had dialogues between individuals and their immediate supervisors based on the assessment results, leading to insights and fair assessments.

### Future Challenges and Countermeasures

The Hodogaya Chemical Group has set enhancement of engagement that: all executives and personnel can feel job satisfaction as a strategic goal, and is planning measures to tackle it. Amid major global structural changes, however, it is possible that values regarding human resources will change. By keeping our antennas high to collect information, we can grasp changes in human resource management trends in a timely manner, and respond to changes based on the Hodogaya Chemical Group's PURPOSE (Management Philosophy) and VISION (Target Corporate Image).

### VOICE



#### Boldly taking 3 months of childcare leave

In July 2023, my second daughter was born, and I took 3 months of childcare leave. When my first daughter was born by emergency C-section, my wife struggled to even move for a while due to postoperative pain, and considering that we didn't have any relatives nearby to rely on, as well as taking care of our energetic first daughter, I decided to take 3 months off.

I am very grateful to my supervisor who readily agreed and to my colleagues who supported me. I feel that the understanding of men taking childcare leave has deepened to the point where it's already becoming the norm, which greatly contributed to my ability to take it without hesitation.

My wife thanked me, saying, "I'm really grateful that you took childcare leave." In the future, I will support those taking childcare leave as someone who can provide support.

(S.H., Manufacturing Department, Koriyama Plant)



# Respect for Human Rights

• Respecting human rights



Details can be found on our website.  
<https://www.hodogaya.co.jp/english/csr/stakeholder/humanrights/>



## Basic approach

The Hodogaya Chemical Group believes that respect for human rights as stipulated in the Constitution of Japan is a fundamental matter in carrying out its business activities. Identifying respect for human rights in our Sustainability Policy, we comply with laws and regulations as well as highly ethical and normed behavior, respect the diversity, personality, and individuality of everyone working at the Hodogaya Chemical Group, and ensure a sound and pleasant working environment free of discrimination and harassment, while also paying close attention to respect for human rights regarding partner companies in accordance with the Corporate Action Guidelines and the Compliance Action Policy, which include items described in the United Nations “Guiding Principles on Business and Human Rights.



Corporate Action Guidelines  
<https://www.hodogaya.co.jp/english/company/philosophy/#a7>



Compliance Action Policy  
<https://www.hodogaya.co.jp/english/company/governance/compliance/>



### Human Rights Policy

The Hodogaya Chemical Group formulated the Human Rights Policy as part of its Sustainability Policy.

The Hodogaya Chemical Group regards respect for human rights as the basis of its business activities and ensures the following listed items in accordance with the Corporate Action Guidelines, Compliance Action Policy, and Procurement Policy, while also paying close attention to respect for human rights regarding partner companies.

1. Complying with laws and regulations, highly ethical and normed behavior
2. Respect for diversity, personality, and individuality of everyone working at the Hodogaya Chemical Group
3. Creation of a sound and pleasant working environment free of discrimination and harassment



Procurement Policy  
<https://www.hodogaya.co.jp/english/company/philosophy/#a8>



### Human Rights Due Diligence Initiatives

The Hodogaya Chemical Group identifies human rights risks that may arise through its operations.

We are conducting education and training, upgrading workplace environments and systems, and engaging in supply chain management to address human rights risks and as preventative measures against identified risks.

We also closely monitor these activities to ascertain the effectiveness of preventive measures and to promote improvements on a continuous basis. We regularly conduct surveys of partner companies using the Procurement Guidelines Implementation Status Survey Sheet as part of efforts to monitor the supply chain and to confirm whether compliance items are properly implemented. In addition, we work to improve activities to deepen mutual understanding while building mutual trust with our partner companies.

A grievance mechanism is in place to detect and address risks related to human rights.

### Initiatives to Tackle Human Rights Issues in the Supply Chain

The Hodogaya Chemical Group has formulated the Procurement Policy and the Procurement Guidelines and has included clauses on compliance with the Procurement Guidelines in basic contracts with partner companies. In addition to understanding the content of these clauses, we also ask partner companies to undertake initiatives to tackle human rights issues that are similar to those of the Group. The Procurement Guidelines spell out the prohibition of forced labor, prohibition of inhumane treatment, prohibition of child labor, prohibition of discrimination, proper wages, and work hours as items to be complied with for the Human Rights and Labor Standards.

In line with these policies, we do not tolerate forced labor or child labor in the supply chain.



Procurement Guidelines  
[https://www.hodogaya.co.jp/english/wp/wp-content/uploads/2018/09/procurement\\_guidelines\\_20180918.pdf](https://www.hodogaya.co.jp/english/wp/wp-content/uploads/2018/09/procurement_guidelines_20180918.pdf)



### Establishment of a System to Prevent All Forms of Harassment

The Hodogaya Chemical Group established a system to comprehensively prevent all forms of harassment that could be considered as violations of human rights. This includes workplace bullying, sexual harassment, pregnancy-related harassment, or harassment related to leave taken for childcare or other long-term nursing care. After clearly stipulating in our business policies and Work Rules that harassment is prohibited, we created harassment prevention regulations and a manual in order to implement a range of measures, including establishing a consultation desk and establishing internal human rights due diligence. During Compliance Training, personnel are regularly educated on the prevention of various types of harassment and about consultation desks, and by continuing to do so, we will ensure a work environment that respects human rights.



Inquiries from partner companies  
[https://www.hodogaya.co.jp/english/eng\\_cntct/othr\\_1/](https://www.hodogaya.co.jp/english/eng_cntct/othr_1/)



# Community and Society

• Contributing to communities



Details can be found on our website.  
<https://www.hodogaya.co.jp/english/csr/stakeholder/community/>



## Basic approach

The Hodogaya Chemical Group believes that as corporate citizens contributing to the sustainable development of the community is an important activity in carrying out its business. We are engaged in various community contributions including the nurturing of children through chemistry, environmental conservation activities in the regions where the Group’s plants are located, and the provision of tangible and intangible objects that are useful for the rich lifestyles of people.

In addition, if a disaster is designated as a major disaster by the Cabinet Office, where one of our key bases is located, and the damage to the area around the base is severe, we donate a certain percentage of the previous fiscal year’s earnings to the impacted prefecture. Most recently, in August 2023, we made a donation through the corporate version of hometown tax to contribute to the regional revitalization of Fukushima Prefecture, which we have always been indebted to.

### Passing on Irreplaceable Nature to the Future

The Koriyama Plant participates every year in the “Inawashiro Clean Action,” a cleanup volunteer activity organized by Fukushima Prefecture. Lake Inawashiro is the third largest freshwater lake in Japan and has been ranked first in water quality in Japan, making it a very beautiful lake. However, when you visit the lakeshore, you can see a lot of garbage washed up, and its beauty is being lost. When I participated, I saw a lot of everyday garbage such as snack bags and plastic bottles, and as someone involved in manufacturing, I felt a great responsibility. Through this volunteer activity, not only was I able to contribute to the environmental conservation of Lake Inawashiro, but I also felt that it was very meaningful to realize the impact that people’s lives have on the environment. In order to pass on irreplaceable nature to the future, I would like to continue participating in such activities and consider what I can contribute as an employee of a chemical company in my daily work.

(H.M., Production Technology Department, Koriyama Plant)



### Connecting Children’s Curiosity and Spirit of Inquiry to a Sustainable World

As part of its social contribution activities, Hodogaya Chemical participates in the “Summer Vacation Children’s Chemistry Experiment Show” with a theme of creating water-based pens using dyes, which is our strength, and separating colors. We work together, choosing easy-to-understand words while devising ways to effectively convey specialized content. When I see the children listening intently with excitement and their faces filled with surprise and joy when they succeed in separating the mixed colors, I feel glad that we were able to show them the interesting aspects of chemistry. I want to continue to stimulate the curiosity and spirit of inquiry of children who will lead the future and contribute to the creation of a sustainable world.

(Y.S., Tsukuba Research Laboratory, Research and Development Department)



### First Head Office Tour

In August 2023, we held our first head office tour, inviting employees’ families. With the aim of deepening understanding of Hodogaya Chemical and each person’s work by seeing the operating office and the employees working there, on the day of the event, participants toured each area of the head office floor, experienced web conferences in the large conference room, and tried the healthy lunches we usually eat.

The title on the name tags and realistic business cards prepared for each participant was “Special Supporter.” For busy employees, having their families understand their work and environment is the greatest support. All employees will continue to strive to do work that we can be proud of to our families, and by extension, to our communities and society.

(R.A., General Affairs Department)



### Supporting Career Education for Elementary School Students

As part of the Hodogaya Chemical Group’s sustainability activities, we sponsored the “Children’s Diet 2024 Summer” held in July 2024. This event involves visiting the National Diet Building, children engaging in group work on the theme of “Child-Centered Society,” and finally presenting their ideas for an ideal society to bipartisan members of the Diet.

For the families who participated from Hodogaya Chemical and the employees who served as mentors, it was also a good opportunity to gain surprises and insights from the children’s innocent honesty and the opinions they expressed.

Also, through our sponsorship, we were able to support the creation of opportunities for participating children to take on challenges related to the exciting topics of society and fairness. We will continue to contribute to society through our catchphrase “Your Dream is Our Business.”

(Sustainability Development Department)

