# SANYO CHEMICAL GROUP SUSTAINABILITY REPORT 2023

For the year ended March 31, 2023



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# **Editorial Policy**

In 2000, the Sanyo Chemical Group published its first Environmental Report. In 2008, the Environmental Report was upgraded to the CSR Report by adding information related to social responsibility. The Group has endeavored to ensure communication with stakeholders and fulfill accountability.

In FY2022, the Group abolished the CSR Report and newly published the Integrated Report. It also posted CSR DATA BOOK 2022 (a PDF version), which offered comprehensive information about ESG data, on the web as a supplementary tool.

In FY2023, the sustainability website was significantly reviewed and renewed to provide in-depth sustainability information. It was decided to archive the PDF version of the sustainability website as of the end of September as the Sustainability Report for the fiscal year.

We hope that the Sustainability Report, together with the Integrated Report, will aid understanding of our commitment to sustainability management.

# Reporting period

The period covered is mainly FY2022 (from April 2022 to March 2023) but is extended to June 2023 for those that made significant progress in terms of management, such as organizational and policy changes. The numerical data regarding ESG covers the period from April 2022 to March 2023.

# Covered Organizations

The basis of the Company's business.

SANYO CHEMICAL INDUSTRIES, LTD.

DOMESTIC SUBSIDIARIES & AFFILIATES

- · SDP Global Co., Ltd.
- · SAN NOPCO LIMITED
- · San Chemical Co., Ltd.
- · San-Apro Ltd.
- · San-Petrochemicals Co., Ltd.
- · Sanyo Chemical Logistics Co., Ltd.
- Shiohama Chemicals Warehouse Co., Ltd.

# **OVERSEAS BASES**

- Sanyo Kasei (Nantong) Co., Ltd. \*
- ullet San-Dia Polymers (Nantong) Co., Ltd.  $\ \ *$
- SANYO CHEMICAL (SHANGHAI) TRADING CO., LTD.
- · San Nopco (Shanghai) Trading Co., Ltd.
- DaXiang International Trading (Shanghai) Co., Ltd.
- · Sanyo Kasei Korea, Ltd.
- · Sanyo Chemical Manufacturing Korea, Ltd.
- San Nopco (Korea) Limited
- · Sanyo Chemical America Incorporated
- Sanyo Chemical Texas Industries, LLC \*
- Sunrise Chemical LLC
- ullet Sanyo Kasei (Thailand) Ltd.  $\ \ *$
- SDP GLOBAL (MALAYSIA) SDN. BHD. \*
- SANYO KASEI (TAIWAN) LTD.

As a general rule, the numerical data, including the environmental data, cover Sanyo Chemical Industries, Ltd., all business sites of subsidiaries and affiliates in Japan, and five overseas subsidiaries and affiliates that have production facilities (the above companies with an asterisk after the company name). Notes are indicated when the scope of aggregation is different.

# Inquiries

Corporate Social Responsibility Promotion Dept., SANYO CHEMICAL INDUSTRIES, LTD. : E-Mail <a href="mailto:csr@sanyo-chemical.group">csr@sanyo-chemical.group</a>

# Guidelines consulted

GRI "Sustainability Reporting Standards"

International Organization for Standardization "ISO 26000"

# Published

October 2023 in Japanese

Next scheduled publication: November 2024

Previous publication: October 2022 (CSR Data Book in Japanese)

# **Cover Design for this Sustainability Report**

We use the artwork of Paralym Art, which is operated by the Shougaisha Jiritsu Suishin Kikou Association.

Title: Catching the Light

Artist Name:

Oyumi

Paralym Art is an activity that promotes the social participation and economic independence of people with disabilities through artistic expression. We support the independence of artists with disabilities as an official partner of Paralym Art.





# Message from the President

Based on our mission to

"Establish a better society through our corporate activities,"

we are working to realize a sustainable society.

Akinori Higuchi Representative Director, President, and CEO



# Sustainability Management

In July 2022, the Sanyo Chemical Group established the Basic Sustainability Policy, under which we aim to achieve sustainable growth into the future by improving both economic and social value while collaborating with stakeholders based on our company mission that we have cherished since our founding.

At the core of the Group's strategy are Sustainability Management and identifying material issues. We aim for sustainable growth by placing the following two business fields at the center of our strategy: the Environment (E) aimed at contributing to environmental issues such as carbon neutrality, and the Life (L) aimed at improving the quality of life (QOL).

# Fatal accident in January 2022

A fatal accident occurred on the premises of the Nagoya Factory. We sincerely pray for the repose of the employee's soul and extend our heartfelt sympathy to the family of the deceased. We would also like to deeply apologize for the aggravation and distress we have caused to all those concerned. In response to reports from the Accident Response Committee,\* which examined the accident, we have established the Safety Promotion Department. For details of our initiatives, please refer to the "Occupational Safety and Health/Accident Prevention" section on pages 39 and 40 of this report. We are currently taking a variety of short-term and long-term measures. Although I often visit factories without prior notice, I feel that the Sanyo Chemical Group is now more conscious of safety. To prevent such an accident from happening again in the future, the management team and all employees will work together to implement recurrence prevention measures and to foster a culture of safety.

\*The Accident Response Committee consists of a total of 13 members, including factory managers and the executive chairperson of the labor union, with the Executive Officer in charge of production serving as the chairperson and the Responsible Care Division General Manager serving as the execution manager. As of August 2022, the cause of the accident had been analyzed 15 times, and recommendations for permanent measures had been presented.

# Formulation and background of our Human Rights Policy

As we promote management that adheres to our Basic Sustainability Policy, we are aware that various human rights issues are attracting worldwide attention. In order to ensure not only that we do not commit direct human rights violations, but also that we do not overlook indirect involvement, we formulated and disclosed the Human Rights Policy in March 2023.

# Our response to climate change

In December 2021, we officially supported the recommendations by the Task Force on Climate-related Financial Disclosures (TCFD).

Assessing the risks and opportunities that climate change may pose to the Group, we are proceeding with initiatives based on our scenario analysis.

Regarding the reduction of  $CO_2$  emissions, we have set a long-term goal of achieving net zero emissions by FY2050 in Scope 1 and Scope 2, while aiming to reduce  $CO_2$  emissions by FY2030 compared to FY2013. To achieve our goal, regardless of the size of their effects, we have identified as many measures as possible to reduce  $CO_2$  emissions. In FY2022, we compiled a roadmap that provides approaches on how to implement such measures, and announced it as part of the New Medium-Term Management Plan 2025. For more details, please see the "Initiatives for climate change and the TCFD recommendations" page on this website.

# Initiatives for Diversity, Equity, and Inclusion (DEI) and Health and Productivity Management

We aim to be a company where all employees can work comfortably with peace of mind while valuing their individuality. To this end, to ensure that all employees can play active roles, we promote diversity, equity, and inclusion (DEI) initiatives aimed at reforming workstyle, diversifying human resources, and creating a work environment where all human rights and diverse values are respected and accepted.

In order for individual employees to perform at a high level, it is essential that they be physically and mentally healthy. We believe that when employees work under good physical and mental condition, they and their families will be happy, thereby leading the growth of the company. Based on this belief, we promote initiatives for Health and Productivity Management. In Japan, where the birthrate is declining and the population is aging, we strongly believe that these initiatives for DEI and Health and Productivity Management are essential for us to aim for sustainable growth into the future.

# Aiming for sustainable growth

This time, we will use this website to introduce in detail to our stakeholders our efforts in the areas of environment (E), society (S), and governance (G) for the sustainable growth of the Group.

Based on our company mission, "Establish a better society through our corporate activities," we aim to achieve sustainable growth into the future. We ask for the continued understanding and support of everyone involved.

September, 2023

Representative Director, President, and CEO

A Higachia

# Message from the Director in Charge of Sustainability

# Overview of Sanyo Chemical's Sustainability Management



Director, Managing Executive Officer In charge of Sustainability, General Manage of Corporate Planning Division

Since its founding, the Sanyo Chemical Group has conducted corporate activities based on its company mission, "Establish a better society through our corporate activities." As a result, using the chemical technology that we have cultivated, we have developed a wide range of products that make society and people's lives more comfortable and convenient, and we are proud to have contributed to establishing a better society.

However, in response to the recent rise in environmental awareness, we have become more aware that a wide range of products that we offer should contribute to the pursuit of comfort and convenience, and at the same time, that we should contribute to the realization of a sustainable society through corporate activities by reducing the environmental impact throughout the supply chain.

Also, from the perspective of corporate sustainability, we have become aware that we need to change our existing decision-making structure and personnel system to more transparent ones that will help improve employee engagement.

Against this background, we established the Basic Sustainability Policy in FY2022 to show our new management stance of aiming to achieve sustainable growth into the future by improving both economic and social value while collaborating with stakeholders.

Hirovuki Susaki

# Position and relationships of the Sustainable Management Committee and the CSR **Promotion Management Committee**

We currently have the Sustainable Management Committee, which reports directly to the Board of Directors and is chaired by the President, and the CSR Promotion Management Committee, which reports directly to the Management Council and is chaired by the General Manager of the General Affairs Division.

The Sustainable Management Committee considers the process of creating economic and social value for the sustainable growth of the Group as a whole. In particular, regarding the environment, society, and governance, the committee is responsible for deliberating and deciding on policies and company-wide measures to resolve material issues (materiality) that should be addressed as a priority, and for developing these policies and measures into specific measures for related departments.

Meanwhile, the CSR Promotion Management Committee aims to link the implementation of the CSR guidelines (CSR activities) to effective activities. In particular, with regard to the achievement of carbon neutrality, which is one of our material issues, we have positioned the reduction of GHG emissions as the most important issue, and are working to create systems and mechanisms to plan and implement specific initiatives to achieve this goal. The activities of the CSR Promotion Management Committee are reported to the Sustainable Management Committee once a year.

# Recognition of the importance of the role and responsibilities that we should fulfill

When it comes to issues such as sustainability and CSR, which are important to corporate activities and for which it is difficult to produce results easily, we need to pay attention to the fact that if we place too much emphasis on "form," such as how to present our efforts to the public and how our efforts are seen by the public, our activities will often lack effectiveness and substance, as symbolized by the term "greenwashing."

Accordingly, for our sustainability and CSR initiatives, we need to be careful not to focus solely on "form." We constantly monitor our initiatives to determine whether they are effective and substantial, make course corrections if they are not so effective or substantial, and disclose their progress as appropriate.

# Formulation and background of our Human Rights Policy

As stated in the Top Message, we formulated and disclosed the Human Rights Policy in March 2023 to ensure not only that we do not commit direct human rights violations, but also that we do not overlook indirect involvement.

Please refer to the "Respect for Human Rights" appage on this website for details.

# What we are currently focusing on the most

The six items that we have identified as material issues are all important issues that we should focus on. Among them, I would like to highlight the following two items here.

The first item is to achieve carbon neutrality and improve the quality of life (QOL) through the development of new products and new businesses. Specifically, we are currently focusing most on the development of new battery materials that contribute to lighter storage batteries, and on the creation of new businesses in the fields of agriculture and diagnostics/regenerative medicine. We believe that these initiatives will truly improve both our economic and social value.

The second item is related to the reduction of GHG emissions. We have set a goal of halving GHG emissions in Scope 1 and Scope 2 by FY2030 compared to FY2013, and we are focusing most on efforts to achieve this goal. Specifically, believing that it is important to identify as many initiatives as possible that we can implement, from those with large reduction effects to those with small reduction effects, and to implement them one by one to accumulate results, we are working to create systems and mechanisms for their implementation.

# Promotion of communication with stakeholders

As stated in our Basic Sustainability Policy, collaboration with stakeholders is an essential factor for us to aim for sustainable growth into the future. Moreover, in order to collaborate with stakeholders, we need them to understand the overall picture of our Sustainability Management. "Understanding the overall picture" here refers to understanding not only what we are doing but also our ideas and basic policies behind such action. We believe that it is important for us to communicate with stakeholders so that this purpose can be attained.

This sustainability website has been updated based basically on the above idea. We sincerely hope that this idea of ours will be conveyed to all of our stakeholders, even if only to a slight degree.

# What we would like to achieve in the future

As mentioned at the beginning, we take pride in having developed a wide range of products that make society and people's lives more comfortable and convenient, and in having contributed to establishing a better society based on our company mission since our founding. This pride comes from the following. Although we are a small business, as a manufacturer of performance chemicals with unique functions, we have boasted a high profit margin while supporting the Japan' manufacturing industry behind the scenes, and have shone as a highly profitable company that is known to those in the know.

We hope that our corporate activities will be consistent with societal sustainability, that we will become a company that can continue to shine, and that this will be understood by our stakeholders

# Request for your understanding and cooperation

We have contributed to and will continue to contribute to the realization of a sustainable society through a wide range of products that we create using the unique and unparalleled technology that we have cultivated. We believe that this will in turn ensure our sustainability. We would like to convey this belief to all of our stakeholders and ask for their understanding. We would be more than happy if you could take a closer look at this updated sustainability website and deepen your understanding of the Group.

We appreciate your continued understanding and support for us.

Director, Managing Executive Officer In charge of Sustainability, General Manager of Corporate Planning Division

Home.

# **Sustainability Management**

All policies and initiatives related to sustainability of the Sanyo Chemical Group originate from its company mission, "Establish a better society through our corporate activities," which has been valued since its founding.

This company mission represents the spirit of realizing sustainable harmony between society and the company through corporate activities. It serves as the foundation of all our activities.

# Basic Policy

In FY2022, the Basic Policy on Sustainability was established to define the future vision of our corporate activities, which is based on the company mission that has been implemented since our founding. This is the foundation of the sustainability management strategy of our Group. We believe that the enhancement of both economic and social value in close cooperation with all stakeholders leads to the sustainable growth of the company.

# Basic Policy on Sustainability

Our mission has been to establish a better society through our corporate activities since our foundation. Sanyo Chemical Group aims for sustainable growth in the future by enhancing both economic and social values in close cooperation with all stakeholders.

# Metrics and targets

To establish a basis for more practical sustainability management, we identified material issues that have a significant impact on the creation of our medium- to long-term value. We will cope with issues in the four fields of the environment, life, society, and governance, by setting specific metrics and targets.

# Promotion system

Our Group studies appropriate response to issues that may pose management risks, and makes decisions to take action under the supervision of the Board of Directors.

To fulfill the company mission, we established the CSR Guidelines, which comprehensively compile our Group's response to social issues. The CSR Committee, a body under the direct control of the Board of Directors, practiced CSR management to formulate policies, check the status of implementation, and give instructions. In FY2021, the Sustainable Management Committee was established (chairperson: President and CEO) as a body under the direct control of the Board of Directors with sustainability management positioned as a higher-order concept of CSR (Corporate Social Responsibility).

The Sustainable Management Committee is responsible for establishing policies on material issues, giving instructions to take action, and reviewing the progress and results to enhance both economic and social value.

Meanwhile, the former CSR Committee was placed under the direct control of the Management Council and renamed the "CSR Promotion Management Committee." The committee formulates plans for implementing the CSR Guidelines (CSR activities), and monitors the status of implementation in order to conduct effective activities.



# Sustainable Management Committee and CSR Promotion Management Committee

The Sustainable Management Committee considers the process of creating economic and social value for the sustainable growth of the Group as a whole. In particular, regarding the environment, society, and governance, the committee is responsible for deliberating and deciding on policies and corporate measures to resolve material issues that should be prioritized, and for developing these policies and measures into measures for related departments.

Meanwhile, the CSR Promotion Management Committee aims to link the implementation of the CSR Guidelines (CSR activities) with effective activities. In particular, with regard to the achievement of carbon neutrality, which is one of our material issues, we have positioned the reduction of CO<sub>2</sub> emissions as the most important issue, and are working to create systems and mechanisms to plan and implement specific initiatives to achieve this goal. The activities of the CSR Promotion Management Committee are reported to the Sustainable Management Committee once a year.

# [Sustainable Management Committee]

Chairman	President / CEO
Committee members	Full-time Director, person appointed by chairman
Observer	Full-time Audit & Supervisory Board member
Secretariat	General Manager of Corporate Planning Division, Manager of Corporate Planning Division

# [Purpose]

To enhance both the economic value and corporate value while coordinating with stakeholders in order for continual growth

# [Holding frequency]

Twice a year or more

# [Role]

- (1)To discuss the process of creating economic value and corporate value for the purpose of sustainable group company growth
- (2)To examine and determine policies for solutions and company-wide measures for Materiality and develop them into measures for the relevant departments
- (3)To review the plan, progress, and results concerning the above measures and examine and determine improvement, correction, and other results
- (4)To serve as the dissemination base of information concerning our sustainability management in order to proactively communicate with stakeholders, as well as global organizations, such as the United Nations

# [CSR Promotion Management Committee]

Chairman	General Affairs Division General Manager
Committee members	General Manager and Deputy General Manager of each Sales, Research, Production, and Administrative Division Nominee of the Chairman
Observer	Full-time Audit & Supervisory Board member
Secretariat	Corporate Social Responsibility Promotion Department Senior Manager

### [Purpose]

Meeting social needs and expectations and fulfilling the company mission to help create a sustainable society

### [Holding frequency]

Twice a year or more

### [Role]

- (1)Creating systems and mechanisms to plan and implement specific initiatives to realize carbon neutrality
- (2)Monitoring the status of promotion and proposing improvement measures
- (3)Monitoring the planning and implementation of promotion plans for each fiscal year by the person or department responsible for promotion, from the viewpoint of ensuring the effectiveness of CSR activities, and proposing improvement measures
- (4)Constantly reviewing the basic policies (e.g., CSR Guidelines) to meet social needs and expectations

# CSR Guidelines

The initiatives of our Group to deal with social issues were comprehensively compiled as the CSR Guidelines, which comprise nine items.

Items of the CSR Guidelines	Details
Safety and accident prevention	We will give top priority to safety and accident prevention in all our business activities. We will strive for the continuance of accident-free and injury-free operation, and contribute to social safety. At the same time, we will protect the safety and health of everyone involved in our operations, and strive to create a comfortable work environment.
2. Compliance	All directors and employees of our Group make sure to take action with the questions in "Advice on Compliance" in mind, including "Can you declare openly that your actions have always been legal, just, and fair?"
Reduction of environmental impact	We work voluntarily and steadily on effective measures to reduce greenhouse gas emissions and the generation of plastic and industrial waste. Notably, to reduce greenhouse gas emissions, we actively promote energy conservation and the shift to renewable energy.
Product development	We aim to develop products that are useful in society and that can "realize a sustainable global environment" and "improve convenience and comfort," by combining the strengths that we have acquired with new strengths that we will acquire and external expertise.
5. Sustainable purchasing	We have our Sustainable Purchasing Policy in place and steadily fulfill the policy to contribute to "realizing a sustainable global environment," and avoid complicity in human rights violations throughout the supply chain, including suppliers.
Product safety and quality     reliability	We provide accurate product information to external parties to ensure safety throughout the product lifecycle, from development and manufacture to use and disposal of products. To improve the quality reliability of products, we ensure rigorous quality control in-house.
7. DEI and human resource development	We respect the diversity, personalities, and individuality of our employees, and ensure a safe and comfortable workplace environment. We develop human resources who can achieve self-actualization by demonstrating self-initiative and creativity in addition to realizing well-being, abundance, and mental and physical health. We endeavor to eliminate harassment and respect human rights in the workplace.
8. Dialogue with stakeholders	We disclose financial and non-financial information of our Group in an active and fair manner and promote dialogue so that our stakeholders, including customers, shareholders, investors, suppliers, local communities, local governments, mass media, and employees can correctly understand the corporate value of our Group, and so that we can understand the expectations and evaluations of our Group from the viewpoint of our stakeholders and reflect them in our corporate activities.
9. Social contribution activities	We maintain our voluntary activities to contribute to educational and research institutions, medical institutions, local communities, NPOs, and NGOs, with the aim of promoting science and technology, art, culture, education, and welfare.

# Supporting initiatives

Initiative	Subjects/contents	Sponsoring organizations
UN Global Compact	Human Rights, Labor, Environment and Anti- Corruption	United Nations
Responsible Care Global Charter	Responsible Care	ICCA (International Council of Chemical Associations)
TCFD (Task Force on Climate-related Financial Disclosures)	Climate change	Task Force on Climate-related Financial Disclosure
Challenge Zero by Keidanren	Climate change	Keidanren (Japan Business Federation)
GX League	Green transformation	Ministry of Economy, Trade and Industry
Keidanren Initiative for Biodiversity Conservation	Biodiversity	Keidanren (Japan Business Federation)
Ikuboss Corporate Alliance	Work style reform	NPO Corporation Fathering Japan
"Declaration on Action" by a group of male leaders who accelerate "A Society in which Women Shine"	Promotion of women's advancement	Cabinet Office
The "Challenge to 30% by 2030" initiative of the Japan Business Federation (Keidanren) aims to achieve a ratio of 30% or more female executives by 2030	Promotion of women's advancement	Keidanren (Japan Business Federation)
Business for Marriage Equality	LGBTQ	Public Interest Incorporated Association Marriage For All Japan (MFAJ) — Freedom of marriage for all NPO Legal Network for LGBT and Ally Lawyers, Certified NPO Rainbow Diversity

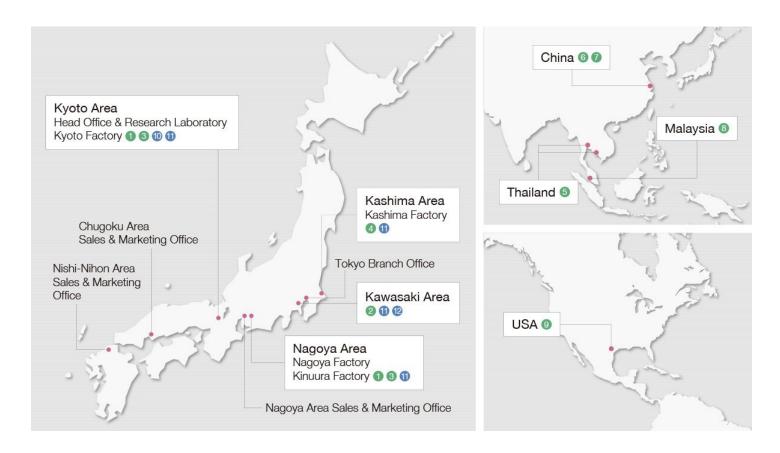
# Major participating organizations

Organization name	Position, qualification, etc.
Keidanren (Japan Business Federation)	Officer
Japan Chemical Industry Association	RC committee member
Japan Surfactant Industry Association	Director
Japan Urethane Raw Materials Association	Director
Kyoto Model Forest Association	Director
Roundtable on Sustainable Palm Oil (RSPO)	RSPO member

# ISO certification

Sanyo Chemical and its domestic subsidiaries and affiliates obtained certification for the environmental management system (ISO14001) between 1999 and 2001, and then we have maintained this certification for approximately 20 years. However, we discontinued the certifications for domestic facilities in FY2020 based on our judgment that we are able to adequately operate the system on our own. The certifications of overseas facilities will continue.

As a pharmaceutical-related quality control management system, the Biotechnology & Medical Division acquired ISO 13485 certification for medical devices in 2019 and for invitro diagnostic medicine.



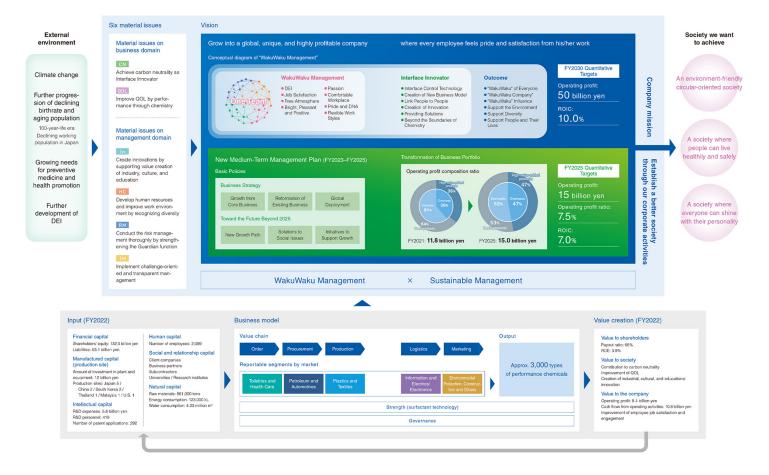
			Year	ISO14001		ISO9001	
	Location	Facility	established (in operation)	Year acquired	Certification authority	Year acquired	Certification authority
	_	Sanyo Chemical Kashima Factory	1977	_	_	1997	JCQA
	_	Sanyo Chemical Kyoto Factory	1949	_	_	1999	JCQA
	_	Sanyo Chemical Nagoya Factory	1969	_	_	1998	JCQA
ase	_	Sanyo Chemical Kinuura Factory	2010	_	_	2010	JCQA
Production Base	1)	SDP Global Co., Ltd.	2001	_	_	2000	JCQA
Produ	2	San Chemical Co., Ltd.	1982	_	_	2000	JCQA
	3	SAN NOPCO LIMITED	1966	_	_	2000	JCQA
	4	San-Petrochemicals Co., Ltd.	1977	_	_	_	_
	(5)	Sanyo Kasei (Thailand) Ltd.	1997	2009	TICA/J-VAC	2004	TICA/J-VAC
	6	Sanyo Kasei (Nantong) Co., Ltd.	2003	2012	TUV NORD	2006	TUV NORD

		Year	ISO14001		ISO9001		
	Location	Facility	established (in operation)	Year acquired	Certification authority	Year acquired	Certification authority
n Base	7	San-Dia Polymers (Nantong) Co., Ltd.	2003	2013	CQM	2007	DET NORSKE VERITAS
Production Base	8	SDP GLOBAL (MALAYSIA) SDN. BHD.	2015	_	_	_	_
Ē	9	Sanyo Chemical Texas Industries, LLC	2005	_	_	_	_
Base	10	San-Apro Ltd.	1966	_	_	2003	JCQA
duction	(1)	Sanyo Chemical Logistics Co.,Ltd.	2020	_	_	_	_
Non-production	(12)	Shiohama Chemicals Warehouse Co.,Ltd.	1983	_	_	_	_

Note: The four Sanyo Chemical factories and domestic affiliates/subsidiaries ① through ④ will discontinued their ISO 14001 certification in FY2020. ④San-Petrochemicals Co., Ltd also discontinued its ISO 9001 certification in FY2020.

# **Sanyo Chemical Group Value Creation Process**

# Sanyo Chemical Group Value Creation Process



# **Stakeholder and Communication**

The business operated by the Sanyo Chemical Group is founded on relationships with various stakeholders, including customers, suppliers, shareholders, investors, local communities, and employees.

We believe that our efforts to give consideration to the interest and needs of these stakeholders, gain trust and build cooperative relationships through communication, and meet their expectations will lead to sustainability of society and our company.

# Policy

We endeavor to ensure that our stakeholders, including customers, shareholders, investors, suppliers, local communities, local governments, mass media, and employees can correctly understand the corporate value of our Group. We proactively disclose financial and non-financial information of our group in a fair manner, and promote dialogue so that we can understand the expectations and evaluations of our Group from the viewpoint of our stakeholders and reflect them in our corporate activities.

We also promote communication among Group employees with the aim of building a sense of unity within the Group.

### Stakeholder communication

Stakeholder communication			
Stakeholder	Relationship with the Sanyo Chemical Group	Communication policy and attitude	Main communication opportunities
Customers	Business partners who promote environmental and CSR management together with the Sanyo Chemical Group through the sale and purchase of products and services (e.g., green procurement, CSR procurement).	We aim to improve customer satisfaction by offering safe and secure products that meet the needs of customers, and by responding promptly, appropriately, and wholeheartedly to their opinions and requests.	Direct communication through sales activities including exhibition sales     Inquiries by phone or via the website     Responding to customers' green procurement, etc.     Dissemination of information on initiatives for new products, new technologies, and new business fields     Communication of corporate information and ESG information
Suppliers		We work on sustainable procurement with cooperation from suppliers, and maintain long-term trust based on fair and impartial transactions.	Direct communication through procurement activities     CSR questionnaires     Meetings to exchange opinions with suppliers
Shareholders and investors	Entities that provide funds and are engaged in management in some way or another. Our business performance directly results in their profits or losses. Thus, they are highly interested not only in the financial and non-financial information of companies but also in ESG evaluation results and ratings.	We disclose information about the Group in a timely, appropriate, and fair manner to help shareholders and investors correctly understand and recognize the corporate value of the Group.	General meetings of shareholders     Seminars for institutional investors and analysts and response to interviews     Seminars for individual investors     Research laboratory tours     Business reports     Website     Shareholder questionnaires

Stakeholder	Relationship with the Sanyo Chemical Group	Communication policy and attitude	Main communication opportunities
Local communities	Local communities are directly affected by pollution from factories, pollution prevention measures, and injuries and accidents. Their interest is from the viewpoint of preservation of the living environment and the impact on health. They expect companies to work on such initiatives as accident prevention and social contribution activities.	We deepen communication with local communities to help people understand the activities of the Sanyo Chemical Group and ensure harmony with such communities.	<ul> <li>Social contribution activities, such as sponsoring events and supporting schools</li> <li>Cooperation for disaster prevention and traffic safety</li> <li>Contribution</li> </ul>
Employees	Constituent members of a company Because they are employed by companies, they are significantly affected by corporate decisions and management. They take the initiative to promote CSR activities systematically.	We aim to create a workplace where every employee feels pride and satisfaction in his/her work.	Various education and training programs, talks with the management, interviews Personnel systems, such as workstyles and health management In-house newsletters and Intranet Whistleblowing contact point (hotline)

Click here for communication results

# **Sanyo Chemical Group Material Issues**

# Approach to materiality identification

The difinition of material issues; important issues that have a significant impact on the medium-to-long-term value creation of Sanyo Chamical Group

The Sanyo Chemical Group defines materiality as "important issues that have a significant impact on the medium- to long-term value creation of the Sanyo Chemical Group." We believe that it is necessary to identify materiality in order to continue to create value with the intention of satisfying all stakeholders defined by the Group. To create value for all stakeholders, we have identified materiality by following the process 1 to 4 below, considering that identifying and prioritizing medium- to long-term themes is the shortest route to value creation.

# Process 1. Identification of issues

Issues have been selected with reference to various guidelines, such as the SASB Standards for the chemical industry, the GRI Guidelines, the Sustainable Development Goals (SDGs), and the World Economic Forum (WEF) core metrics, as well as communication with stakeholders and a questionnaire on our company mission for all employees and officers.

# Process 2. Prioritization of the issues and creation of the materiality matrix

The identified issues have been prioritized through dialogue with major shareholders and employees about their impacts on our corporate identity and finance, opportunities to create innovation, and the Sanyo Chemical Group's uniqueness. The issues were then plotted on a matrix with management and business perspectives placed on the horizontal axis and expectations and contributions to resolving social and environmental issues placed on the vertical axis.

# Process 3. Identification of material issues

With a focus on the upper right area of the materiality matrix, six material issues have been identified, with issues related to the Environment field and the Life field as material issues on the business domain and issues related to the Society field and the Governance field as material issues on the management domain. (The Life field has been separated from the conventional ESG portfolio and categorized as a symbol of expectations and contributions to the improvement of QOL.)

# Process 4. Validation of the material issues and board approval

The material issues have been validated through deliberations at the Sustainable Management Committee, which is chaired by the President and CEO, and have been approved by the Board of Directors. The issues will be reviewed according to changes in the business environment that may occur in the future.

# Sanyo Chemical Group Material Issues

We have identified six material issues based on our company mission, "Establish a better society through our corporate activities." We address these issues while realizing "Inspire WakuWaku feeling from all the stakeholders," "Co-create environmental, social and economic value with the stakeholders," and "Facilitate every employee's value creation."

# Material issues on business domain

Classification	Material Issues
invironment support the environment sy creating an environment riendly circular-oriented ociety Material Issues	Achieve carbon neutrality as Interface Innovator  13 acres 13 acres 14 Acres 15 acre
ife upport people and their ves by creating a society rhere people can live ealthy and safely	Improve QOL by Performance Through Chemistry  3 MARHAGEMENT

# Material issues on management domain

Classification	Material Issues
Society Support diversity by creating a society	Create innovations by supporting value creation of industry, culture and education.
where everyone can shine with their personality	Develop human resources and improve work environment by recognizing diversity
Governance Retain social trust with	Conduct the risk management thoroughly by strengthening the Guardian function
transparent management	Implement challenge-oriented and transparent management

# **New Medium-Term Management Plan 2025**

The Sanyo Chemical Group implemented the "WakuWaku Explosion 2030" management policy in March 2022. Based on the company mission since our founding, "Establish a better society through our corporate activities," each and every employee has been working to create values toward becoming an exciting (WakuWaku) company, where everyone can shine, with the three pillars of "Contribution to carbon neutrality (CN)," "Improvement of quality of life (QOL)," and "Improvement of job satisfaction," so that we can contribute to creating a sustainable society.

On the other hand, in FY2022, negative factors such as lockdowns in China due to novel coronavirus infections (COVID-19), soaring energy prices due to the turmoil in Ukraine, automobile production cutbacks due to semiconductor shortages, sharp depreciation of the yen, and other global environmental changes have had significant impacts on our business operations.

Under these circumstances, the Sanyo Chemical Group formulated the New Medium-Term Management Plan, a three-year plan which defined the growth path of our Group and specific measures to realize the vision in the Management Policy. With its chemical capabilities to accelerate the creation of new value, the Sanyo Chemical Group will make concerted efforts to enhance value throughout the entire supply chain and generate innovation beyond the boundaries of chemistry.

# New Medium-Term Management Plan 2025 Basic Policies

# Business Strategy (FY2023-FY2025)

### 1. Growth from Core Business

We will position five focus product groups that contribute to carbon neutrality (CN) and improvement of QOL (quality of life) as "high-value-added products categories," and accelerate research and development as well as capital investment in these product categories in order to generate earnings.

### 2. Reformation of Existing Business

We will improve profitability by transforming the business process throughout the supply chain and implementing structural reforms in the polyurethane and superabsorbent polymer (SAP) businesses.

### 3. Global Deployment

We will expand facilities in overseas plants and strengthen the functions of overseas sales offices.

# Toward the Future Beyond 2025

# 1. New Growth Path

We will focus our resources on growing areas where we can contribute to carbon neutrality and improvement of QOL. We will reinforce innovative actions including opportunities for strategic alliances and M&A.

# 2. Solutions to Social Issues

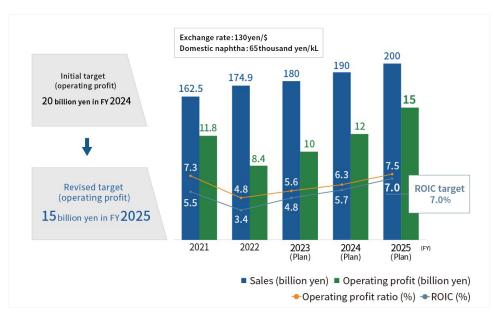
We aim to pursue significant reduction of CO<sub>2</sub> emissions through Carbon dioxide Capture and Utilization (CCU). We will proactively address human rights issues in the supply chain.

# 3. Initiatives to Support Growth

We will promote human resources development and improvement of the work environment. We will manage with safety and quality as our top priority and promote transparent management.

# Revision of earnings forecast

Reflecting the external environment and the progress of internal transformation, we have revised the target of "20 billion yen in operating profit in FY2024" set forth in the management policy.



# **New Growth Path**

# Proactive new business development

The Sanyo Chemical Group has set "Achieve carbon neutrality as Interface Innovator" and "Improve QOL by performance through chemistry" as material issues on business domain. During the period of the New Medium-Term Management Plan 2025, we will focus on developing new businesses and products that contribute to carbon neutrality and improvement of QOL, with the aim of creating next-generation businesses that will open up a new growth path toward 2030. We will aim for the commercialization of new businesses and products at an early stage by continuing to inject resources and reinforcing innovative actions, including opportunities for strategic alliances and M&A.

# Carbon recycling (CCU)

We have accumulated know-how in the design and manufacture of ionic liquids over many years through our main business of electrolytes for aluminum electrolytic capacitors. Currently, we are considering how to apply our ionic liquid technology to the systems that can efficiently capture and utilize  ${\rm CO_2}$  (CCU: Carbon dioxide Capture and Utilization). CCU is expected to play a key role in sustaining the use of fossil fuels and the current industrial processes while controlling greenhouse gas emissions, which contribute to climate change. It is also expected to achieve negative emissions of  ${\rm CO_2}$  when combined with renewable energy.

We aim to apply our ionic liquid technology to the separation of  ${\rm CO_2}$  from the air, which is attracting attention as a negative emission technology, as well as from flue gas through consortium activities involving engineering partners, municipalities, and other chemical manufacturers, without being bound by the existing business framework.

# Market potential for CO2 separation and capture 12 10 費用内訳 兆円/年 8 分離回収世界市場 6 2 その他 燃料費 O 2020 2030 2040 2050 (Source) Ministry of Economy, Trade and Industry "What is CCUS Technology?" (in Japanese)

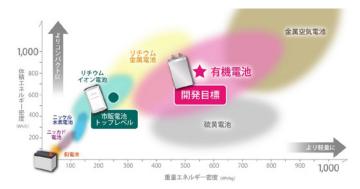
# Energy (Organic cathode active materials)

As expectations for next-generation devices, such as drones and HAPS (High Altitude Platform Station), a stratospheric communication platform, are increasing, it has become necessary to develop light, safe next-generation batteries with high weight energy density in order to dramatically improve the performance of these devices. Also, from the perspective of sustainability, high-performance batteries are indispensable for promoting electrification and storing renewable energy, which are measures to achieve carbon neutrality. Current lithium-ion batteries are said to be close to the upper limit of their performance, and we are promoting material development with a focus on organic cathode secondary batteries as a type of next-generation battery.

Organic cathode secondary batteries are characterized by the replacement of current inorganic materials containing rare metals, used as cathode active materials, with organic materials, and are expected to significantly improve weight energy density. They also help avoid the shortages and soaring prices of rare metal resources and risks to their stable supply. We will develop and manufacture the key organic materials, aiming to achieve early results in cooperation with partner companies.

# Image of an organic cathode secondary battery

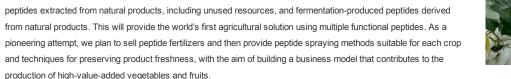




(Source) SoftBank Corp. (in Japanese)

# Agriculture (Peptide materials)

In modern agriculture, food crises due to labor shortages and abnormal weather, as well as the environmental impact caused by pesticides and chemical fertilizers, have become major social issues. Peptide agriculture, which we aim to put into practical use in FY2023, is a technology that maximizes the innate functions of plants by giving peptides, which are biostimulants,\* to vegetables and fruit trees. Peptides are expected to improve in quality and yield through the mitigation of their damage due to disease and climate change, and to help reduce the use of pesticides and chemical fertilizers. By making full use of our fundamental technologies, such as interface control technology, we can produce peptides extracted from natural products, including unused resources, and fermentation-produced peptides derived from natural products. This will provide the world's first agricultural solution using multiple functional peptides. As a pioneering attempt, we plan to sell peptide fertilizers and then provide peptide spraying methods suitable for each crop and techniques for preserving product freshness, with the aim of building a business model that contributes to the production of high-value-added vegetables and fruits.



\* Biostimulants:

This is a new technology that reduces plant damage caused by climate and soil conditions by controlling abiotic stresses (high and low temperatures, physical damage, etc.) to plants in order to provide healthy plants. Its global market size is expected to be three billion dollars, with an average annual growth rate of more than 12%



# Diagnostic and regenerative medical care (Extracellular vesicles: EVs)

In recent years, body fluid components, called "exosome-containing extracellular vesicles," have been attracting considerable attention in medical fields that are directly linked to improving QOL, such as disease discovery and regenerative medicine. It is expected that the research market alone will grow to over 100 billion yen by 2030. Jointly with Tokushima University, we have developed EXORPTION®, a method for collecting extracellular vesicles from various body fluids with high efficiency, high yield, and a high degree of purification, by applying the body fluid component collection technology and know-how that we have cultivated in the in vitro diagnostic reagent business. By disseminating this technology, we aim to support new diagnostic and therapeutic research using extracellular vesicles, and to implement diagnostic agents to which this technology is applied in clinical settings.



# In vitro diagnostic medical products (Accuraseed)

Immunoassay-based in vitro diagnostic reagents are used for the purpose of diagnosing diseases, and their domestic market size reached approximately 250 billion yen in 2021. We have developed reagents dedicated to Accuraseed® \* that use our unique magnetic particles, Magrapid. These are in vitro diagnostic reagents that enable rapid immunoassay in just 10 minutes. Since these agents dedicated to Accuraseed® were launched jointly with FUJIFILM Wako Pure Chemical Corporation in November 2015, their lineup has expanded to include 30 inspection items, including thyroid diseases and infectious diseases. This helps meet the need for rapid diagnosis in clinical settings. In June 2022, Sanyo Chemical Industries, Ltd. and FUJIFILM Corporation established FUJIFILM Sanyo Chemical Healthcare Corporation to consolidate the production systems for the reagents dedicated to Accuraseed® of both companies. We will strengthen our production base to achieve high productivity and respond to the growing demand for in vitro diagnostic reagents.

\* Accuraseed®

Fully automated chemiluminescent enzyme immunoassay system manufactured by FUJIFILM Wako Pure Chemical Corporation



# Wound healing material and meniscus repair (Silk-elastin)

As Japan's aging society progresses, an increasing number of people are suffering from diabetic skin ulcers, pressure ulcers, knee osteoarthritis, and other diseases. In particular, many patients whose natural healing powers have declined due to aging are finding it increasingly difficult to recover with conventional treatments. It is said that there are 150,000 patients with refractory skin ulcers and eight million patients with knee osteoarthritis in Japan. We use the functional protein "silk-elastin," which is under development at the company, for such patients to enhance their natural healing powers, thereby trying to heal their wounds (tissue regeneration) that could not be healed by conventional treatments. Since 2016, we have conducted clinical trials on skin defect regeneration and meniscus repair to confirm the efficacy and safety of silk-elastin. We plan to implement it in society by 2024 as a regenerative medical device "wound healing material" intended to regenerate refractory skin defects. We also plan to implement it in society by 2026 as a meniscus repair for patients with knee osteoarthritis. We aim to extend healthy life expectancy through silk-elastin to contribute to improving the QOL of the elderly.



# Digital olfaction (Electric nose)

Reproduction of the five human senses is being actively studied in order to cope with the recent IoT trends and realize next-generation communication using the five senses. In particular, it is difficult to reproduce the olfactory sense, and products and services that visualize odors and aromas have yet to be fully and practically implemented in society. Digital olfactory technology, which digitally identifies and quantifies specific odors, is expected to be applied in the medical field and the life-related fields including food and beverages, and its market size is expected to reach \$3.12 trillion by 2026.

The Group provides 3,000 types of functional chemicals. By using the technology and knowledge that we have acquired in this field, we have developed a highly practical electric nose that can be easily customized for various odors.

In addition to this feature, our electric nose is characterized by the ability to quickly and continuously identify complex mixed odors, which is difficult for commercially available gas sensors.

Toward the commercialization of electric noses, we are working on initiatives that use electric noses to contribute to the improvement of QOL. For instance, we consider the visualization of sanitary environment conditions to improve the environmental and enhance work efficiency as well as the visualization of the aroma of foods and luxury items. We aim for the early commercialization of electric noses to create new value through the visualization of odors.



# **Growth from Core Business**

Positioning chemicals for special fibers, chemicals for special electronic parts, lubricant additives, permanent antistatic agents, and medical and pharmaceutical products, which contribute to carbon neutrality and the improvement of QOL, as five focus product groups, we plan to make capital investment of nine billion yen from FY2021 to FY2025, which includes the period of the Medium-Term Management Plan. We expect an incremental operating profit of 2.5 billion yen from this capital investment, and aim to achieve an operating profit of 7.9 billion yen by FY2025 from the five focus product groups. We will also consider additional investments in order to further expand our business.

# Results and targets of sales / operating profit / operating profit ratio for five focus product groups



(Note) Research and development expenses (approx. two billion yen per year) related to new businesses are recorded as company-wide expenses and are not included in the above operating profit.

# Accelerate capital investment in high-value-added products

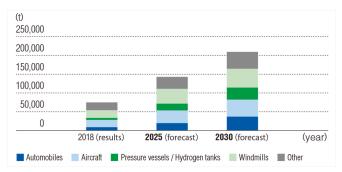


(Note) (Start year / Investment amount [billion yen])

# Chemicals for special fibers

These products contribute to carbon neutrality. Our chemicals for special fibers are mainly used for carbon fibers. Blades of windmills, which are one of the main uses of carbon fibers (windmills, automobiles, aircraft, and pressure vessels), are seeing a rapid increase in demand due to the spread of renewable energy. Demand for carbon fibers is expected to expand as wind power generation increases, and blades become larger. In addition, the development of applications in new fields is progressing. In order to respond to growing demand for carbon fibers, we have decided to increase the production capacity for sizing agents for carbon fibers. In addition to the existing facilities at the Nagoya and Kyoto Factories, we plan to establish a new production facility at the Kashima Factory. The facility is scheduled to start operation in May 2024, increasing production capacity by approximately 50%. We will seek to secure a stable supply of sizing agents for carbon fibers in order to respond to the growing global demand. We would also like to play a major role not only in the utilization of renewable energy and the development of its industry, but also in addressing climate change. We will continue to consider further capacity expansion in order to meet the growing demand for carbon fibers.

# Global market forecast for carbon fiber reinforced plastics by application



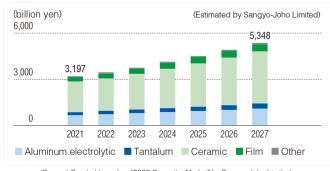
(Source) Created based on "Global carbon fiber reinforced plastics (CFRP/CFRTP) materials and technology report: Market size, applications, share, trends 2020" by FUJI KEIZAI CO., LTD.



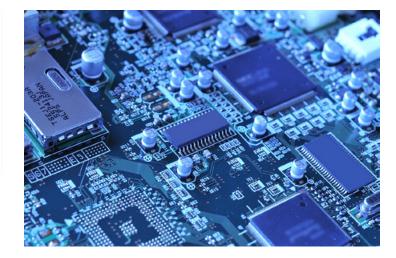
# Chemicals for special electronic parts

These products contribute to carbon neutrality. Our chemicals for special electronic parts include electrolytes for aluminum electrolytic capacitors, which are mainly used in electronic circuits. Electrolytes for aluminum electrolytic capacitors are used in a wide range of applications, from general electronic devices to important electronic parts that support social infrastructure. Our electrolytes for aluminum electrolytic capacitors exhibit high electrical conductivity over a wide temperature range and are excellent in long-term stability at high temperatures. As industry-standard long-run products, they are used in capacitors that require higher reliability, such as automobile control units. Currently in the automobile industry, an increasing number of automobile electrical parts, such as driving support system circuits, are used due to the electrification of vehicles such as electric vehicles (EVs). In order to ensure a stable supply that meets this growing demand, we have decided to increase our production capacity. The current production capacity will be increased by 60% by March 2025.

### Forecast for global production of capacitors



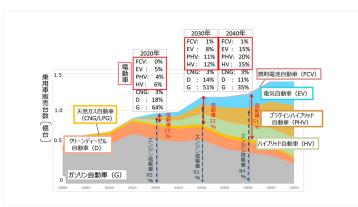
(Source) Created based on "2022 Capacitor Market" by Sangvo-Joho Limited.



# Lubricant additives

These products contribute to carbon neutrality. In the automobile industry, in order to reduce CO<sub>2</sub> emissions, there is a growing need for fuel-efficient gasoline vehicles, along with the trend toward electrification. Since our lubricant additives are highly effective in improving fuel efficiency, they are used in the engine oils of gasoline vehicles, hybrid vehicles (HVs), and plugin hybrid vehicles (PHVs). It is assumed that their replacement demand at the time of after-sales maintenance will increase. To meet the growing global demand for these products, we have established a production site in South Korea, following those in Japan and China, which has already started operation. We are also working on the development of lubricant additives optimized for EVs in order to contribute to improving the fuel efficiency of all vehicles.

# Forecast for sales of gasoline vehicles, hybrid vehicles, and plug-in hybrid vehicles



(Source) Ministry of Economy, Trade and Industry, "Technology Diffusion Scenario Presented by IEA (a case where an average temperature rise of 2°C is achieved)" (2021) (in Japanese)

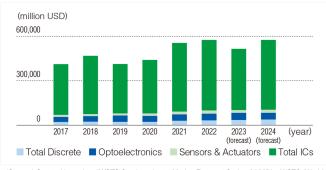
https://www.enecho.meti.go.jp/about/special/johoteikyo/gosei\_nenryo.html



# Permanent antistatic agents

These products contribute to the improvement of QOL. Permanent antistatic agents are used in a wide range of applications to prevent various problems caused by static electricity (destruction of electronic circuits, malfunction of electrical appliances, adhesion of dust) and accidents (fires, explosions). In recent years, in addition to an increase in demand centered on semiconductor carrier trays and the packaging of electronic devices and precision parts, explosion-proof and other applications are expanding. In order to meet future demand expansion, we have launched a new production site at the Rayong factory of Sanyo Kasei (Thailand) Ltd., which has been in operation since July 2022. Since permanent antistatic agents are our unique, high-functionality products, we will strive to open up new markets while taking into account the possibility of further expanding the production facility depending on our future demand. We will also promote the development of new materials.

### Semiconductor market forecast by product



(Source) Created based on "WSTS Semiconductor Market Forecast Spring 2023" by WSTS (World Semiconductor Trade Statistics) Japan Council



# Medical and pharmaceutical products

These products contribute to the improvement of QOL and mainly include polyethylene glycol for pharmaceuticals and non-absorbable topical hemostatic materials for the central circulatory system.

Polyethylene glycol for pharmaceuticals is used as a pharmaceutical additive in a base material for ointment and tablet coating agents, and is used as an active pharmaceutical ingredient for colon cleaning agent. It is also used in various applications such as tissue regeneration and cell culture. To meet demand expansion due to increased sales, which is caused by the development of generic drugs, we plan to expand the facilities at the Nagoya Factory. These facilities are scheduled to start operation in May 2024, with the production capacity expected to increase by approximately 20%.

Non-absorbable topical hemostatic materials for the central circulatory system are surgical hemostatic agents made of polyurethane materials that react with water to form a flexible film. Since their launch in 2014, they have been used in many cardiovascular surgeries in Japan as hemostatic materials used in the anastomosis of the thoracic aorta and the branch of the aortic arch for artificial blood vessel replacement. In March 2020, the scope of their application was expanded to include the anastomosis of whole blood vessels except cerebral vessels. In July 2019, we obtained the CE marking for products for overseas shipping, and started their sales in the European market. Using this as a foothold, we are accelerating our overseas expansion, including entering the Hong Kong market in July 2021 and the Taiwanese market in December 2021. We will ensure its stable supply to satisfy growing demand by increasing our production capacity to approximately five times (scheduled to start operation in February 2024).



# **Environmental Performance Chemicals**

# Products that contribute to reduction of environmental impact

By offering performance chemical products that meet environmental needs, we are contributing to the realization of a sustainable society.

Environmental needs	Function/performance	Sanyo Chemical product line		
	Increase of energy efficiency	Lubricant additives for fuel consumption improvement Fuel additives for fuel consumption improvement	ACLUBE products SANFRIC products	
	Reduction of energy consumption	Low-temperature flexible toner resins	HIMER products	
	Weight reduction, film thinning	Polyols for high-strength rigid polyurethane foams Superabsorbent polymers for thin-paper diapers Thermoplastic polyurethane beads for the thin interior parts of automobiles Polyurethane solutions for moisture-permeable waterproof fabrics	EXCELFLOW products SANWET SG products MELTEX LF products SANPRENE H-600	
Energy saving, prevention of global warming, resource	High durability, long service life	Polyols for high-resilient flexible polyurethane foams Electrolytes for high-durable electrolytic capacitors Permanent antistatic agents	SHARPFLOW products SANELEK products PERESTAT, PELECTRON products	
savings	Water saving, power saving	Concentrated liquid detergent base	PUREMEEL EP-300S MICELAND SCD-100	
	Contribution to the expansion of renewable energy use	Sizing agents for carbon fibers (for wind turbine blades)	CHEMITYLEN products	
	Renewable biomass feedstock use (Carbon neutrality)	RSPO certified products  ISCC certified product  Biomass mark certified products	Certified ECONOL, BEAULIGHT, and LEBON products Certified PEG, polyethylene glycol Biomass degree: 10%, 25% of superabsorbent polymers	
Environmental preservation (contamination control)	Removal of hazardous substances	Polymer flocculants for wastewater/sewage treatment Organic coagulants Heavy metal fixing agents for fly ash	SANFLOC products CATIOMER products ASHFIX products	
	Nonuse of hazardous substances	Nonionic surfactant for endocrine disrupting effects Raw materials for water-expanded (non-CFC) polyurethane foam Non-solvent type acrylic pressure-sensitive adhesives Solvent-less UV/EB curing monomers Polyurethane beads (vinyl chloride-free) for slush molding Polyurethane resin emulsions (solvent-less) for water-based paints Non-halogen cleaning agents	NAROACTY and SANNONIC products SANNIX products  POLYTHICK AH products NEOMER products MELTEX products UCOAT products  CHEMICLEAN products	
	Short-term existence in environment	Biodegradable shampoo base  Biodegradable hair treatment base Biodegradable laundry detergent base Biodegradable lubricant base oil	LEBON, PIUSERIA, and BEAULIGHT products ECONOL TM-22 EMULMIN CS-100, MICELAND SCD-100 EXCEBIOL products	
Environmental	Managed rainforest use	RSPO-certified cosmetic ingredients	Certified ECONOL, BEAULIGHT, and LEBON products	
Conservation	Use of recyclable materials	Leather made of wood and vegetable biomass	MOC-TEX	

Environmental needs	Function/performance	Sanyo Chemical product line	
Environment improvement (greening)	High water-retention properties, compatibility with plants	Soil conditioner (superabsorbent polymer)	SANFRESH GT-1

# Volume of product contribution to CO<sub>2</sub> reduction

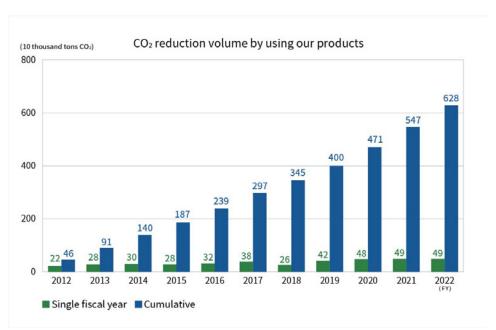
To visualize the contribution that our products make in reducing greenhouse gas (CO<sub>2</sub>) emissions, we have formulated and implemented a calculation standard.

The purpose of this standard is to quantify how much CO<sub>2</sub> emissions can be reduced in the use, consumption, and disposal stages by saving energy and resources using our products in comparison with widely marketed products (conventional products). Among the products that contribute to reduction of environmental impact listed in the following table, this standard is applied only to our products whose contribution is apparent and can be quantified.

We have been using this standard since FY2012 and have calculated the single-year reduction volume in FY2022 to be 0.49 million tons and the cumulative reduction volume with consideration given to the lifecycle to be 6.28 million tons.

# Main products contributing to CO<sub>2</sub> reduction

main products continuating to co2 reduction		
	CO <sub>2</sub> reduction contribution to per kg of product (kgCO <sub>2</sub> )	
Superabsorbent polymers for thin-paper diapers	1.8	
Lubricant additives for fuel consumption improvement	10-20	
Concentrated liquid detergent base	1.3	
Thermoplastic polyurethane beads for the thin interior parts of automobiles	1.7-3.5	



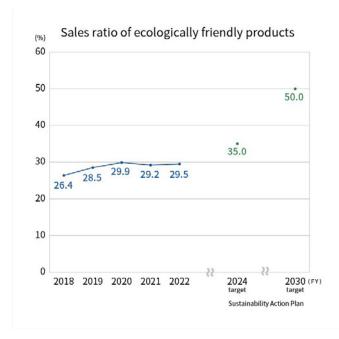
# Ecologically friendly products

Before product commercialization, we evaluate the environmental impact given in each of the product lifecycle stages, i.e. the design, development, raw material procurement, manufacturing, physical distribution, use, consumption and disposal and then score the evaluation on a check sheet.

We assess the product concept, use of recyclable raw materials, and environmental contribution at the product use stage, define products equal to or above a certain score as ecologically friendly products, and determine the increase in the rate of ecologically friendly products for a management indicator.

The rate of ecologically friendly products in FY2022 was 29.5% on a sales basis.

Our Sustainability Action Plan aims for 35% in FY2024, and 50% in FY2030.



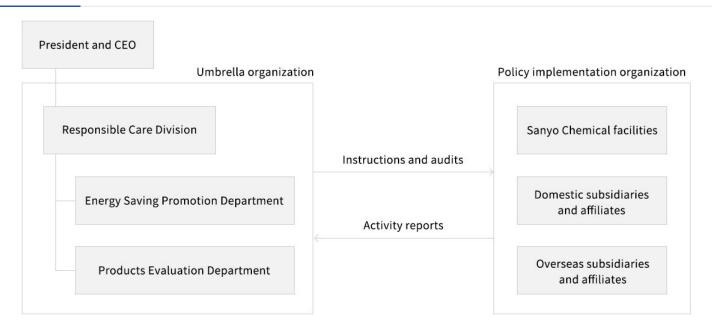
# **Environmental Management**

In 1996, Sanyo Chemical established the management policy on responsible care (RC). It also joined the Japan Responsible Care Council (currently the RC Committee of the Japan Chemical Industry Association) and started RC activities. In FY2000, Sanyo Chemical launched the Environmental Action Plan, which specified priority action items and target values. The scope was expanded to subsidiaries and affiliates in Japan in FY2004 and to overseas subsidiaries and affiliates in FY2007, to promote environmental management on a Group hasis

# Policy

Our company mission states, "We will strive for perfection in safety and harmony with the environment, which is the first required mission in society." Our Code of Corporate Ethics states, "We shall proactively take initiatives to conserve the environment and prevent accidents and disasters as crucial requirements for the sustainability and activity of our business." The CSR Guidelines specify reduction of environmental impact in Item 3, contribution to the environment and the improvement of personal lives through product development in Item 4, and sustainable purchasing in Item 5 to promote specific activities.

# Management system



In January 2023, the Responsible Care Division was reorganized. Overall environmental conservation activities other than energy conservation and global warming measures, which had been undertaken by the Environmental and Safety Administration Dept., were transferred to the Energy Saving Promotion Dept., which had specialized in energy conservation and global warming measures. Accordingly, the Energy Conservation Promotion Dept. assumed the responsibility for supervising overall "environmental conservation" activities among the five RC activities.

The "chemicals/product safety" activities and part of "logistics safety" will continue to be covered by the Products Evaluation Dept. "Labor safety and health" and "safety/accident prevention" were separated from the Responsible Care Division and transferred to the Safety Promotion Department, which was newly established as a department under the direct control of the President and CEO.

Concerning the environmental management system (ISO 14001), which we had used as one of our RC promotion tools, we discontinued the certifications for domestic factories based on our judgment that we are able to adequately operate the system on our own. The certifications of overseas facilities will continue. We will continue the certifications of both domestic and overseas facilities for the quality management system (ISO 9001).

We will also continue the RC (safety, health, environment, and security) audits that we conduct once a year by visiting the sites of listed companies and laboratories in Japan.

# What is Responsible Care?



Responsible Care is a voluntary activity in which businesses that manufacture or handle chemical substances ensure the environment, health, and safety throughout the entire process from development, manufacture, distribution, use, and final consumption to disposal of chemical substances based on the principle of self-responsibility, i.e., promoting the five activities of environmental conservation, occupational health and safety, safety and disaster prevention, chemical and product safety, and distribution safety, promoting information disclosure and dialogue with society.

# Environmental action plan 21-24 (FY2021 to FY2024)

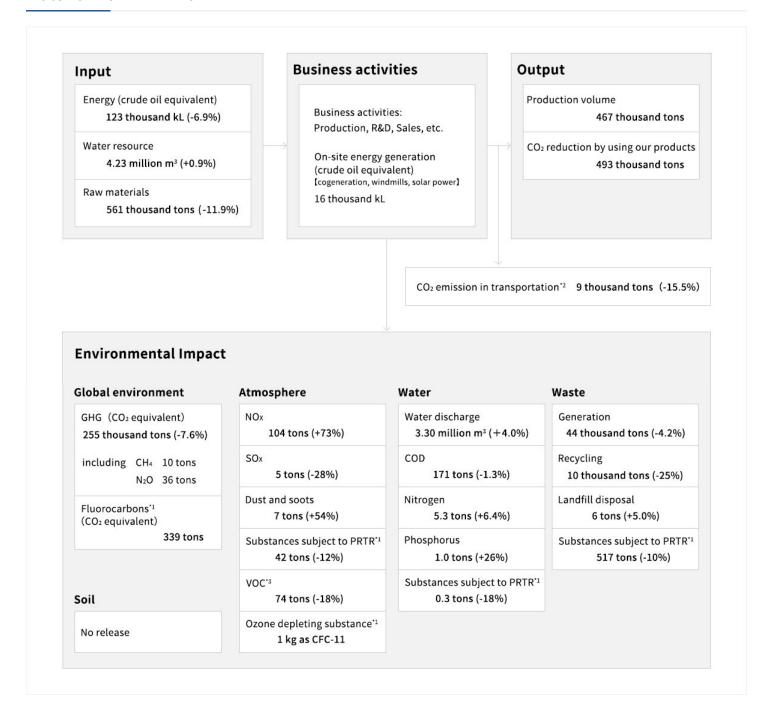
Initially, GHG emissions reduction and energy conservation were set out as activity themes for the Environmental Action Plan 21-24. To accelerate activities toward carbon neutrality, the two themes were transferred to the CSR Promotion Management Committee in FY2022. The themes of water conservation, reduction of waste generation, and reduction of VOCs will continue to be pursued under the action plan.

Scope : All facilities of Sanyo Chemical, all domestic SUBSIDIARIES & AFFILIATES and overseas facilities which have production bases\*1

\*1 Sanyo Chemical Texas Industries, LLC, Sanyo Kasei (Thailand) Ltd., Sanyo Kasei (Nantong) Co., Ltd., San-Dia Polymers (Nantong) Co., Ltd., SDP GLOBAL (MALAYSIA) SDN. BHD.,

	FY2019 result	FY2024 target			
Theme	(base year)	Target	Reduction rate compared with base year	Note	
Water saving	4,354	4,136 or less	5% or more	Reduction of 1% or more per year	
Water usage (thousand m <sup>3</sup> )	· · · · · · · · · · · · · · · · · · ·				
Waste generation control	5.9	3.6 or less	39% or more	_	
Waste generated (10,000 tons)	0.0	0.0 01 1000	30 % St IIIG10		
VOC*2 emissions reduction	112 Domestic: 89	90 or less Domestic: 80 or less	19.7% or more	_	
VOC emissions volume (tons)	Overseas: 22	Overseas: 10 or less	19.7 % (1 111016		

<sup>\*2</sup> Total emission of substances subject to former and revised PRTR Laws, and substances specified by the Japan Chemical Industry Association



The values shown above are the values for consolidated results for all domestic and overseas facilities.

<sup>\*1</sup> Domestic tota

<sup>\*2</sup> Total of SCI (all facilities in Sanyo Chemical Industries, Ltd.), SDP Global Co., Ltd., and SAN NOPCO LIMITED

<sup>\*3</sup> Total of Domestic (SCI plus domestic affiliates/subsidiaries), Sanyo Kasei (Thailand) Ltd. Sanyo Kasei (Nantong) Co., Ltd. San-Dia Polymers (Nantong) Co., Ltd. and SDP GLOBAL (MALAYSIA) SDN. BHD.

# Environmental management indicators

# Environmental accounting (April 1, 2022 to March 31, 2023)

Scope of summarization: Seven domestic and five overseas subsidiaries and affiliates with production facilities accounting data have been consolidated and compiled in accordance with the Environmental Accounting Guidelines 2005 (Ministry of the Environment). SKT, however, uses a fiscal year from January 1, 2022 to December 31, 2022.

### **Environmental Protection Costs**

# [Business activities by category]

[Business activities by category] (million yen			
Classification		Investment*1	Expense*2
	(1) Pollution prevention costs	297	875
Facility area costs	(2) Global environment costs	27	663
	(3) Resource recycling costs	1	1,898
Upstream/Downstre	eam costs	0	33
Administrative costs		3	505
R&D costs		0	730
Social activity costs		0	138
Environmental remediation costs		0	4
Total		327	4,846

<sup>\*1</sup> The investment amount is based on the acceptances during the corresponding period.

# [Environmental conservation measures by category]

(million yen)

		(ITIIIIIOIT yell)
Classification	Investment	Expense
(1) Costs related to global warming measures	34	642
(2) Costs related to ozone layer protection measures	0	2
(3) Costs related to air quality conservation measures	224	408
(4) Costs related to noise and vibration	0	74
(5) Costs related to environmental conservation measures for the aquatic, ground, and geologic environments	62	456
(6) Costs related to waste product and recycling measures	1	1,906
(7) Costs related to measures for reducing chemical risk and emissions	0	259
(8) Costs related to natural environmental conservation	1	16
(9) Other costs	5	354
Total	327	4,116

Note: Expenses for research and development are not classified.

### [Economic impact] (unit: million yen)

			(unit rimier year)
Results		Reduced costs (million yen)	Main items
Energy saving		20	Reduction in purchase of electricity and steam by using waste heat and cogeneration, etc.
	Waste reduction	7	Reduction in consumption of resources and generation of waste through process improvements
Resource saving	Raw material use reduction (yield improvement)	82	Increase in product yield and reduction in process chemicals
	Revenue from recycling	70	Income on sale of waste solvents, used containers, etc.
Total		179	

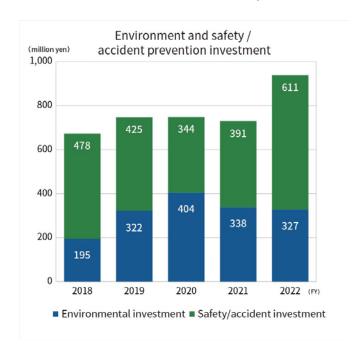
Note: Including effects of measures that do not involve investment (e.g., improvement of the manufacturing processes)

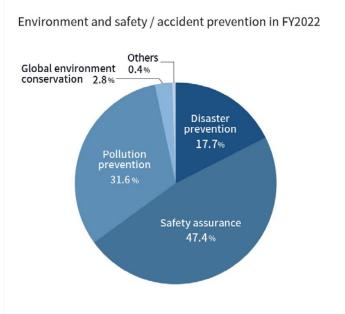
<sup>\*2</sup> The expense amount includes depreciation.

# Environmental and safety/accident prevention investments

We are engaged in environmental conservation and safety assurance. We proactively invest not only in environmental measures, but also in safety and accident prevention, including industrial accidents, measures against earthquakes, and the 3Ds (Dirty, Dangerous, and Demanding jobs) improvements.

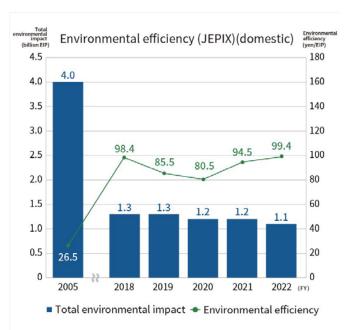
In FY2022, our environmental investments totaled 330 million yen, and the investments in safety/accident prevention was 610 million yen.





# Environmental efficiency index JEPIX\*

Our environmental efficiency has been greatly improved by reducing exhaust gas emissions of ethylene oxide, implemented in 2005, and propylene oxide, implemented in FY2012. Our environmental efficiency has been improving since FY2020.



Note: <u>JEPIX (http://www.jepix.org) (Japanese only)</u> a Calculated using PEPIX Calculation Sheet Ver. 2

\* JEPIX: Japan Environmental Policy Priorities Index

The total environmental point (EIP) is multiplied by the weighted coefficient of each type of environmental impact such as GHG and hazardous air pollutants. Environmental efficiency is calculated by driving EIP by adjusted gross sales (JPY). The smaller the EIP, the better the environmental efficiency.

# **Approach to Climate Change**

# **GHG** emission reduction and energy savings

# **Disclosure based on TCFD recommendations**

The  $\mathrm{CO}_2$  concentration in the atmosphere has been rising because of humans activities. Due to the greenhouse effect of  $\mathrm{CO}_2$  and other greenhouse gases, the global temperature has increased by  $0.3^{\circ}\mathrm{C}$  to  $0.6^{\circ}\mathrm{C}$  in the past 100 years. Furthermore, it is predicted to increase by  $1.4^{\circ}\mathrm{C}$  to  $5.8^{\circ}\mathrm{C}$  in the next 100 years. Temperature rise causes climate change. There is serious concern that climate change will greatly affect the ecosystem and human lives through extreme weather, sea level rise, and increase in species extinction for example. Reduction of greenhouse gas (GHG such as  $\mathrm{CO}_2$ ) emissions and stopping temperature rises are a global issues. In 2020, the Japanese government declared that Japan will achieve greenhouse gas (GHG) reduction in 2030 by 46% compared to that in FY2013, then will achieve carbon neutrality\* in 2050.

\*Carbon neutrality: Refers to the state of net zero  $\mathrm{CO}_2$  emissions achieved through the use of renewable energies and the absorption of  $\mathrm{CO}_2$  by forests and other means.

# Policy

As a chemicals manufacturer, the Sanyo Chemical Group contributes to the carbon neutrality of society as a whole by reducing GHG emissions from its business sites and developing and offering products that help reduce CO<sub>2</sub> emissions.

# GHG emission reduction and energy savings

# GHG emission status (FY2022)

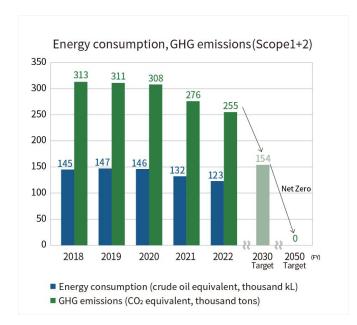
Emission / Absorption / Product contribution classification	GHG type	Emissions volume (CO <sub>2</sub> equivalent)
	Direct emissions from fuel oil combustion (Scope 1)	130 thousand tons
	Methane (generated from septic tanks)	10 tons
	Nitrous oxide (by-product of combustion)	36 tons
Emission	other GHG (NF $_3$ 、PFC、SF $_6$ )	No emissions
	Fluorocarbons leakage from refrigerators and air conditioners	339 tons
	Indirect emissions from the use of electricity, heat, or steam supplied by others (Scope 2)	125 thousand tons
	Supply chain emissions (Scope 3)	2,513 thousand tons
Absorption	Increase in forest CO <sub>2</sub> absorption (based on tree thinning project)	11 tons
Product contribution	CO <sub>2</sub> reduction by using our products	493 thousand tons

Of GHG emissions from business sites, the main gases other than  $CO_2$  are methane from septic tanks, nitrous oxide, which is a combustion by-product, and fluorocarbons, which leak from refrigerators and other equipment (385 tons in total in  $CO_2$  equivalent). Emissions of these GHGs other than  $CO_2$  account for 0.15%, which is very small compared to the emissions of Scopes 1 and 2. Almost all emissions from the supply chain, including Scope 3, are  $CO_2$ .

Click here for details of Scopes 1, 2, and 3

# Midterm to long-term goals of greenhouse gas emission reduction plan (Scope1+Scope2)

FY	Target (CO <sub>2</sub> equivalent)	Note
2013	309 thousand tons	Base year
2030	154 thousand tons	Intermediate target (50% reduction compared to base year)
2050	Net Zero	Final target (carbon neutrality)



Additionally, in FY2018, we changed the sales management policy to selectively sell high value added products and stop selling low value added products. As a result, domestic production volumes decreased have significantly decreased. Overseas, although the production volumes had been increasing until FY2020, the Chinese affiliate's production volume has been decreasing particularly largely since FY2021, as a result the group-wide production volume decreased by 20% compared to FY2018. Because of the product mix change and production volumes decreases through sales policy changes and the CO<sub>2</sub> reduction measures of by the Work Group, CO<sub>2</sub> emissions in FY2022 were 255 thousand tons. In terms of energy consumption in crude oil equivalent, it is also decreasing for the same reasons.

# Measures toward carbon neutrality

Most of the GHG emissions from business sites of our Group are CO<sub>2</sub>. Thus, we aim to achieve carbon neutrality across the supply chain by focusing on efficient utilization through the establishment and operation of an energy management system, and on energy transition (from fossil fuels to sunlight and hydrogen) in Scopes 1 and 2. Meanwhile, in Scope 3, we use low-GHG raw materials (that contribute to carbon neutrality, such as biomass raw materials) and develop technologies for energy conservation, GHG emissions reduction, and resource conservation when using our products and technologies that contribute to CCU (Carbon dioxide Capture and Utilization). The roadmap is shown on the page for information disclosure based on recommendations by the Task Force on Climate-related Financial Disclosure (TCFD).

# Monozukuri Transformation (Manufacturing Innovation)

As part of the Reformation of Existing Business set out in the New Medium-Term Management Plan, we have been working to reform the operational process throughout the supply chain based on digital transformation (DX). The production and research teams work together to promote initiatives that lead to carbon neutrality, such as a fundamental review of the production process for existing products and the use of low-GHG raw materials.

# Products using biomass

Bio-based raw materials (biomass\*) are renewable and sustainable raw materials compared to petrochemical raw materials. Thus, petrochemical raw materials have been increasingly replaced by biomass raw materials. Basic chemicals, such as acrylic acid and ethylene glycol, have also been increasingly derived from biomass. Defossilization of raw materials (a shift to biomass) is expected to accelerate into the future. In fact, we have developed superabsorbent polymers, which have acquired the Biomass Mark, and polyethylene glycol, which has been certified under the ISCC system.

Click here for products using biomass

\*Biomass: A concept that represents the amount ("mass") of biological resources ("bio"). Biomass refers to "renewable, bio-based organic resources excluding petrochemical raw materials." Unlike CO<sub>2</sub> released from the combustion of petrochemical raw materials, CO<sub>2</sub> released from the combustion of biomass is CO<sub>2</sub> absorbed from the atmosphere through photosynthesis during the growth process of living organisms. Thus, biomass is regarded as "carbon neutral" resources that do not emit additional CO<sub>2</sub> into the atmosphere.

# **Support Initiatives**

Initiative	Sponsoring organization
TCFD	Task Force on Climate-related Financial Disclosure
Keidanren Challenge Zero	Keidanren (Japan Business Federation)
GX League	Ministry of Economy, Trade and Industry
2050 Zero CO <sub>2</sub> Emissions from Kyoto Ordinance	Kyoto City

# Fluorocarbons

Fluorocarbons were heavily used in the mid-20th century as refrigerants and solvents, but it became apparent that fluorocarbons were the causative substance for ozone depletion and were greenhouse gases. Today, substantial restrictions have been imposed on the use by various international agreements and laws, such as the Montreal Protocol.

In Japan, the Fluorocarbon Emissions Control Act was enacted in 2015. In this law, companies who use the air conditioners and refrigerators/freezers including fluorocarbons as a refrigerant are obliged to inspect the devices and report the fluorocarbons leak volume. Our domestic facilities own about 800 devices and annually inspect them in accordance with the law. The total of fluorocarbons leak volume level in FY2022 was 102 kg (of this amount, 20 kg was the leakage ozone depleting fluorocarbons), and this was 339 tons of CO<sub>2</sub> equivalent.

### Disclosure based on TCFD recommendations

# Disclosure based on TCFD recommendations

As a chemical manufacturer, the Sanyo Chemical Group uses fossil fuels in its manufacturing processes for various products and emits CO<sub>2</sub>. For this reason, it focuses on reducing CO<sub>2</sub> emissions from business sites, and aims to achieve carbon neutrality by developing and spreading the use of products that contribute to energy conservation and CO<sub>2</sub> emissions reduction

Considering that response to climate change is an important management issue, we showed support for the recommendations by the Task Force on Climate-related Financial Disclosures (TCFD) in December 2021.

Assessing the risks and opportunities that climate change may pose to Sanyo Chemical, we will proceed with initiatives based on our scenario analysis. We will actively work on initiatives across the Group toward a "50% reduction in  $CO_2$  emissions by 2030 (compared to the FY2013 level) and net zero by 2050," which are the targets of our Sustainability Action Plan, while aiming to reduce emissions across the supply chain.

Recommendations by the Task Force on Climate-related Financial Disclosure (TCFD) require information disclosure regarding the governance, strategy, risk management, and metrics and targets of climate change. Our Group has been taking action in line with the TCFD recommendations.

### Governance

Since FY2021, the Sustainable Management Committee (chairperson: President and CEO) has been in place to study appropriate response to issues that may pose management risks, including climate change, and to make decisions under the supervisory system of the Board of Directors. The committee discusses the response to TCFD recommendations and reports important matters to the Board of Directors.

The CSR Promotion Management Committee formulates and implements specific measures to reduce CO<sub>2</sub> emissions. The committee builds systems and mechanisms and reports the status of CSR activities, which are conducted under the initiative of the committee, to the Sustainable Management Committee.



# Strategy

The Group conducts scenario analysis as the first step toward formulating the strategy, risk management, metrics, and targets for climate change. We selected business risks and opportunities in the 1.5°C scenario, which aims to achieve a shift toward a decarbonized society, assessed their importance, and compiled their impact on the Group. The scope of analysis was the business of the Company and SDP Global Co., Ltd.

We conducted a qualitative scenario analysis of the Group's major business areas, including the Toiletries & Health Care, Petroleum & Automotives, Plastics & Textiles, Information & Electrics/Electronics, and Environmental Protection & Construction. The assessment results were discussed by the Sustainable Management Committee and reported to the Board of Directors.

The scope of analysis will be expanded to our Group companies, and the 4°C scenario will be assessed to formulate measures.

# The 1.5°C scenario

Referring to the scenario of strong control of CO<sub>2</sub> emissions to limit temperature rise to "+1.5°C" (the long-term outlook "Net Zero Emissions by 2050" at the International Energy Agency), we considered tighter regulations and major social and market transformations as the central scenario of transition risk. The scenario was based on the following assumptions.

World anticipated in the 1.5°C scenario

- Top priority placed on the realization of a decarbonized society, and implementation of an ambitious climate change policy
- · Significant increase in the carbon tax rate
- Prohibition of internal combustion engine (ICE) sales, shift to electric vehicles (EVs), and decarbonization of energy and raw materials
- · Mainstreaming of renewable energy
- · Reduction in consumption of chemicals through recycling
- Manufacture of chemicals from biomass and CO2-derived raw materials
- · Exacerbation of natural disasters
- Realization of carbon neutrality (2050)

# Risk management

We anticipate tighter regulations due to policies, including carbon pricing toward decarbonization, and a shift in demand for materials suitable for decarbonization as the main climate change risks of the Group. We also study the risks of the accelerated shift toward a circular economy, and the emergence of innovative technologies toward a decarbonized society.

As countermeasures, we will study the possibility of carbon dioxide capture and utilization (CCU) and energy shift to hydrogen, etc. t the Nagoya Factory and the Kashima Factory, and in the SDP Group, which account for a large proportion of the CO<sub>2</sub> emissions of the Group. We will also improve the processes and reduce CO<sub>2</sub> emissions from our business sites

Regarding opportunities, we contribute to reducing CO<sub>2</sub> emissions by actively promoting sustainable management, including the review of our business portfolio.

### The Group's countermeasures to the main risks and opportunities of climate change

The Group's countermeasures to the main risks and opportunities and the results of impact assessment were compiled. Regarding the impact assessment, the impact in terms of the amount of money was estimated and classified into three categories (high, intermediate, and low), depending on the magnitude.

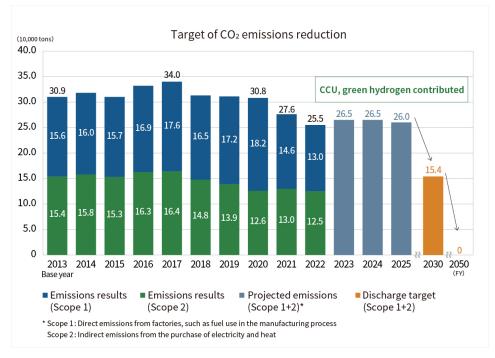
Climate change risk item	Impact of climate change risks  ● Risk ○ Opportunity	Impact assessment	Countermeasure
Introduction / raising of carbon tax	●Increase in energy procurement costs  ○Spread of CCUS	High	Reduction of GHG emissions by introducing cogeneration and solar power generation     CEstablishment of a CCU system using our ionic liquids
Reduction of CO <sub>2</sub> emissions	<ul> <li>Tightening of GHG emission regulations</li> <li>Expansion of the market for products that contribute to reducing GHG emissions</li> </ul>	High	Reduction of GHG emissions during the manufacture of SAP through energy management     Expansion of sales of carbon fiber convergents for blades for wind power generation
Replacement with low-carbon products	●Restrictions on CO₂ emissions during use  OMarket expansion of products made from bio-based raw materials	Intermediate	OExpansion of sales of surfactants made from bio-based raw materials
Recycling regulations	<ul> <li>Increased costs due to the increased use of recycled raw materials</li> <li>Increase in demand for recyclable products</li> </ul>	Intermediate	ODevelopment of imaging materials using recycled PET  ODevelopment of chemical recycling technology for urethane  ODeployment of resin dispersants for recycled materials / organic filler dispersion
Changes in consumer behavior	<ul> <li>Decrease in sales of gasoline-fueled and hybrid vehicles</li> <li>Olncrease in sales of electric vehicles</li> <li>OReduction in weight of batteries in line with the higher mileage of vehicles</li> </ul>	High	Increase in sales of lubricant additives that contribute to higher fuel efficiency of gasoline-fueled and hybrid vehicles     Increase in sales of electrolytes in line with the electrification of vehicles     Increase in demand for permanent antistatic agents for IC trays in line with increasing demand for semiconductors     Development of organic cathodes for organic cathode secondary batteries that contribute to weight reduction

# Metrics and targets

#### Target of CO<sub>2</sub> emissions reduction

#### ■ Emissions (Scopes 1+2)

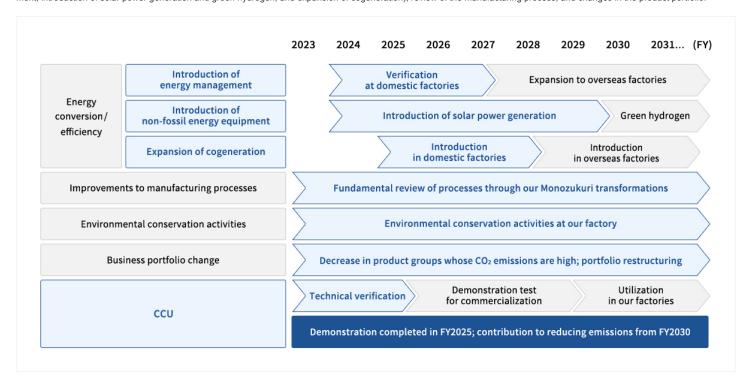
The Group set long-term targets to achieve net zero CO<sub>2</sub> emissions by 2050 in Scopes 1 and 2\*, and created a roadmap to reduce CO<sub>2</sub> emissions by 50% by 2030 (compared to the FY2013 level). We aim to reduce CO<sub>2</sub> emissions significantly by introducing CCU in addition to increasing energy use efficiency through the use of renewable energy and the introduction of an energy management system, reviewing the manufacturing processes, and changing the product portfolio.



- Emissions are expected to increase during the period of the new medium-term management plan (FY2023-FY2025) as production volume increases, but we will continue to improve manufacturing processes and reduce CO<sub>2</sub>.
- A 50% reduction is targeted for FY2030 (compared to FY2013) through the use of CCUs and green hydrogen.

### Roadmap toward carbon neutrality

We aim to reduce GHG emissions significantly by introducing CCU in addition to GHG emissions reduction measures, including energy transition (introduction of energy management, introduction of solar power generation and green hydrogen, and expansion of cogeneration), review of the manufacturing process, and changes in the product portfolio.



### Emissions through the supply chain (Scope 3)

We will also set metrics to promote sales expansion and the development of products that contribute to the reduction of CO<sub>2</sub> emissions, and will work on the reduction of CO<sub>2</sub> emissions in Scope 3 (emissions through the supply chain). Starting in FY2022, we use a standard questionnaire tool (common SAQ) formulated by the Global Compact Network Japan to reduce CO<sub>2</sub> emissions through the supply chain.

# Toward the future

We will continue to conduct scenario analysis in line with the recommendations by TCFD, quantitatively evaluate the impact of climate change, and expand the scope of evaluation to Group companies. We will also practice PDCA by periodically reporting the review results to the Board of Directors and holding deliberations each year to disclose information about target setting and progress.

# **Chemical Substance Control**

As a chemical company, the Sanyo Chemical Group handles many chemical substances in its business activities. Chemical manufactures are required to endeavor to ensure environmental protection, safety, and health throughout the entire lifecycle, including product development, manufacture, logistics, and use/disposal of products sold, and to minimize the negative impact of chemical substances.

# Policy

The chemical substances management regulations stipulate that "regarding chemical substances handled in business activities, we ensure proper management in compliance with relevant laws and regulations, etc. in and outside Japan by taking into account the impact on the global environment, ecosystem, and human health and social trends in Japan and the global community." Management targets are all chemical substances contained in products that are manufactured at business sites, raw materials, intermediate products, recovered materials, and waste, as well as chemical structure designs and process designs in R&D.

# Bodies related to management of chemical substances and their roles

The General Manager of the Responsible Care Division serves as the supervisor. Respective divisions collaborate under the leadership of the General Manager to manage chemical substances. Discharge into the environment due to in handling in production activities is managed by the Production Division. Design management related to the product composition and manufacturing processes is undertaken through cooperation between the research department affiliated with a business division and the Production Division.



Headquarter	Main responsibility
Responsible Care Division	<ul> <li>Confirmation of compliance with laws and regulations in and outside Japan and conformity to the industry standards, customers' procurement standards, etc.</li> <li>Confirmation of proper management in terms of safety/accident prevention, labor safety and health, and the environment and safety</li> </ul>
Each Business Division	<ul> <li>Manufacturing process designs, composition designs, and provision of products in accordance with chemical substances management regulations</li> <li>Collection of information about trends in the industry, customers' procurement standards, etc. and the provision of conforming products</li> <li>Provision of information about chemical substances to customers</li> </ul>
Global Purchasing Division	• Promotion of green procurement of raw materials (dissemination of information about our procurement standards and acquisition of information about management of chemical substances)
Production Division	<ul> <li>Storage, proper management, and use in accordance with laws and regulations</li> <li>Collection of safety information about raw materials and products (e.g., SDSs)</li> <li>Identification of risks during handling, and planning and implementation of risk reduction measures</li> <li>Calculation (measurement) and reduction of the discharge and migration amount during storage and use</li> <li>Confirmation of impact on chemical substances management due to changes in production conditions</li> </ul>

### Safe and appropriate handling of chemical substances

Our Group handles various chemical substances in its operations. Thus, it is essential to acquire knowledge about physical properties and the harmful effects of chemical substances. Regarding substances handled, respective departments organize workshops using safety data sheets (SDSs) and conduct risk assessment. Employees are encouraged to acquire qualifications for handling specified chemical substances whose harmful effects are particularly high, organic solvents, poisonous and deleterious substances, and hazardous materials for preventing fire and accidents. Plant engineers at factories are required to acquire qualifications as Class A hazardous materials engineers or Class B hazardous materials engineers (Group 4).

### Status of qualifications in Japan

March, 2023

Qualification	Number of qualified people (persons)
Hazardous materials engineers*1	1,242
People/persons in charge of handling poisonous and deleterious substances	21
Organic solvent work chiefs	517
Specified chemical substance work chiefs	466
High pressure gas production safety managers	224
Pollution prevention managers *2	53

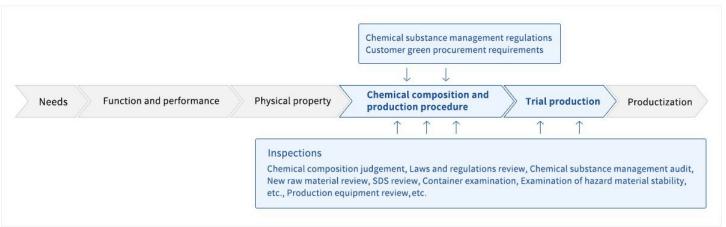
Total number of qualified people in factories and research laboratory

- \*1 Total number of dangerous goods handler class A and/or class B (Otsu1-6)
- \*2 Total number of pollution prevention manager; air, water, noise, and dioxin

### Design management

When designing a product, it is necessary to translate the "functionality and performance" to meet the target needs into physical and chemical "properties," and design the chemical composition to demonstrate the "physical properties." To minimize the impact on individuals during the manufacture and use of products and their discharge into the environment and to ensure safety, examinations and checks are conducted from various viewpoints in the respective phases of composition design, process design, prototype production, and commercialization of products.

### Inspections through research and development



Click here for more information about considerations regarding harmful chemical substances used for products.

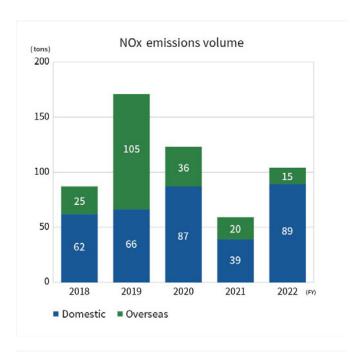
The page introduces products designed by giving consideration to the prevention of pollution and reduction of content based on the keywords of "solvent-free," "halogen-free," "free from harmful substances," and "environmental residue."

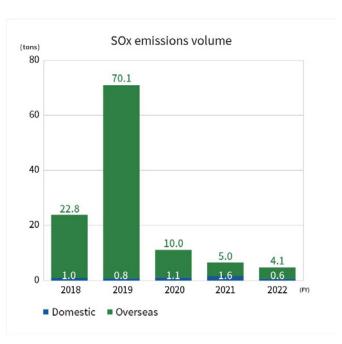
### Discharge management

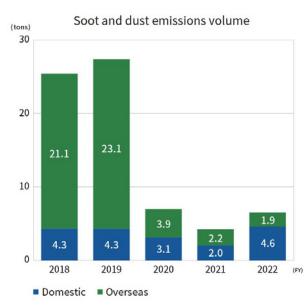
To reduce the negative impact of chemical substances discharged from production activities on the atmospheric, aquatic, and soil environments, we ensure compliance with laws and regulations and work on voluntary activities to reduce the discharge.

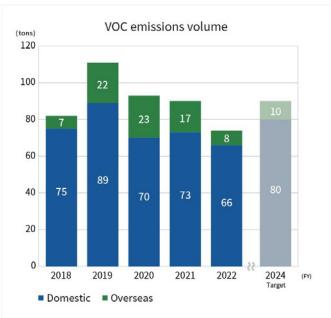
### Conservation of the atmospheric environment

Business sites discharge combustion gases into the atmosphere (e.g., NOx, SOx) due to the use of boilers, cogeneration systems, and incinerators and volatile organic compounds (VOCs) generated from the operation of reaction tanks and storage tanks at plants. We endeavor to reduce the impact on the atmospheric environment through the maintenance and proper operation of such equipment and ancillary exhaust gas treatment equipment. Regarding VOCs, the targets for the final fiscal year (FY2024) of the Environmental Action Plan are 80 tons or less in Japan and 10 tons or less overseas. In FY2022, VOC emissions were 66 tons (-7 tons from the previous fiscal year) in Japan and 8 tons (-9 tons from the previous fiscal year) overseas, adding up to 74 tons for the entire Group and attaining the FY2024 targets.









Note 1: The overseas values of NOx, SOx, and soot and dust in FY2019 were high because abnormal measurement values were recorded at SDP GLOBAL (MALAYSIA) SDN. BHD. We checked the equipment and measurement methods. The values are normal in FY2020 and beyond.

Note 2: Scope of aggregation of VOCs: All the business sites in Japan and Sanyo Kasei (Thailand) Ltd. in FY2018. Sanyo Kasei (Nantong) Co., Ltd., San-Dia Polymers (Nantong) Co., Ltd., and SDP GLOBAL (MALAYSIA) SDN. BHD. were added in FY2019.

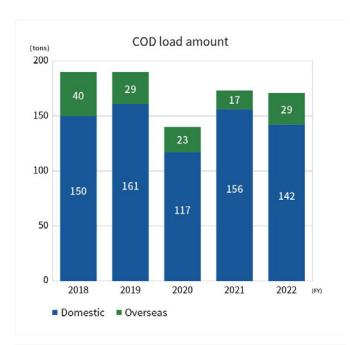
### Conservation of the water environment

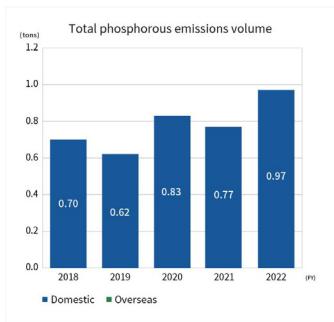
At the wastewater discharge pipes at business sites, voluntary management values stricter than the wastewater regulation values stipulated in laws and regulations are in place to manage the concentration by monitoring the status of wastewater.

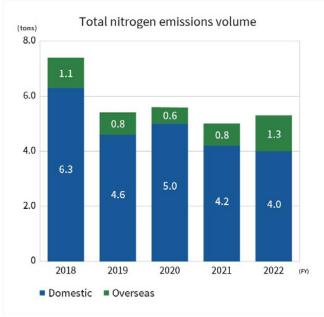
We endeavor to prevent the discharge of pollutants into the aqueous environment through the appropriate maintenance of equipment, installation of dikes, and measures to prevent leakage at business sites.

Click <u>here</u> of for information of discharge and environmental impacts.

Nagoya area (Nagoya Factory, SDP Global Co., Ltd. and San Nopco Ltd.) discharge to Ise Bay, and Kawasaki area (San Chemical Co., Ltd.) discharge to Tokyo Bay. Other facilities discharge to sewerage system.







### Environmental conservation for soil and ground water

We do not perform landfill disposal at business sites. We also monitor the condition of ground water using observation wells at business sites. We conduct a voluntary soil survey on house premises during construction work to check for problems on an ongoing basis.

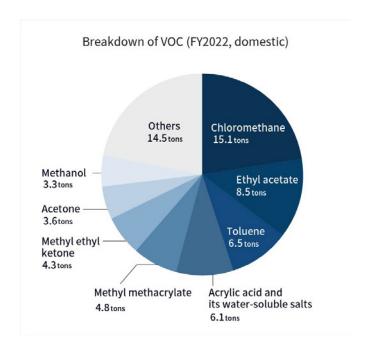
### Compliance with the PRTR Law

In Japan and Thailand, a system is in place to notify the amount discharged to the environment and the migration amount in accordance with the PRTR Law.

Our Group has been working to reduce the discharge by determining the amount of VOCs outside the scope of the PRTR Law in addition to the amount of substances covered by the law discharged from business sites, and setting priorities.

In FY2022, we started to implement measures to reduce the discharge of chloromethane, whose discharge amount was the largest among the VOCs discharged in Japan, but against which no effective measures had been implemented.

We succeeded in reducing the amount of chloromethane, which had been excessively used, by improving the manufacturing process. In FY2022, consumption was reduced by about 2 tons. This is equivalent to a reduction in the discharge amount by up to 8.8 tons per annum. In overseas operations, the discharge amount will be reduced through combustion and adsorption treatment of exhaust gas by using discharge reduction technology refined in the operations in Japan.



### Substances subject to PRTR Law in FY2022 (domestic facilities)

	Number of handled substances	Volume (tons)	Emissions to air (tons)	Emissions to water (tons)	Emissions to soil (tons)	Transferred to waste (tons)
Sanyo Chemical	121	102,292	35.5	0.3	0	507.7
Domestic subsidiaries and affiliates	57	129,195	6.0	0.0	0	9.5
Total	131 in total	231,487	41.5	0.3	0	517.2

Click here for emissions / transfer data, and emission reduction measures.

### Compliance on environmental matter

In FY2022, we did not receive any complaints about pollution, violate any law or regulation related to the environment, or have administrative direction or any lawsuits.

# **Resource Saving and Waste Reduction**

# Policy

We work on the 3Rs (reduce, reuse, and recycle) for the effective use of resources. In particular, we focus on reduction of waste generation.

# Targets and results

# Waste generation volume and recycle rate

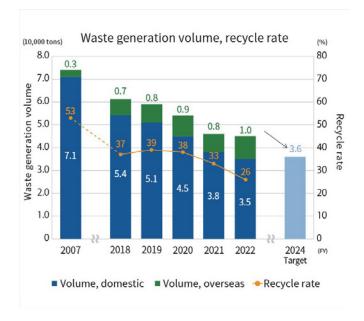
The waste generation volume of 74 thousand tons in 2007 decreased to the 60 thousand ton-range in the late 2010s, because domestic factories, which generated the majority of waste in our group, worked hard to meet the challenge using our company-wide challenge system. In Japan, the amount of waste generated has been decreasing since FY2017 due to changes in the product mix, attributed to changes in the sales policy, and reduction in the production volume in addition to waste reduction measures. In FY2022, the amount of waste generated was 44,000 tons (35,000 tons in Japan and 10,000 tons overseas), which fell slightly short of the plan for the fiscal year due to an increase in the amount of waste generated by overseas subsidiaries and affiliates.

The recycling rate relative to the amount of waste generated is on the decline. It was found that part of waste commissioned to external treatment in FY2022 had not been thermally recycled, resulting in a recycling rate of 26%. The data on waste may not be accurate, so a retroactive review will be studied in FY2023. The landfill disposal volume is kept below 0.01% of the total volume of waste generated. There were 10 out of 13 facilities with zero landfill volume.

As the reduction of the volume of waste generated also leads to a reduction of CO<sub>2</sub> emissions resulting from incineration disposal, we will address it as an important issue.

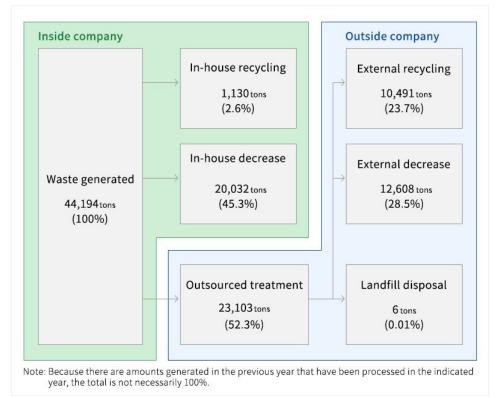
ENVIRONMENTAL ACTION PLAN 21-24	FY2024 target	FY2022 target	FY2022 result	Rating
Waste generation volume	36 thousand tons or less	41 thousand tons or less	44 thousand tons	В — С

Note: A; Excellent B; Good C; Bad



# Resource saving and waste reduction

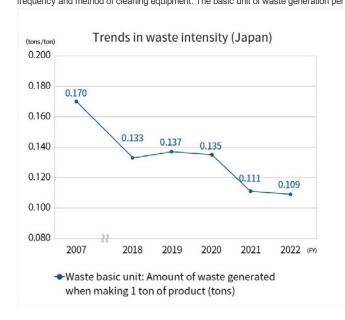
### Material flow of waste in FY2022



Our Group generates a large amount of waste in which organic matter is mixed with water, including water produced after cleaning equipment and products and waste fluids generated in the manufacturing process. Such waste is not suitable for recycling. The amount of waste subject to internal and external weight reduction mainly by incineration accounts for 45.3% and 28.5%, respectively. About a quarter of the waste generated is recycled internally and externally.

### Reduction of waste generation

In FY2018, the Management Policy was changed to stop sales of low-value-added products and shift the focus to sales of high-value-added products. This caused our product mix to change and resulted in a decrease in the production volume at business sites in Japan, which had been generating a large amount of waste. These measures turned out to be effective. Other measures were also implemented to reduce the generation of waste, such as optimization of the input of raw materials (reduction), improvement of the yield, and review of the frequency and method of cleaning equipment. The basic unit of waste generation per production volume has decreased.



# Examples of recycling

In FY2022, about 3% of waste generated was recycled internally, while 24% was recycled externally. (Specific examples)

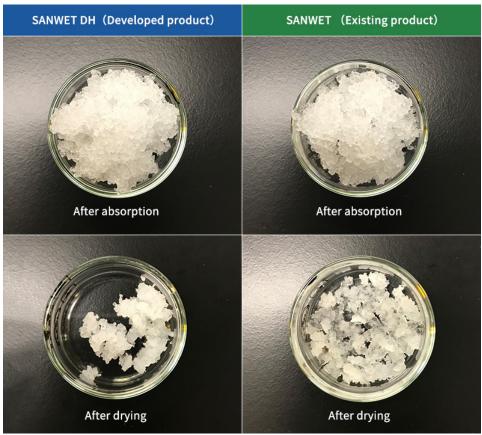
- $\boldsymbol{\cdot}$  Solvents used for cleaning equipment are constantly reused in-house.
- · Of solvents and monomers recovered from the production process, recyclable solvents and monomers are purified for reuse.
- · Metals, wood, paper, and other materials are subject to external material recycling.
- Some waste plastics are subjected to external material recycling. Most waste plastics are subjected to thermal recycling.

### Contribution through products

We offer product lines at that contribute to the sustainable use of resources categorized by the keywords of "weight reduction," "low additive amount," "long service life," "high durability," "increased yield," and "use of biomass (from petrochemicals)."

### Contribution through superabsorbent polymers (SAPs)

Recently, efforts have been made to recycle disposable diapers, which have been increasing as general waste. One of the issues in recycling and treatment is dehydration, volume reduction, and recovery of SAPs, which are used as water-absorbing materials in disposable diapers. SDP Global Co., Ltd. developed SANWET DH, an SAP whose dewaterability has been improved while maintaining its water-absorbing and water retention performance as a water-absorbing material by harnessing polymerization technology, particle shape control technology, and surface treatment technology. Compared to conventional products, SANWET DH is characterized by higher dewaterability (improved by 30%), shorter dewatering time, and easier separation from other materials during recycling.



SAP that absorbed water was immersed in a calcium chloride solution for 10 minutes. It was then dehydrated for 90 seconds in a centrifuge





We also started the shipment of samples of SAPs that contained plant-derived biomass raw materials (10% or 25%) and acquired the Biomass Mark.

### Information about the reduction of discharge and recycling of industrial waste products using plastics

We fall under the category of business operators that discharge a large amount of waste (250 tons or more per annum), as stipulated in the Act on Promotion of Resource Circulation for Plastics. The status of discharge of industrial waste of products using plastics is as shown in the table below. Subsidiaries and affiliates in Japan do not fall under the category of business operators that discharge a large amount of waste. However, they have been working to reduce discharge while sharing information with Sanyo Chemical. Part of the discharged waste is recycled as road base materials and raw materials for plastic products. Most of such waste is subject to thermal recycling.

# Emissions status and reduction target of waste products using plastic

(unit:tons)

			(4.11.1.16.16)
		Emission volume (Sanyo Chemical)	Emission volume (domestic SUBSIDIARIES & AFFILIATES*)
FY2021		1,061	48
EV2022	target	1,052	46
FY2022	result	959	52
FY2023 target		1,185	48

<sup>\*</sup>SDP Global Co., Ltd., San Chemical Co., Ltd., SAN NOPCO LIMITED, and San-Petrochemicals Co., Ltd.

# Maintenance and management of industrial waste management facilities information

Based on the Act on Waste Management and Public Cleansing Article 15-2-3-2 in japan, we show the following status of maintenance and management of industrial waste management facilities.

# Nagoya Factory (Tokai, Aichi prefecture, Japan) liquid combustion furnace

The status of maintenance and management of industrial waste management facilities	File (Japanese PDF only)
The status of maintenance	PDF 🗷
Management of industrial waste management facilities (FY2023)	PDF 🚨
Management of industrial waste management facilities (FY2022)	PDF 🗷
Management of industrial waste management facilities (FY2021)	PDF 🚨
Management of industrial waste management facilities (FY2020)	PDF 🚨
Management of industrial waste management facilities (FY2019)	PDF 🚨

### Nagoya Factory (Tokai, Aichi prefecture, Japan) garbage incinerator

The status of maintenance and management of industrial waste management facilities	File (Japanese PDF only)
The status of maintenance	PDE 🚨
Management of industrial waste management facilities (FY2023)	PDF 🚨
Management of industrial waste management facilities (FY2022)	PDF 🚨
Management of industrial waste management facilities (FY2021)	PDF 🚨
Management of industrial waste management facilities (FY2020)	PDF 🚨
Management of industrial waste management facilities (FY2019)	PDF 🚨

# **Biodiversity Initiatives**

In its business activities to manufacture and sell chemicals, the Sanyo Chemical Group has a negative impact on biodiversity, such as through the consumption of natural capital, GHG emissions, and the discharge of harmful substances in the lifecycle from the design and development of products, including the procurement of raw materials, the manufacture of products, transport, product use, and final disposal. However, we also recognize that the products that we offer have a positive impact in contributing to the reduction and improvement of environmental impact. We have worked on activities based on a belief that commitment to a reduction of impact at each stage of the lifecycle, including through energy conservation and reduction of GHG emissions and discharge of pollutants in production activities, energy conservation and reduction of GHG emissions during product use, reduction of harmful substances contained in products, use of biodegradable materials, and non-use of endocrine disrupters for disposal help prevent biodiversity loss, albeit indirectly.

In 2009, we revised the Management Policy on responsible care by adding biodiversity and launched the Sanyo Chemical Woodland project for the purpose of supporting the Kyoto Model Forest Movement. We work on the project on an ongoing basis.

# Policy

The management policy regarding responsible care sets out the goal to "deepen understanding and recognition about biodiversity conservation and promote biodiversity-conscious activities," and defines an activity policy on biodiversity.

# Action Policy Concerning Biodiversity

With the acknowledgement that business affects biodiversity, our group will deepen the understanding and acknowledgement of the preservation of biodiversity and promote our activities with consideration for biodiversity.

- 1. We will develop products in consideration of the environment and contribute to the preservation of biodiversity through the provision and diffusion of those products.
- 2. In the procurement of materials, raw materials, office supplies, and others, we will give consideration to the preservation of biodiversity.
- 3. We will reduce the environmental loads, such as the emissions of greenhouse gases, utilization of water resources, and release of chemical substances and waste, from the workplaces so as to alleviate their impact on biodiversity.
- 4. All of our employees will enhance the understanding and acknowledgement of biodiversity and try to increase the awareness of the preservation of biodiversity.
- 5. We will promote efforts in cooperation with the local community.

(Established: 2013)

# Involved Initiatives

Declaration of Biodiversity by Keidanren, Japan Business Federation



Roundtable on Sustainable Palm Oil  $(RSPO)^*$ 



\*RSPO: An NGO established by the World Wide Fund for Nature (WWF) and other organizations in 2004 to produce palm oil while ensuring sustainability by giving consideration to environmental issues, such as logging in rain forests and the shrinking of habitats for wildlife caused by logging, as well as poor working environments and human rights issues on farms. RSPO establishes principles and standards on the production and use of palm oil. It started operating a certification system for palm oil in 2007. Various members participate from across the supply chain, including palm oil producers, traders, and processors.

# Education and training

The Sanyo Chemical Woodland project, which is organized by employees who serve as volunteers, raises awareness about biodiversity through forest management, observation of organisms, and forest learning. Since 2010, forest creation activities have been part of the training curriculum for new employees. Employees are required to experience the activities at least once after joining the company. Since the launch of the activities in 2009, a total of 2,019 employees have participated (including 576 employees who have participated in the training for new employees). Forest Maintenance News, an in-house newsletter that carries basic articles about the activities and biodiversity, is posted on our Intranet to raise awareness about biodiversity.

# Action on the activity policy

### Products that contribute to reduction of environmental impact

We develop and market product groups that contribute to biodiversity by achieving energy conservation, improving energy efficiency, and ensuring durability, long service life (resource conservation), water conservation, removal of harmful substances, non-use of harmful substances, and biodegradability.

Click here for products that contribute to reduction of environmental impact

Regarding protein synthesis using genetically modified organisms, we ensure biosafety so that organisms are not released into the environment. In the field of agri-nutrition (agriculture), which we are about to enter, we are studying the possibility of reducing the use of fertilizers and pesticides, whose environmental impact is high, by efficiently delivering components essential for plants (e.g., peptides and amino acids) and fully unleashing the yield and quality potential inherent in plants. Reduction in the use of fertilizers and pesticides is expected to reduce the environmental impact during the manufacture of these products and the negative impact on organisms other than the target organisms due to excessive use.

### Procurement of raw materials

Since our foundation in the surfactant industry, we have handled bio-based raw materials, including oils and fats. Later, we expanded our business to the petrochemical industry. Although the percentage of bio-based raw materials has decreased, we still use a considerable amount of bio-based raw materials. Regarding raw materials used, we determine whether they are bio-based and identify the species from which they are derived. We purchase oils and fats, higher alcohols, and fatty acids (derivatives) derived from oil palm, coconut palm, rapeseed, soybeans, cattle, and pigs. In FY2023, we started to procure raw materials derived from RSPO-certified palm oil as raw materials for cosmetics. Our group specifies biodiversity conservation and sustainable use in the Sustainable Procurement Guidelines, which are presented to suppliers to seek their understanding. The status at suppliers is checked through CSR questionnaires.

### Reduction of environmental impact

We endeavor to reduce the biodiversity risk through environmental impact reduction activities in accordance with the Environmental Action Plan, environmental considerations based on the chemical composition design of products, and the provision of compliant products.

### Awareness raising of employees and collaboration with local communities

### The Sanyo Chemical Woodland project (Yubune district, Wazuka Town, Soraku-gun, Kyoto Prefecture)

We provided funds to the Forest Creation Fund of the Kyoto Model Forest Association to contribute to the development of a healthy forest through a tree-thinning project in Wazuka Town, Soraku-gun, Kyoto Prefecture. The project helps conserve species, increase CO<sub>2</sub> absorption by forests, cultivate water sources, and prevent flood damage. In collaboration with local governments, including Wazuka Town, our employees and their families as well as retirees participate in forest management of Yubune Forest Park as volunteers to raise awareness about biodiversity and ensure communication with local communities. We also make donations to the Keidanren Nature Conservation Fund every year.

Click  $\underline{\text{here}}$   $\blacksquare$  for forestry activities

# **Water Resources**

The Sanyo Chemical Group uses water resources in various aspects of manufacturing chemical products. We believe that it is our mission to endeavor to conserve water and reduce water pollution through wastewater discharged from our business sites.

### Policy

We work to reduce water consumption as one of the targets of our Environmental Action Plan 21-24.

Regarding reduction in discharge of water pollutants, we meet the values set in laws and regulations by preventing leakage at business sites and monitoring pollutants in wastewater.

# System

The Energy Conservation Promotion Dept. of the Responsible Care Division serves as the secretariat to manage the progress of measures, such as water conservation at respective business sites, and shares the information. The resulting measures are also deployed to overseas business sites.

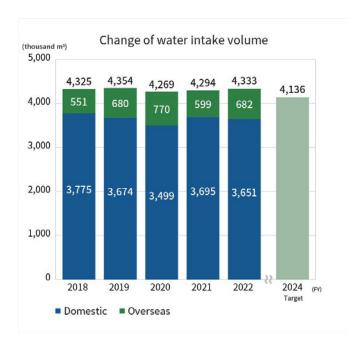
# Water consumption targets and results (domestic and overseas)

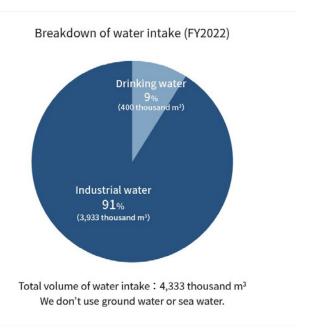
	FY2024 target	FY2022 target	FY2022 result	Rating
Water consumption	Less than 4,136 thousand m <sup>3</sup> ; 5% or more reduction compared to FY 2019	Less than 4,223 thousand m <sup>3</sup> ; 3% or more reduction compared to FY 2019	Less than 4,333 thousand m <sup>3</sup> ; 0.5% reduction compared to FY 2019	в — С
Reduction ratio from FY2019	5% or more	3% or more	0.5%	

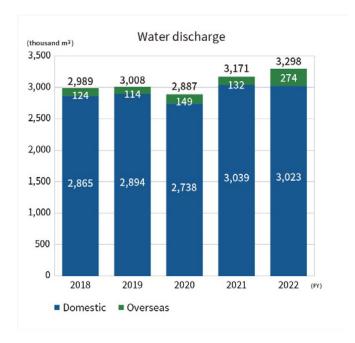
Note: A; Excellent B; Good C; Bad

# Reduction of water consumption

Regarding water consumption within our Group, industrial water accounts for about 90%. Industrial water is mainly used for manufacturing equipment and auxiliary equipment such as heating, cooling, and cleaning water as well as for wastewater equipment. Drinking water is used as a polymerization solvent and dilution water for products. It is also used for the cleaning of products, intermediate products, and manufacturing equipment. No groundwater or seawater is used. The production volume in FY2022 decreased by about 10% from the previous fiscal year. However, the consumption of heating and cooling water in manufacturing equipment and auxiliary equipment is not affected by increases or decreases in production volume. Water consumption decreased slightly in Japan and increased slightly overseas, adding up to 4,333 thousand m<sup>3</sup> in total (an increase of 1% from the previous fiscal year).





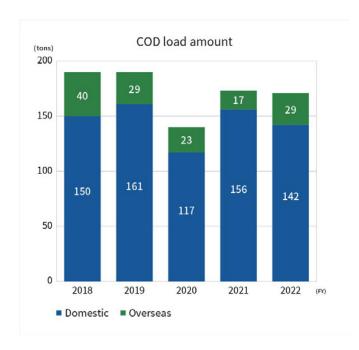


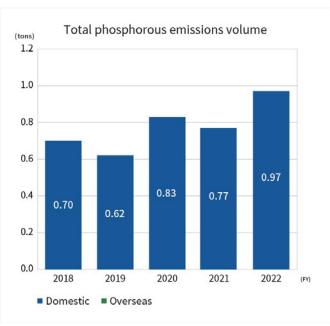
# Water conservation and recycling

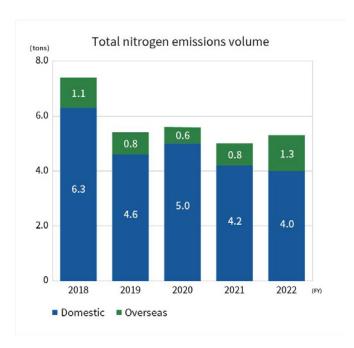
Polymerization water for polymer production and cleaning water for products and intermediate products are used repeatedly as much as possible. Steam drainage is reused as water. Water conservation and recycling themes are determined for respective business sites to reduce consumption.

### Reduction of water pollutants discharge

While preventing leakage at business sites, we monitor the concentration of pollutants in wastewater to ensure management within the regulation values set by laws and ordinances.







### Discharge area and environmental impact (domestic, FY2022)

	Unit	Nagoya area	Kawasaki area	Kashima area	Kyoto area	Kinuura area
Facilities		Nagoya Factory, SDP Global Co,. Ltd., San Nopco Ltd.	San Chemical Co., Ltd.	Kashima Factory, San-Petrochemicals Co., Ltd.	Kyoto Factory, Head Office, Research Laboratory, Katsura Research Laboratory	Kinuura Factory
Discharge area	ı	Ise Bay	Tokyo Bay	Sewage system	Sewage system	Sewage system
Water discharge volume	thousand m <sup>3</sup>	1,924	116	838	144	1
COD	tons	10.9	2.9	127.4	1.2	0.0
Total Phosphorus	tons	0.3	0.0	0.6	0.1	0.0
Total Nitrogen	tons	1.4	0.3	1.9	0.4	0.0

# Products that contribute to the conservation of water resources and the water environment

We offer a lineup of products categorized by the keywords of water conservation, wastewater treatment, and biodegradability, including raw materials for water-conserving compact detergents and polymer flocculants for wastewater treatment.

Click here of for products that contribute to reduction of environmental impact

# **Respect for Human Rights**

Since the 2000s, with the advancement of globalization of corporate activities, raw materials have been procured through various supply chains. In this situation, it has come to be noticed that such corporate activities affect labor and human rights in unexpected countries and regions. As a result, there has been an accelerated movement to require companies to manage their business in a way that respects human rights.

The Sanyo Chemical Group has set its Vision 2030: "Grow into a global, unique, and highly profitable company where every employee feels pride and satisfaction from his/her work." We believe that the success of diverse human resources is possible only when there is a foundation for understanding the human rights of each individual and recognizing their individuality and values. In addition, in order to advance our business activities in various regions of the world, we are required to address human rights issues, including labor-related rights for stakeholders involved in our business activities and throughout our supply chain. To address human rights issues, we formulated the Sanyo Chemical Group Human Rights Policy in March 2023. Going forward, we will proactively disclose information to reduce human rights risk both inside and outside the company, and promote initiatives such as establishing systems for human rights due diligence and remedies.

# **Human Rights Policy**

Our human rights policy is as follows.

# Sanyo Chemical Group Human Rights Policy

### 1. Basic attitude

As corporate activities become increasingly globalized, companies are expected to take the initiative in eliminating human rights violations from the perspective of creating an inclusive society. The Group will conduct management that respects the human rights of all people and recognizes that its business activities may have a negative impact on human rights. At the same time, we will work with our customers, business partners, suppliers, and government agencies to avoid such negative impacts, thereby gaining recognition from investors, customers, and society at large. We will also cooperate with diverse stakeholders to support the socially vulnerable.

### 2. Scope of application

This policy applies to all executives and employees of the Sanyo Chemical Group. The Sanyo Chemical Group will continue to encourage its customers, business partners, and suppliers to support this policy and participate in similar initiatives, and will work together to promote initiatives to respect human rights.

### 3. Responsibility to respect human rights

The Sanyo Chemical Group will fulfill its responsibility to respect human rights by not infringing on the human rights of those affected by its business activities and by taking appropriate measures to correct any adverse impact on human rights that its business activities may cause. If any adverse impact on human rights is caused by our customers, business partners, and suppliers, we will demand them to take appropriate action.

### 4. Compliance With applicable laws and regulations

The Sanyo Chemical Group will strive to understand internationally recognized human rights norms and the relevant laws and regulations in each country, including those stipulated in the following documents. Where local national laws and regulations are incompatible with internationally recognized human rights norms, we will seek ways to respect the latter

- International Bill of Human Rights: Universal Declaration of Human Rights and International Covenants on Human Rights (International Covenant on Civil and Political Rights / International Covenant on Economic, Social and Cultural Rights)
- International Labour Organization's (ILO's) Core Labour Standards (child labor, forced labor, freedom of association and the right to collective bargaining, elimination of discrimination in employment, etc.)
- United Nations "Guiding Principles on Business and Human Rights"
- · OECD Guidelines for Multinational Enterprises
- · United Nations Global Compact (voluntary efforts of companies based on the Ten Principles in the areas of human rights, labor, the environment, and anti-corruption)
- · ISO26000 "Guidance on social responsibility"
- Japanese government "Guidelines on Respect for Human Rights in Responsible Supply Chains"
- · UK Modern Slavery Act

### 5. Human rights due diligence

The Sanyo Chemical Group will establish a human rights due diligence system to identify adverse impacts on human rights, conduct preventive surveys and investigations, implement appropriate measures to correct adverse impact, and continue to strive to prevent and mitigate its adverse human rights impact on society.

### 6. Identification of human rights risks

The Sanyo Chemical Group has identified the following three items as outstanding human rights issues, and will continue to address these issues.

- · Labor in the supply chain
- · Employee safety and health
- · Human rights risks due to the effects of geopolitical situations and conflicts

### 7. Prevention and mitigation measures

The Sanyo Chemical Group will not engage in discrimination or acts that undermine the dignity of individuals based on factors such as thoughts, creed, age, social status, nationality, birthplace, ethnic group, religion, immigration, gender, sexual orientation, gender identity, pregnancy, poverty, disease, and disability. To that end, we will also strive to understand the issues faced by socially vulnerable people who suffer from discrimination and acts that undermine personal dignity based on these reasons, and cooperate with various stakeholders such as government agencies, local governments, and social welfare organizations to provide support.

### 8. Corrective and remedial measures

The Sanyo Chemical Group fully recognizes that human rights violations pose a management risk. It will prevent human rights violations and respond fairly and appropriately in the event of any human rights violations. It will not only oppose child labor and forced labor, but will also not use raw materials that are thought to have been produced by child labor or forced labor. It will also establish a whistleblowing contact point that allows anonymous reporting for internal employees, and will take necessary measures while appropriately handling the confidentiality of the whistleblowers and reported information. It will prohibit any disadvantageous treatment or retaliation against whistleblowers, and will ensure their protection.

#### 9. Education

The Sanyo Chemical Group will continue to provide appropriate education to ensure that a correct understanding of this policy is permeated both inside and outside the company, and that it is effectively implemented.

### 10. Information disclosure/engagement

The Sanyo Chemical Group will disclose the status of its efforts regarding Respect for Human Rights. It will also evolve a series of efforts based on this policy through dialogue and consultation with various internal and external stakeholders.

Established: March. 2023

# Human rights due diligence

We have included human rights due diligence in our recently formulated Human Rights Policy to strengthen human rights initiatives.

# Human rights considerations in the supply chain

We have clearly stated considerations for human rights in the supply chain in our Sustainable Procurement Guidelines, which were revised in January 2022, to inform our suppliers of human rights considerations. Currently, human rights issues expected to occur in the supply chain are attracting attention around the world, such as the ones listed below. We will act in a way that ensures that our business activities do not directly or indirectly contribute to or encourage human rights violations.

When procuring raw materials, we strive to follow the procedures detailed in the United Nations Guiding Principles on Business and Human Rights.

### Human rights issues in the supply chain

#### Procurement of raw materials R&D, Production, Delivery Use, Consumption, Disposal, Recycling **Employees** Suppliers Customers · Forced labor and child labor Unfair work environment and work conditions · Human rights violations through marketing or advertising · Conflict minerals · Labor accidents and health hazards · Use of products madeby parties that violate · Infringements of rights of indigenous people · Discrimination and harassment human rights and immigrants · Invasion of privacy · Damage to communities due to environmental Human rights violations in suppliers

# Human rights education and awareness

The Sanyo Chemical Group has clearly stated that it will continue to provide appropriate human rights education to ensure that a correct understanding of its Human Rights Policy, described above, is permeated both inside and outside the company and that it is effectively implemented. In FY2023, we will consider and implement the following initiatives.

- Human rights education and awareness for employees, etc.
- · Consideration of human rights due diligence
- · Corrective and remedial measures in the event of human rights violations
- Consideration of determination of purchasing prerequisites in the supply chain

### Prevention of harassment

Toward the realization of a workplace environment without harassment, we have undertaken various initiatives, such as awareness building and seminars, to prevent harassment. We will continuously improve our understanding and response on harassment, have a strong mind to "Not allow or commit harassment and not become an innocent bystander," strive for "open workplaces with good communication" and "safe and easy-to-work harassment free workplaces." Our group aims to be a company in which diverse human resources with diverse values can take pride and work with peace of mind.

In particular, to make it easier to consult about matters related to sexual harassment, maternal harassment, and LGBTQ discrimination, the Diversity Promotion Department has acted as an internal contact point, in addition to the whistleblowing contact point. We have also provided a consultation service at two external institutions with extensive experience in harassment counseling. In FY2022, four reports were submitted through these whistleblowing channels. We investigated the facts with the utmost care to ensure that whistleblowers are not disadvantaged. When a problem was identified, we provided guidance and education to the relevant person to rectify the situation. We also used our intranet to encourage all employees to raise their awareness of human rights.

# **Occupational Safety and Health/Accident Prevention**

Details of a fatal occupational accident on January 15, 2022

### Occupational Safety and Health/Accident Prevention

Chemical Group, which runs chemical businesses, is well aware that safety is the foundation of its business activities, and has been striving to achieve accident-free/injury-free operation. We sincerely regret the occurrence of a fatal accident in January 2022. The Group will redouble its efforts to ensure that all its managers and employees go back to the basics and remain committed to occupational safety and health and accident prevention in cooperation with its subcontractors.

# Details of a fatal occupational accident on January 15, 2022

A fatal occupational accident occurred on the premises of the Nagoya Factory (Tokai City, Aichi Prefecture) of Sanyo Chemical Industries, Ltd. Specifically, an employee of a subcontractor died during preparation for the resumption of production after periodic equipment repairs. We sincerely pray for the peaceful repose of the employee's soul, and extend our heartfelt sympathy to the family of the deceased. We also extend our deepest apologies for the aggravation and distress we have caused to all those concerned.

# Background of the accident

During the periodic repairs conducted from December 2021 to January 2022, a manhole\* cover of the equipment installed in the building was removed and reinstalled. The cover was not sufficiently tightened when it was reinstalled. In this state, nitrogen was fed in from the day before the accident to prepare for the resumption of production. This caused nitrogen to leak through the gap in the cover, filling the building with nitrogen. The victim passed through the area during this state, and thus the accident occurred. Since the accident, the Group has been providing full cooperation in the investigation by the relevant authorities.

\* An inspection opening for equipment maintenance, etc., allowing a person to enter and exit

# To improve essential safety

In response to this fatal accident, the Company established an accident response committee to investigate the cause, among other factors. At the same time, we conducted a comprehensive review of the risk of similar accidents occurring at other factories and research laboratories, and took countermeasures. We will continue to invest in safety measures at the factories by carrying out ongoing countermeasure works, such as enhanced ventilation and safety confirmation systems. In addition, after investigating the cause of the accident, we established a new permanent countermeasures committee, and have been studying ways to improve essential safety, including changing safety awareness.

In December 2022, we established a safety philosophy and a safety policy to ensure the Group's concerted efforts. We have also developed priority measures in the New Medium-term Management Plan 2025. We will certainly work on these.

### Safety philosophy

We place the highest priority on Safety and Compliance in all our business activities.

### Safety policy

Safety comes first. Recognizing that safety is the foundation of our business activities, and with a strong determination to ensure that no one will be injured or will injure others, we will work on the following as our basic policy.

- 1. Observance of basic safety rules
- 2. Execution of health and safety activities
- 3. Improvement of crisis management capabilities

# Fostering a safety-first mind led by the Safety Promotion Department

In order to ensure the implementation of the above initiatives, the Safety Promotion Department was newly established as an organization under the direct control of the President, incorporating the operations of the Environmental and Safety Administration Department of the Responsible Care Division and the Safety and Technology Education Center. We will foster a safety-first mind by changing safety awareness and deepening and expanding various measures.

# Strengthening risk assessment and developing human resources

We will strengthen risk assessment to mitigate risks. We will make long-term efforts to develop human resources capable of identifying risks and formulating mitigation measures appropriately, thereby improving the capabilities of each workplace.

# Expanding safety education to employees including subcontractors

In recent years, increased sensitivity to danger and education on safety behavior have become even more important. The Safety and Technology Education Center at the Nagoya Factory has already provided hazard simulation programs and rank-based training, but we will further enhance safety education. A curriculum suitable for subcontractors, who work alongside us at our business sites, will be introduced.

# Assessment of factory safety by an outside audit

In order to comprehensively assess our safety challenges and continuously improve our safety, we introduced a safety assessment by the Japan Industrial Safety Competency Center, a non-profit organization, and began the assessment of our Nagoya Factory in May 2023. We will operate it for other factories as well to address our safety challenges.

# **Occupational Safety and Health/Accident Prevention**

Details of a fatal occupational accident on January 15, 2022

**Occupational Safety and Health/Accident Prevention** 

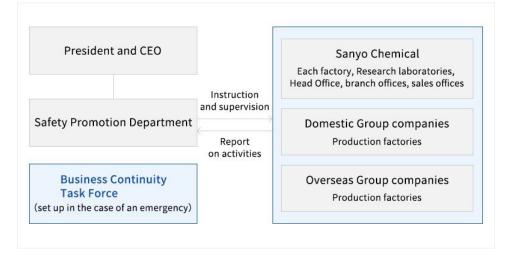
# Policy

In every business activity, we will address safety and accident prevention as the top priority. We will strive to operate with no accidents and no disasters, make contributions to social safety, protect employees' safety and health, and create a comfortable working environment.

# System

The Safety Promotion Department, which is under the direct control of the President, instructs and supervises the occupational health and safety and accident prevention in each base. In case of an emergency, a local emergency task force is established in the region where the emergency has occurred. Should a large-scale earthquake or other wide-area disaster occur, the Business Continuity Task Force will be set up at the Head Office to implement support and reconstruction activities on a company-wide level under the control of the General Manager of the Environment and Safety Headquarters designated by the President.

### System

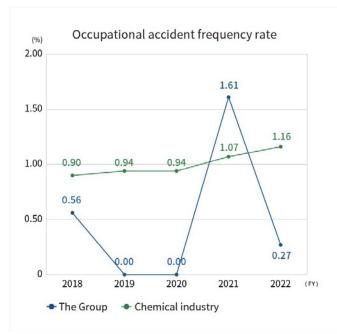


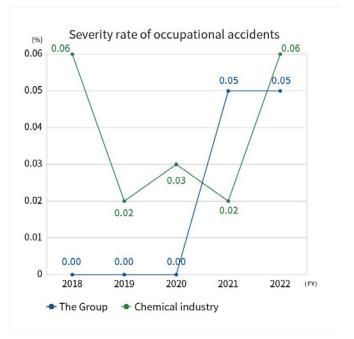
### Status of labor accidents

To achieve zero labor accidents, we are conducting activities under the main themes of risk assessment, creation of a workplace culture in which workers warn each other, thorough implementation of recurrence prevention measures, and achievement of safer work environments.

In FY2022, we had one occupational accident involving our employees with lost time and seven without lost time. As for dispatched employees/employees of affiliates, there were three occupational accident with lost time and five without lost time. We have investigated the actual causes of the accidents by using the five whys method\*, implemented recurrence prevention measures, and rolled out important countermeasures to all Group factories in Japan and abroad.

\*A technique to verify the effectiveness of countermeasures against a certain problem, by examining the direct cause of the problem (why did it occur) and by repeating the question "Why?" to determine the root cause.





<sup>\*</sup> Frequency rate = (Number of employees subject to accident with lost time) + (total working hours) × 1,000,000

This value indicates the frequency of accident victims (Group company employees) per 1 million hours.

# Safety and Technology Education Center

In 2012, we established the Safety and Technology Education Center at the Nagoya Factory aimed at improving safety education and production technology (the facilities and operations have now been reorganized under the company-wide Safety Promotion Dept.). The center is equipped with devices for experiencing the dangers of occupational accidents including flight simulators that reproduce the production equipment, allowing the study of work facility principles and theories. Up to now, education has been provided to more than 3,000 employees of our company and affiliates. In the center, by making videos simulating accidents that have occurred in our company, safety education is provided to young workers.

### Risk assessment

With the revision of the Industrial Safety and Health Act, the number of chemical substances subject to risk assessment will be gradually expanded. We will conduct systematic risk assessments of target substances handled at our factories and research laboratories, and take necessary risk mitigation measures.

<sup>\*</sup> Severity rate = (labor lost days) + (total working hours) × 1,000

This value indicates the severity of accidents per 1,000 working hours

# Monozukuri Transformation (Manufacturing Innovation) Promotion Project

Envisioning where we want to be in five or 10 years, under the slogan of the Production Division "Change to be safer, more comfortable, and stronger!", in order to innovate our manufacturing, in April 2021, we launched a project consisting of two project teams, automatization/mechanization (Monozukuri Transformation) and digitalization/work efficiency improvement (work style reform practices).

However, we decided to conclude this project in March 2023 after reviewing two years of activities, and after selecting themes to be continuously promoted, we will work on these themes at each factory. Going forward, we will proceed with Manufacturing Innovation as a company-wide project aimed at improving productivity and profitability through fundamental improvements in manufacturing processes. In July 2023, we established the Monozukuri Transformation Center within the Nagoya Factory as an organization to promote this project. At the center, we have resident researchers, who are responsible for the stabilization of production, process optimization, automatization, and labor saving through genchi genbutsu (going to see for yourself to thoroughly understand the situation).

# Kyoto Factory's "activities that listen to the opinions of subcontractors" received the Responsible Care Excellence Award from the Japan Chemical Industry Association.

There might be something that employees of subcontractors, who are essential to the production activities at the factory, feel subconsciously but find it difficult to express. In order to respond to this situation, we have started Hospitality Activities for Subcontractors, in which we make suggestions to subcontractors to make improvements, in addition to our previous efforts to make improvements in response to their suggestions and requests. Specifically, in addition to the existing rest areas in the factory, we have installed easily accessible rest areas near the workplaces of subcontractor employees to make it easier for them to take frequent breaks and drink water. As measures against heatstroke, we have also installed mist showers and have provided heatstroke prevention goods to workers who work for long hours under the scorching sun. These efforts to improve labor safety and health have been very well received by subcontractor employees. As a result, in recognition of the following aspects of these activities, in May 2023, we received the Responsible Care Excellence Award from the Japan Chemical Industry Association. First, these activities have been undertaken from the perspective of subcontractor employees. Second, a wide range of opinions from subcontractor employees have been reflected in improvements to the work environment, including the installation of new rest areas and the implementation of numerous measures to prevent heatstroke. Third, this has been effective in deepening communication between our employees and subcontractor employees.



# Safety/accident prevention activity

In order to ensure safe business operation and business continuity, we implement countermeasures for interruptions in both hardware and software. Having set the response/action plan in case of an emergency, we conduct training in accordance with it.

### Unusual situation handling training and emergency response Training for handling unusual situation and emergency response

In the education/training curriculum implemented at facilities, education concerning environment and safety/accident prevention practical training are incorporated, while we repetitively conduct emergency drills and other training in case of an earthquake, fire, and leakage regularly. We also conduct training in cooperation with the local community that includes joint training with neighboring factories of other companies and the local fire departments.

On the Company-wide Safety Day (October 2) established for the purpose of remembering the past serious occupational accidents, we hold various safety-related events in all areas of each domestic and overseas facility, including emergency training, disaster drills, emergency notification training, safety patrols, and cautionary lectures on safety while taking countermeasures against COVID-19.



Kashima Factory: Safety talk by subcontractors



Nagoya Office in SAN NOPCO LIMITED: Safety patrols by managers



Sanyo Kasei (Thailand) Ltd.: Safety patrols

### Earthquake countermeasures

Since the Great Hanshin-Awaji Earthquake in 1995, we have continued to reinforce our buildings and production facilities against earthquakes. We have also been working on the establishment of a BCP (Business Continuity Plan) since 2007, and based on the experience of the Kashima Plant being damaged by the Great East Japan Earthquake in 2011, we continue to conduct BCP drills and review response manuals and other documents.

### Efforts for predictive maintenance

Using artificial intelligence (Al) and digital transformation (DX), we have started predictive maintenance, which measures and monitors the condition of equipment to replace or repair parts and other components at the appropriate time. As a result, we believe that this will curb unnecessary parts replacement and unexpected troubles compared to the method of periodic maintenance.

We have also introduced smart glasses that allow skilled workers to view images and give instructions from outside the plant.

Other initiatives at each plant are shared through web-based communication tools and company-wide presentations at safety conventions to help strengthen accident prevention measures

# Internal environment, safety, and accident prevention audit (RC audit)

Targeting at the factories and research departments, Responsible Care Headquarter conducts audits concerning environment, safety, and accident prevention by visiting each facility once a year. In FY2022, the department conducted audits for status of horizontal development of accident countermeasures, the observation of compliance with laws and regulations, leak prevention measures, and risk assessment.

As we discontinued the ISO 14001 certification for domestic factories, the audit of the environmental management is also undertaken.

# Quality

As a chemical manufacturer, Sanyo Chemical's mission is to provide products that customers can use with peace of mind. To this end, it is necessary to design products to ensure safety at the product design stage and manufacture them under reliable quality control, in order to offer them to the market while assuring their quality.

# Policy

We have set out the following in Section 6 (Implementation of PL and product management) of our CSR Guidelines:

"Throughout the entire product lifecycle ranging from product development through manufacturing and use to disposal, we will implement product safety measures with top priority placed on safety and conduct strictly product management. We will also provide appropriate information and faithfully respond to inquiries and complaints."

# Organizations related to quality assurance, quality control, and product liability (PL) and their roles

Products produced in the Production Division are tested and inspected by the Inspection Dept. within the Division, and quality judgments are carried out by the Quality Management Dept. (Sect.), which belongs to the Responsible Care Division and is stationed in each factory. In this way, by ensuring independence, we aim to strengthen governance. The Quality Management Dept. (Sect.) is also responsible for leading quality control to minimize the occurrence of complaints and nonconforming products at each factory.

The Products Evaluation Dept. of the Responsible Care Division is a department that specializes in product liability (PL), and conducts product compliance reviews with domestic and international laws and regulations, label and safety data sheet (SDS) reviews, voluntary management of chemical substances, and customer services.

In the event of PL-related deliberations, accidents or complaints, we will convene an investigative meeting and a countermeasure meeting to deal with them accordingly. In FY2022, there were no PL-related deliberations, accidents, or complaints.

### Organization



### Provision of safe and secure products

By communicating with customers, we understand their needs in terms of performance, quality, and the environment, introduce products and develop new products that meet those needs, and provide appropriate technical and safety information concerning our products.

For newly marketed products, we have employed a system to start sales only after we understand the intended use of the customers and confirm the compliance of the products with the customers' requirements, including green procurement and use of non-conflict minerals. We also set a rule to eliminate chemical substances that do not comply with the customers' needs early in the product design stage.

### Positive quality control

We produce and market approximately 3,000 types of performance/chemical products.

Our domestic and overseas factories have acquired ISO 9001 certification and built quality control systems in synergy with the quality control system of our company.

In case quality issues occur, we will immediately investigate the cause, draft recurrence prevention measures, promptly respond to customers, and share the information concerning the issue among group factories to horizontally develop countermeasures.

# Export control: Export Administration Committee, Export stop system

The export of chemical products may be restricted due to the Export Trade Control Order in Japan, laws/regulations of destination countries, or international treaties. In order to observe those rules, we have incorporated an export stop system in our order system.

When making entry of an order, the system rejects products not registered in our export control database. Products Evaluation Department closely examines and inputs information into the database serving as the foundation of this system, such as product chemical compositions and their status in other countries and any restrictions imposed by any laws or regulations. The Export Administration Committee discusses and examines our group's compliance to laws and regulations in concerned countries and then implements changes as necessary.

### Product safety design and Provision of product safety information

At the product design stage, we design compositions that exclude prohibited substances stipulated by our chemical substance management regulations, as well as prohibited and restricted substances/substances to be reduced that are stipulated by our customers' green procurement standards. After confirming that the designed composition complies with domestic and international laws and regulations and undergoing a safety data sheet (SDS) and label review, we commercialize the relevant products.

Click here for the design management

When we introduce our product sample, we also submit the SDS at the same time so that the customer can check the technical features and the safe handling methods.

Following the revision of laws related to chemical substances, including the Chemical Substance Control Law, Industrial Safety and Health Act, PRTR Law, and Poisonous and Deleterious Substances Control Act, we revised the SDS and product label accordingly.

To each driver of trucks and tanker trucks that transport our products, we issue a yellow card with first-aid methods and emergency contact information so that they can appropriately respond in case of an accident during transportation.



# Communication with customers

We are striving to disseminate our new product and technical information through press releases, press conferences, and other means, as well as direct communications with customers at exhibitions and wherever possible. On the product search page of our website, it is possible to search not only by function, application, and composition, but also by social needs.

Click here for Products Information

We launched our website to introduce resin/functional chemicals and explain our product/technical information. The website contains detailed information to deepen understanding of our performance chemicals, such as each product's features and use applications, explanations of functions, and other basic knowledge.



Click here for Product & Technology Site

# GPS (Global Product Strategy) / JIPS (Japan Initiative of Product Stewardship)

We participate in GPS (in Japan, JIPS led by the Japan Chemical Industry Association), which is an international voluntary initiative for chemical product management promoted by the International Council of Chemical Associations (ICCA). Based on GPS principles, we prepare and publish safety summaries of chemical substances.

These are summary documents that compile the safety data for chemical products and risk assessment that takes into account the supply chain. We have created safety summaries for the following chemical substances.

Substance name	CAS No.
2-(Dimethylamino)ethyl methacrylate	2867-47-2
Poly(oxyethylene)nonylphenyl ether Ethylene oxide 3 $\sim$ 10 mole	9016-45-9
Poly(oxyethylene)nonylphenyl ether Ethylene oxide 11∼15 mole	9016-45-9
Poly(oxyethylene)nonylphenyl ether Ethylene oxide more than 16 mole	9016-45-9
Poly(oxyethylene)alkylether (alkyl group:C12 $\sim$ C15) Ethylene oxide 2 $\sim$ 4 mole	9002-92-0
Poly(oxyethylene)alkylether (alkyl group:C12 $\sim$ C15) Ethylene oxide 5 $\sim$ 10 mole	9002-92-0
Poly(oxyethylene)alkylether (alkyl group:C12~C15) Ethylene oxide 11~19 mole	9002-92-0
Poly(oxyethylene)alkylether (alkyl group:C12~C15) Ethylene oxide more than 20 mole	9002-92-0

# **Sustainable Procurement**

At Sanyo Chemical Industries, Ltd., we believe that it is important to improve CSR in procurement while collaborating and cooperating with our business partners throughout the supply chain. Sanyo Chemical Industries, Ltd. signed the UN Global Compact (UNGC), a global framework for achieving the Sustainable Development Goals, on March 5, 2021, to further promote sustainability as a group. In addition, we used this opportunity to review our previously established "purchasing policy" and to formulate a "sustainable purchasing policy" in January 2022. Under this policy, we aim to promote procurement activities that contribute toward realizing a sustainable society.

# Sustainable Purchasing Policy

- 1. We conduct procurement activities based on social common sense and corporate ethics in addition to ensuring compliance, and strive to cooperate with our business partners, and build relationships based on trust.
- 2. We provide fair business opportunities to both domestic and overseas companies and conduct procurement activities from a global perspective.
- 3. We consider various conditions such as the quality, price, and stable supply of materials and raw materials in procurement activities. Moreover, we make efforts to set appropriate prices and maintain and improve quality in cooperation with our business partners. Simultaneously, we promote green procurement in terms of environmental conservation and chemical substance control.
- 4. We aim to create a sustainable society throughout the supply chain in conjunction with our business partners to fulfill the corporate social responsibility, including considerations related to the global environment and protection of human rights and the working environment.

### Sustainable Procurement Guideline

As a tool for collaborating with our business partners to create a sustainable society, we have summarized in our Sustainable Procurement Guidelines not only what we should do, but also what we would like our business partners to do. The guidelines present specific actions based on the Ten Principles of the United Nations Global Compact from seven perspectives: sound corporate management, fair corporate activities, the environment, human rights, labor, quality & safety, and coexistence with local communities. We post our purchasing policy and these guidelines on our website and attach them to CSR questionnaires to our business partners to ensure that they are widely known and understood.

## At the start of a business transaction

We ask our business partners to submit the following documents before starting a transaction. Based on the contents of these documents, we understand, evaluate, and share the status of CSR activities, sustainable procurement, and green procurement promotion with our business partners, aiming to improve the level of sustainable procurement together.

Documents necessary for raw material adoption

- (1) Raw Material Supply Specifications Excel
- (2) Safety Data Sheet
- (3) Certification of Specific Chemical Substances (Non-use warranty of RoHS substances ) Excel 🗵
- (4) Investigation Report of Environmental Management and Chemical Substance Management  $\underline{\text{Excel}}\ \ \underline{\ \ }$
- (5) CSR Questionnaire Excel ☑

# CSR questionnaire

The CSR questionnaire uses the Global Compact Network Japan's Self-Assessment Questionnaire (SAQ) to quantify the extent to which our business partners meet the requirements of the United Nations Global Compact. For items that do not meet the requirements, a message will be sent to them to urge improvement.

In FY2022, we asked suppliers of our key raw materials to complete a questionnaire and received responses from all of them. As a result, it was found that many of our key raw material suppliers were large global companies and generally obtained high evaluation points. Although there were some responses that scored below 80 points when viewed by item, it was confirmed that although the relevant suppliers had a CSR policy and management system in place, they just lacked a system for checking and correcting the situation.

#### SAQ response results for our key raw material suppliers

Evaluation	Average point out of 100
Corporate governance	98
Human rights	98
Labor	98
Environment	98
Fair corporate activities	100
Quality & Safety	100
Information security	98
Supply chains	97
Community	98



Note: The results of all 114 questions (out of 5 points) were averaged for each evaluation item and displayed on a 100-point scale

In FY2023, we will conduct a questionnaire survey mainly of suppliers of oils and fats who may pose risks in terms of labor and human rights, and evaluate them to improve the level of sustainable procurement.

### RSPO certification

For palm oil, problems have been pointed out in terms of ecosystem collapse, labor, and human rights violations during cultivation and production. To resolve these problems, the Roundtable on Sustainable Palm Oil (RSPO) has established a palm oil certification system. From a sustainability perspective, it has become necessary to procure and use palm oil (derivatives) that is properly managed in the supply chain. Accordingly, we joined the RSPO in 2013 and obtained an RSPO certification for our Head Office, the Tokyo branch office, and domestic factories (Nagoya, Kashima, Kyoto, and Kinuura Factories) under the mass balance method\* in January 2023. As part of our supply chain management, the Group will also require its suppliers to procure and use properly managed palm oil, expand the use of certified palm oil, and promote the establishment of a system for sustainable procurement and supply of raw materials.

\* Mass balance method: RSPO has three certification models (Identity Preserved, Segregation, and Mass Balance) and one credit model (Book & Claim).

The mass balance method is a certification model in which certified oil is mixed with non-certified oil in the processing and distribution process. Although the physical product includes non-certified oil, the quantity of certified palm oil supplied from certified plantations and oil mills is guaranteed.

### ISCC certification

The ISCC (International Sustainability and Carbon Certification) PLUS certification ensures that biomass-derived raw materials are properly managed in the sustainable, traceable, deforestation-free supply chain. Regarding polyethylene glycol (PEG) derived from biomass, we obtained ISCC PLUS certification under the mass balance method for our Head Office, the Tokyo branch office, and a domestic factory (Nagoya Factory) in May 2023. PEG is a polymer obtained by adding ethylene oxide to ethylene glycol and water and used in a wide range of industrial applications such as cosmetics, toiletries, and resins, as well as pharmaceuticals. We will continue to contribute to the realization of carbon neutrality through the use of biomass resources.

### Conflict minerals

Minerals (conflict minerals: particularly gold, tantalum, tungsten, and tin) mined in the Democratic Republic of the Congo and surrounding countries in Africa, which are conflict zones, have been a source of funds for the activities of local armed groups. The armed groups are said to be forcing local residents to work in mines in inhumane conditions.

Companies are required to carefully examine their supply chains, and avoid and mitigate risks in order not to contribute to human rights violations and conflicts by armed groups through their corporate activities.

Our Sustainable Procurement Guidelines state that "we ensure supply chain transparency and are not involved in conflict mineral procurement, crime, etc." We investigate whether the raw materials that we procure contain conflict minerals and confirm their country of origin, and require our suppliers to do the same. Based on these investigation results, we respond to customer requests regarding conflict minerals.

### Implementation of a BCP for raw materials

To ensure business continuity in the event of a disaster (natural disaster, large fire, terrorist attack, etc.), we work with our business partners to implement a BCP(Business Continuity Plan) for raw materials. We work on purchasing raw materials from multiple sources, consolidating similar raw materials, and securing multiple bases on the supplier side.

# **Human Resources**

Human Resources (HR) Development

Diversity, Equity & Inclusion (DEI)

**Work Style Reform** 

Health and Productivity Management

Based on our company mission, "Establish a better society through our corporate activities," we have set our Vision as "Grow into a global, unique, and highly profitable company where every employee feels pride and satisfaction in his/her work." We have also set out the following three values as our important values: (1) Inspire WakuWaku feeling from all stakeholders, (2) Co-create environmental, social and economic value with the stakeholders, and (3) Facilitate every employee's own value creation.

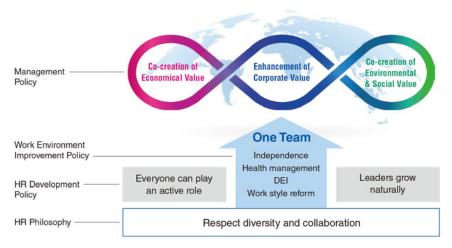
To realize our Vision, we will continue to take on challenges with a sense of speed while combining the power of the Group and all of our stakeholders, in order to create innovations beyond the boundaries of chemistry based on new ideas of diverse individuals. We will also co-create environmental, social, and economic value with our stakeholders to increase our corporate value

To promote changes toward the Vision, we believe that it is important to create a company in which each and every employee can be excited ("WakuWaku") based on the idea that "Every department is a profit center" (each and every diverse employee from all walks of life plays a leading role).

Based on this belief, we have established our HR Philosophy as "Respect diversity and collaboration." Our goal is to create new value through the synergistic effects of individual connections based on mutual recognition of each other's individuality. Under this philosophy, we will foster job satisfaction and pride in each employee based on our HR policy, "Create an environment in which individual abilities can be maximized." Specifically, we will develop a grade system that makes better use of capabilities, a compensation system based on competence and roles, and a fair and transparent evaluation system. We will also carry out human resource development while being conscious of the learning that individuals require, such as strengthening management skills, deepening specialization, and reskilling.

HR Philosophy	Respect diversity and collaboration	
HR Policy	Create an environment in which individual abilities can be maximized	

Image of the connection between human resources philosophy, human capital, and management policies

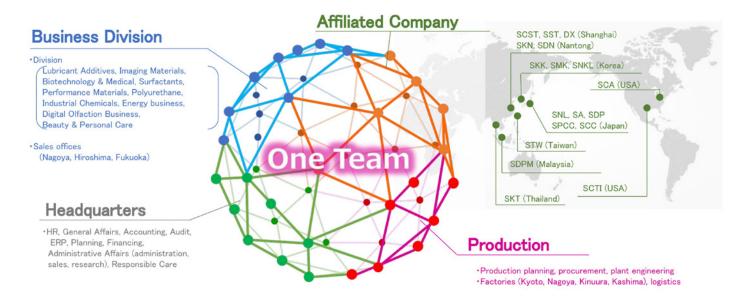


In accordance with our motto, "Every employee in various situations plays a leading role," which includes overseas and production sites employees as well as at our head office, we are determined to spotlight everyone so that every employee can shine and experience a sense of accomplishment. We have the concept that "Every department is a profit center" which expresses the essence of this idea. We believe that being a company where every employee can be excited (WakuWaku) is key to transformation toward our vision.

Sanyo Chemical group will actively put effort into the resolution of diverse issues for a better sustainable society. Therefore, while placing importance on each and every employee's job satisfaction, including global staff (locally hired employees of overseas affiliates), we will take on the challenge along with all stakeholders toward "An exciting (WakuWaku) future."

# Every department is a profit center

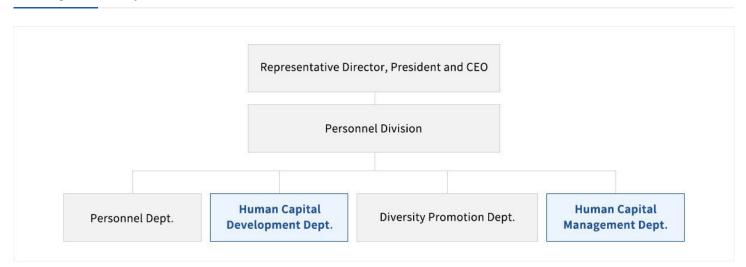
- Every employee of the Sanyo Chemical Group plays a leading role.
- Promoting WakuWaku works by spotlighting everyone.



# Policy

The Group has long been committed to "people-oriented management," and has established systems that allow everyone to take on challenges on their own initiative, aiming to be a company in which each and every employee can grow together with the company and feel job satisfaction and happiness. We position human resources as the driving force that creates innovation toward the realization of our Vision. Aiming to spotlight everyone and to promote changes in an exciting way ("WakuWaku"), we set our HR Development Policy to "have everyone play an active role" and "develop an environment in which leaders (successors) grow naturally." Under this policy, we will strengthen our human resource base to support our sustainable growth.

# Management System



# Personnel affairs/education system for fostering employee's challenge spirit

We have a personnel affairs/education system for employees to develop their capabilities and nurture their desire to take on new challenges.

We also have the following systems; self-development support centered on ON-JT (On the Job Training), OFF-JT (Off the Job Training), online English conversation, upskilling/career development education including Dojo, a place for dialogue between top management and employees, global human resource development education as well as our Unique Challenge System.

# a. Everyone can play an active role

Believing that a "strong organization (One Team)" composed of "strong individuality" (each playing a leading role) will create new value, we will proceed with each measure.

# Strong individuality

or one marviduality		Target			
Measure	Details	Item	Current situation	Target value / Vision	Achievement time (FY)
Ensuring that everyone can play an active role	To provide an environment in which all employees can play an active role regardless of their course, we unify the grade system from the current generalist and specialist positions to an associate position.	Establishment of a course system	There is a distinction between generalist and specialist positions (as of March 2023).	Unification of courses	2023
Supporting proactive challenges and independent learning	<ul> <li>We improve existing systems, such as the "Internal multiple role system" that allows employees to take on challenges in work that interests them, "Awards from General Managers to encourage challenges" that encourage employees to propose their ideas to do to executives, the "Challenge contract system," "Commendations from the president," "JET," and "Training retreats," to make them more user-friendly for active utilization while incorporating opinions from on-site employees.</li> <li>We establish a new career development training program in which employees understand their strengths and weaknesses, make efforts to increase their value, envision a career that continues to grow, and consider how to implement their career goals to contribute to the organization. We also conduct a training program in which the superiors of these employees who have envisioned their future careers consider how to support them.</li> <li>By actively implementing rotations both within and between divisions (functions), we provide opportunities for employees to acquire diverse and wide-ranging knowledge and experience. We also conduct aptitude tests for all employees and compile personnel data so that we can implement rotations based on the characteristics of each employee (the right person for the right job).</li> <li>We continue to conduct training programs, such as the "Study abroad system," "Overseas training," and "Language training," to develop human resources who can play an active role on the global stage.</li> </ul>	Creation of a spirit of challenge	There is a mix of proactive and passive people.	A state full of human resources with a spirit challenge and a strong desire to grow	2027

### Strong organization

		Target			Achievement
Measure	Details	Item	Current situation	Target value / Vision	Achievement time (FY)
Organizational evaluation system	We introduce an organization evaluation system with the aim of maximizing organizational performance. We create a state in which each organization sets an organizational goal toward its vision (Wakuwaku vision), with everyone in the organization taking action toward the organizational goal.	Achievement rate of organizational goals	_	80% or more	2025

### b. Development of an environment in which leaders (successors) grow naturally

We believe that the ideal environment is one in which candidates for future management or key positions in major businesses and functions are growing naturally. To achieve such an environment, we will first work on measures to develop leaders systematically. Then, we will develop an environment in which more and more employees will see the careers of those who grow into leaders and want to become leaders themselves, and realize their goal.

		Target			Aghiovement
Measure	Details	Item	Current situation	Target value / Vision	
Systematic leader development	We regularly hold human resource development meetings to select candidates for the next leaders and discuss a leadership development plan, thereby identifying missing human resource requirements. We provide training for selected leadership candidates to enable them to see the company from a manager's perspective and acquire the skills to formulate strategies. We implement rotations to fill missing human resource requirements. We provide career training to discover young employees who envision their career paths and want to take on the challenge of becoming a leader.	Number of leadership candidates	A state in which leadership candidates are not identified	A state in which there are enough leadership candidates for each position	2027

### Work environment improvement

Aiming to become a company in which all employees can work in good health and with peace of mind while valuing their individuality, we will promote efforts to reform work styles, diversify human resources, and create a work environment in which all human rights and diverse values are respected and accepted and in which all employees are encouraged to perform active roles.

# Education/training system

We have developed an education system based on our "Skill and Training Map" which summarizes the skills and knowledge of each role. We introduced Online language (English, Chinese) training programs and e-learning system, to help employees enlighten themselves and develop their individual capabilities.

### Education system in accordance with job rank

Role	(1) Upskilling/career development			(2) Global human resource development	
Role	Rank based education	Selective training	Educational Programs	(2) Giobal Human resource development	
Managerial staff	Promotion training – near future forum	Executive candidate training	New technical school, Law course, Training Program, Open seminar, JET, Online English lessons, Online Chinese lessons	Study abroad, Overseas training,	
Chief	Promotion training – future forum	Offshore training		Open seminar, JET,  Language training, Expatriate staff developme	Expatriate staff development
Deputy chief or lower rank	Promotion training – long-term forum	Trainer training		Education of overseas group educations	

### (1) Upskilling/career development

Law course	Explanation of details of important laws, including Chemical Substance Control Law, Lectures on regulations on insider trading through e-learning, Lecture classes on Export Trading Control Order (for sales personnel), etc.
Training Program for research section	<ul> <li>Research basics course: basic chemistry necessary for product design; 56 trainees completed the course in FY2022</li> <li>Prepared 12 kinds of training using outside vendors, total of 56 people took lectures such as MOT schools, coaching training, critical thinking training, and design thinking training in FY2022.</li> <li>e-learning (GLOBIS unlimited learning, Udemy): total of 230 persons took lectures</li> </ul>
Forum	Informal seminar offers an opportunity for dialogue between managerial staff and employees; dialogues took place 12 times in FY2022
JET (Job Exchange Training)	Training in which two employees from different departments switch workplaces for about one month to experience different work. Its purpose is diversification of the capabilities of individuals.

### (2) Global human resource development

Study abroad	For the purpose of acquisition of MOT (Management of Technology) and MBA (Master of Business Administration) degrees at overseas universities; one person studied abroad in FY2022.
Overseas training	Language learning and experience in the business field at overseas affiliates* *No implementation of overseas tanning program in FY2022 due to COVID-19
Expatriate staff development program	Education targeted for employees posted overseas; one trainee in FY2022

# Awards system

Awards from president	The managerial staff gives awards to people for their performance at various points in time. Voluntary challenges are highly rated. 33 cases in FY2022.
Awards from general managers to encourage challenges	Award given when the general manager or other executive recognizes through operations that actions, such as voluntary challenges and innovations, have begun to thrive (e.g. start of implementation): 522 cases in FY2022
INVENTOR OF THE YEAR	Aside from special awards, the best patent among invention patents in the corresponding year is awarded.

### HR Development lecture sessions hosted by the labor union

With a union shop system, in which all employees except managers join the labor union, we work to build relationships that emphasize dialogue and cooperation between labor and management. As part of the activities of the labor union, it holds HR Development lecture sessions, inviting experts and celebrities, with the aim of developing human resources, who are the assets of the company. The sessions are attended by not only union members but also managers and executives. In FY2022, the following lecture sessions were held in an online live distribution format (22nd session) to prevent the spread of COVID-19 and in a hybrid format (23rd session) that combines an online distribution with on-site participation. Both sessions were attended by over 100 online participants, with approximately 20 on-site participants in the 23rd session.

• 22nd session: "Organizational design for cross-cultural communication—Leading to the growth of employees and the company"

Lecturer: Mr. Jeff Berglund [Professor at Kyoto University of Foreign Studies, Kyoto International Tourism Ambassador]



Mr. Jeff Berglund [Professor at Kyoto University of Foreign Studies, Kyoto International Tourism Ambassador]

23rd session: "Mental coaching that changed Japan's national rugby team—Leadership that revitalizes the organization"
 Lecturer: Ms. Kaori Araki [Visiting Professor at Juntendo University, chief consultant at CORAZON Co., Ltd.]



Ms. Kaori Araki
[Visiting Professor at Juntendo University, chief consultant at CORAZON Co., Ltd.]

# **Human Resources**

Human Resources (HR)
Development

**Diversity, Equity & Inclusion (DEI)** 

**Work Style Reform** 

Health and Productivity Management

Aiming to be a company in which all employees can work comfortably with peace of mind while valuing their individuality, the Sanyo Chemical Group promotes "DEI (Diversity, equity & inclusion)" to create a work environment in which all human rights and diverse values are respected and accepted, and in which all employees are encouraged to perform proactive roles. In the promotion of DEI, the perspective of equity is particularly important, as it leads to the valuing of individuality. We will contribute to the creation of a sustainable society by generating added value through a combination of diverse needs and the ideas and technologies of each of our employees.



### What is Sanyo Chemical's DEI?

Diversity Diversity: Respecting differences

Our company is full of diversity in terms of age, gender, values, disabilities, career, educational background, family environment, nationality, personal background, and other factors. We respect and acknowledge each other's differences to build a work environment in which everyone can work with a peace of mind.

Equity Equity: Ensuring fair treatment

[Equality] = Giving the same thing to everyone, without considering individual differences

[Equity] = Taking individual differences into consideration and giving each person what is appropriate to achieve their goals

From the perspective of fairness, which focuses on the differences between each person, rather than equality, we will develop systems and initiatives tailored to the working conditions and environment of each employee.

nclusion Inclusion: Increasing a sense of belonging to an organization

This refers to recognizing and accepting each other's individuality and working together as one. A diverse and equitable organization is not necessarily one in which employees feel a greater sense of belonging. Recognizing that unconscious bias and assumptions may exist, we strive to improve psychological safety within the company to create an environment in which diverse individuals and groups are respected, supported, and valued.

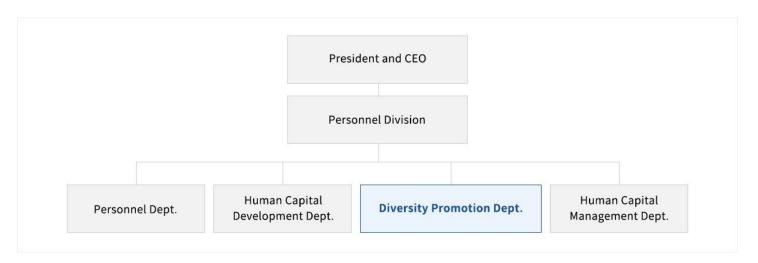
## Targets and Results

Measures	Contents and items	Target value (deadline)	Current status	Evaluation
Overall DEI promotion	Confirmation of various initiatives	D&I AWARD 2022 certified (the highest rank)	Certified in FY2022	А
Empowerment of women	<ul><li>(1) Female leader ratio</li><li>(2) Female manager ratio</li><li>(3) Female director ratio</li><li>(4) Female director ratio</li></ul>	(1) 15% or more (FYE2023) (2) 6% or more (FYE2023) Note: (1) and (2) are targets based on the 3rd Action Plan [Period: April 2021 - March 2024]. (3) More than 30% (FYE2030) (4) 100% (FYE2025)	(1) 15.2%*1 (2) 4.9%*1 (3) 22.2%*1 (4) 98.2%	(1) A (2) C (3) C (4) B
LGBTQ	Raise awareness internally and externally.	PRIDE Index 2022, Gold certification	Certified in 2022 (four consecutive years)	А
People with disabilities	<ul><li>(1) Support for continued employment</li><li>(2) Employment rate</li></ul>	(1) Institutional structure (FYE2023) (2) 2.5% (FYE2024)	(1) Proceed (2) 2.06%* <sup>2</sup>	(1) B (2) D
Foreign nationals (non-Japanese)	Number of foreign employees hires	2 or more hired each year	2 people	А

Rating guideline A: Target achieved B: Steady progress C: Target not achieved despite improvement (or progress) D: Target substantially missed or efforts insufficient

# DEI promotion system

Since its founding, the Sanyo Chemical Group has promoted "people-oriented management" based on its company mission, "Establish a better society through our corporate activities," with the aim of becoming a global, unique, and excellent corporate group. In addition to improving our economic and social factors, we value the job satisfaction, pride, and happiness of our employees. Therefore, we have worked from an early stage to create an environment where it is easy for women to work and have introduced various systems aimed at supporting a balance between work and family life under the Act on Advancement of Measures to Support Raising Next-Generation Children. In FY2014, we established a women's empowerment promotion section and consultation service. Based on the Act on the Promotion of Women's Active Engagement in Professional Life, we have shifted our focus from supporting the continued employment of women to promoting the active participation of women, accelerating various initiatives. In FY2019, we established the Diversity Promotion Department within the Personnel Division to further accelerate support for not only women but also minorities in the company, including LGBTQ people, with the aim of strengthening our DEI promotion system.



The Group has set the promotion of DEI as a material issue in its management policy "WakuWaku Explosion 2030" and the New Medium-Term Management Plan 2025. In FY2021, we decided to designate December of each year as "Diversity Month" to conjunction with Human Rights Week (from December 4 to 10 every year). DEI-related lecture sessions and events are held during Diversity Month. Thus, we are working to further change the mindset of all executives and employees.

#### **Examples of activities during Diversity Month**

Seminar to understand DEI / IKUBOSU lecture / Salon for LGBTQ people / Diversity menu provided at a company cafeteria

<sup>\*1</sup> As of March 31, 2023

<sup>\*2</sup> As of June 1, 2023

# Promotion of women's empowerment

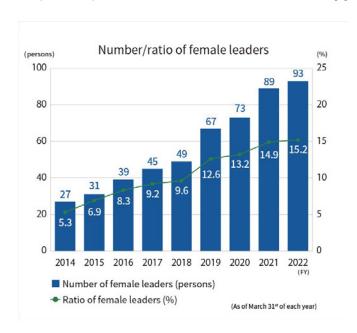
#### Declaration on Action

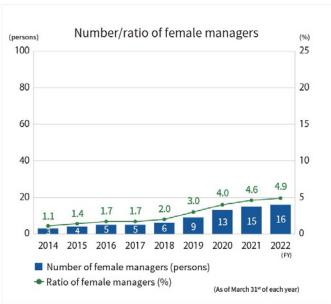
In March 2017, we endorsed the Declaration of Action of the "Association of Male Leaders to Accelerate the Advancement of 'Shining' Women , which is supported by the Cabinet Office. With the aim of creating an environment in which diverse human resources can play an active role, we implement measures that will lead to the empowerment of women and promote the active participation of women.

## Action Plan

We have formulated the 3rd Phase Action Plan (April 2021 to March 2024) based on the Act on the Promotion of Women's Active Engagement in Professional Life and have submitted it to the Kyoto Labor Bureau. We have set the goal of increasing the female leader ratio to 15% or more and the female manager ratio to 6% or more by FYE2023 to lead to a steady increase in the number of women in management positions. While continuing our existing activities, we are working on the creation of a new Diversity Month and on systematic rotations for the development of female employees. In FY2021, we conducted a questionnaire survey among employees on the promotion of women's empowerment, which is conducted every three years, to confirm changes in employee awareness and to use the survey results to plan future measures.

Third phase action plan based on the Act on the Promotion of Women's Active Engagement in Professional Life (in Japanese only).pdf 🔼





## Number of childcare leave used (including employees dispatched to Sanyo Chemical Group companies)

FY	2018	2019	2020	2021	2022
Male (persons)	27	37	40	47	55
Female (persons)	14	13	17	11	17
Employees return rate from childcare leave (%)	100	100	100	100	100

(As of March 31st of each year)

#### Reduced working hours for childcare (including employees dispatched to Sanyo Chemical Group companies)

FY	2018	2019	2020	2021	2022
Male (persons)	1	0	0	0	0
Female (persons)	50	16	12	4	6

(As of March 31st of each year)

## Reform of employee awareness and corporate culture

We hold study sessions at executive training camp study sessions, training sessions for managers, level-specific training sessions, and exchange meetings for people inside and outside the company. We also allow the use of a maiden name within the company, encourage male employees to take childcare leave, and participate in the IkuBOSS declaration and IkuBOSS Corporate Alliance membership.





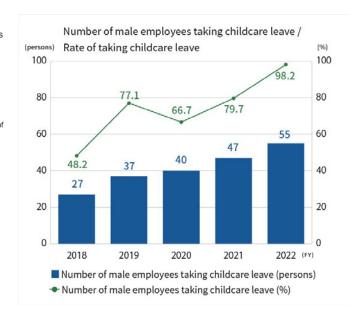
Executive training camp study sessions

IkuBOSS Corporate Alliance Membership

#### Promotion of childcare leave for male employees

We encourage male employees to take childcare leave with the aim of realizing the wishes of male employees who want to actively raise children, and promoting women's desire to work by allowing husbands to share with their wives the burden of childcare and housework, which tends to fall on the female partner. In FY2022, 55 male employees took childcare leave.

Note: In line with the revision of the Childcare and Family Care Leave Act in October 2022, a total of 28 days of salary is paid to the relevant employee after the start of childcare leave, including postpartum paternity leave, regardless of gender.



## Development of female employees

# 《External training》

## Participation in the 21st Century Seminar for Women's Empowerment

Through participation in an external seminar, we aim to increase the motivation and skills of female employees and build an external network with women working at different companies.



The 21st Century School of Empowerment for Women

## 《In-house training》

#### Holding of the Women's Network Seminars

We hold an in-house training session to increase the motivation and skills of female employees and to build a network among female employees that transcends departments, sections, and regions. We aim that this training session will help participants to grow themselves and develop their future careers and will provide them with the opportunity to think independently about creating a comfortable and rewarding workplace.



Women's Network Seminar

#### Holding of an outside Director's salon

We regularly provide opportunities for the company's first female outside Director, Aya Shirai, to interact with the Group's managers and female employees so that they can exchange views on promoting women's empowerment and their careers.



Outside Directors Salon

#### Holding of a seminar to support work and childcare balance for those returning to work after childcare leave

We hold a seminar to help employees who return to work after childcare leave to work actively despite time constraints. while balancing work and childcare, and build satisfying careers, and develop an internal network among employees working in the same environment. To balance work and childcare, it is essential to have understanding and support from the superiors of the relevant employees and those around them. Accordingly, we encourage their partners to participate in the seminar regardless of whether they belong to the company and require the participation of their superiors.



Seminar to support work and childcare balance for those returning to work after childcare leave

In addition, we hold a subordinate development seminar for managers, a training session for female employees, and an exchange meeting with female employees from other companies. We also provide opportunities for learning during childcare leave, conduct interviews after childcare leave, and expand job categories (systematic rotations) for those who return to work.

#### Major support systems for women's empowerment

Systems / Measures	Details
Subsidy system for babysitter expenses and childcare expenses for sick children	To support early return to work from childcare leave and early transition from short working hours for childcare to full-time work, we have introduced a subsidy system for babysitting expenses and childcare expenses for sick children.
Creation of a handbook to support balancing work and childcare.	We have created a handbook for all employees that summarizes various systems, mainly in-house systems, regarding work styles during pregnancy, and after childbirth and return to work. We have posted about it on the intranet.
Review of the personnel evaluation system	To ensure fair evaluation, we abolish evaluation restrictions for employees who take a leave of absence due to childcare and nursing care when evaluating employees regarding salary increases, promotions, bonuses, and other rewards.
Encouragement of male employees to take childcare leave	To create a workplace environment where it is easier for women to work, we encourage male employees to take childcare leave (both male and female employees are paid for a total of 28 days from the start of childcare leave).

## Major systems to support continued employment

Systems / Measures	Details
Childcare leave	Available until the child turns one year old (However, if there are reasons such as not being able to enroll in a nursery school or other facility, the leave is available until the child's third year of age.)
Reduced work hours for childcare	Available until the end of the fiscal year in which the child is in the fourth grade of elementary school
Short working hours	Possible to shorten working hours by two hours per day
Staggered working hours	Possible to shift the start and finish times by 30 minutes

Other support systems include exemption from overtime work, sick child leave, expansion of nursing care leave, and a re-employment request registration system. We have also established various systems aimed at achieving an ideal work-life balance, such as an hourly paid holiday system and a super flextime system. The details are introduced in the "Work style reform" = section.

# Promotion of LGBTQ understanding

Since 2018, we have been working on initiatives related to LGBTQ sexual minorities. We are encouraging understanding and inner promotion of LGBTQ issues by establishing internal and external consultation services, revising internal rules and systems, conducting training and study sessions for executives and employees, providing timely information via the intranet, etc., and participating in Rainbow Pride. We are also communicating to society in an effort to create an environment that respects diverse values. Led by YouTuber Kazue-chan, an LGBTQ person who has been a member of the Group since August 2020 and is engaged in raising awareness about LGBTQ issues, we cooperate and participate in activities of external organizations as well as within the company.



## Establishment of LGBTQ consultation services inside and outside the company

We have established LGBTQ consultation services both inside and outside the company to receive all kinds of consultations from employees.

#### Revision of internal rules

In July 2019, we reviewed our welfare system, and now establishing a system that allows employees to have a spouse regardless of whether the spouse is of the same sex or the opposite sex. (For the application of the system, applications can be made by self-reporting without the use of official documents.)

We have also revised internal rules, including removing the gender field from job entry sheets and eliminating the division between male uniforms and female uniforms (employees can choose the same work uniform or white coat irrespective of their gender).

## Reform of employee awareness and corporate culture

#### Provision of training to understand LGBTQ issues

We hold training sessions for executives, personnel and general affairs staff, and all employees separately to deepen correct understanding of LGBTQ issues. We also provide training for new employees.



Training to understand LGBTQ issues

#### Holding of an LGBTQ workshop, a movie viewing session, and a talk session

For employees to deepen their understanding of LGBTQ issues, we hold a mini seminar on basic knowledge of LGBTQ, led by an external lecturer, and a movie viewing session to watch the LGBTQ-themed movies Kalanchoe no Hana and Boku ga Seibetsu "Zero" ni Modorutoki at all our business sites in Japan. We also hold a talk session, inviting an LGBTQ person as a guest, to exchange views on various topics related to LGBTQ issues.



LGBTQ workshop

#### Welcoming YouTuber Kazue-chan, an LGBTQ person

In August 2020, YouTuber Kazue-chan, an LGBTQ person who is engaged in raising awareness about LGBTQ issues, joined our company. Through Kazue-chan's active participation in internal and external events, we promote understanding of LGBTQ issues among our employees and further accelerate the reform of our corporate culture.



Kazue-chan (on the left) and the Company's chairperson,  $\ensuremath{\mathsf{Dr}}.$  Ando



Kazue-chan's LGBTQ 100 Ally Video viewing session



Online Salon by Kazue-chan

#### Become an ally!

The term "ally" refers to someone who expresses their understanding of LGBTQ people and actively supports them. Since declaring oneself as an ally sends a strong message of support to LGBTQ people, we have created merchandise that can be worn by those who have declared themselves an ally, or be attached to their belongings, so they can show that they are an ally.

Thus, we are working to raise awareness of efforts to express oneself as an ally. Currently, we define allies as comprehensive supporters of DEI promotion, not limited to supporters of LGBTQ people.

Click <u>here</u> ✓ for more information about the DEI Ally Network.









Sanyo Chemical

Goods for visualizing allies

#### Installation of all-gender restrooms

We have installed an all-gender restroom, which anyone can use regardless of gender, at the Kyoto Head Office. We are gradually installing all-gender restrooms at other business sites of the Group. The all-gender restroom at the Kyoto Head Office has three restroom stalls, one of which is a multifunctional toilet that can be accessed by a wheelchair.



All-gender restrooms

# From the company to society

#### Participation in Rainbow Pride events

We participate in Rainbow Pride events in areas where our domestic business sites are located (Tokyo, Nagoya, Kyoto, Kansai, and Kyushu) to introduce the Group's LGBTQ-related initiatives by joining parades, displaying panels at an exhibition booth, and distributing pamphlets.



Participation in Rainbow Pride events

#### Implementation of on-site lectures at external organizations and delivering lessons at high schools/universities

We offer on-site lessons on LGBTQ issues for students and faculty at high schools and universities to provide an opportunity to exchange views among them. We also introduce the Group's LGBTQ-related initiatives to companies and other organizations.



On-site lessons

#### Participation as a supporting member in the Kyoto City Citizen-wide "Kyoto where diverse sexualities are respected" Promotion Network

We aim to support all people, including sexual minorities such as LGBTQ people, throughout society and to create a diverse and inclusive society in which everyone can live comfortably anywhere, including schools, workplaces, and local communities. To this end, we agree with the purpose of this network, comprising sexual minority groups, companies, governments, and other organizations. We actively participate in the network as a supporting member. To create an environment in which diverse values are respected, we strive to collaborate not only internally but also externally.

#### Disseminating the thoughts of our Chairman Takao Ando (then President) on LGBTQ initiatives through web media and SNSs

With the aim of changing society, we widely disseminate our LGBTQ-related initiatives through interviews on web media and SNSs.



Web media "LGBTER" (Japanese only)

Increasing the number of "ally' in the world is [LGBT-friendly] Sanyo Chemical Industries, Ltd. | LGBTER =



Kyoto Bar Association YouTube Channel (Japanese only)

#### Kyoto Bar Association, the 51st Gathering to Consider the Constitution and Human Rights

From the Company, Change Society - Corporate Initiatives on LGBT Issues | The 51st Gathering to Consider the Constitution and Human Rights 6 - YouTube



Kazue-chan YouTube channel (Japanese only)

#### Kazue-chan YouTube channel

【Company with approximately 2,000 employees】 Why I hired a You Tuber - YouTube

# Promotion of employment and activities of persons with disabilities

As part of our corporate social responsibility and beyond, we strive to create a workplace where all employees can work together with their colleagues regardless of their disabilities. In order to achieve this goal, we will promote various initiatives and focus on building a support system for continued employment.

### Disabled employment rate (including employees dispatched to Sanyo Chemical Group companies)

FY	2018	2019	2020	2021	2022
Hired rate (%)	2.18	2.18	2.17	2.09	2.23
Number of persons employed (persons)	26	26	26	26	27

Note: As of June 1, 2023, the disabled employment rate is 2.06%.

(As of June 1 of each fiscal year)

## Training to promote understanding of persons with disabilities

To deepen understanding among executives and general affairs and personnel staff, we held a training session to promote understanding of the employment of employees with disabilities, inviting an external lecturer.



Training for executives to promote understanding of employment of persons with disabilities

## Improvement of in-house equipment

We have installed multi-functional toilets and have upgraded entrance doors to automatic doors.









Elevator

Office entrance and exit

Accessible toile



Sanyo Chemical supports the independence of artists with disabilities as an official partner of Paralym Art, which is operated by the Shougaisha Jiritsu Suishin Kikou Association.

# Support for continued employment

Together with external experts, we promote the establishment of systems that enable employees with disabilities and those working together with them to expand their career with peace of mind, including conducting regular interviews and establishing consultation services.

# Promotion of senior empowerment

Through a re-employment system that allows employees to continue working after retirement, we expand opportunities for seniors to play an active role using their rich experience and knowledge, contributing to passing down their skills and developing their successors.

## Re-employment of permanent retirees (including employees dispatched to Sanyo Chemical Group companies)

FY	2018	2019	2020	2021	2022
Number of persons (persons)	24	27	14	20	20
Re-employment rate (%)	80	87	81	87	100

# Promotion of employment of global talent

Diverse human resources from various cultures are essential for global business development. We are working to create an environment in which employees whose first language is not Japanese can play an active role (explanation of internal systems, policies, and personnel systems, translation of internal documents into English, support for visa procedures, etc.), and will actively promote the employment of global talent in the future.

#### Number of employees with non-Japanese nationality (including transfers to Sanyo Chemical Group companies)

FY	2018	2019	2020	2021	2022
Number of people (persons)	18	17	12	13	12

# Toward understanding of, and sympathy and action for DEI promotion

## Implementation of a harassment prevention seminar

We conduct a seminar on power harassment, sexual harassment, SOGI harassment,\* and basic knowledge of LGBTQ issues for all employees, inviting an external lecturer, so that they learn key points for preventing harassment, including judgment criteria and case examples of harassment. We also provide consultation services regarding harassment both inside and outside the company.

## Formation of an internal DEI Ally Network

With the aim of promoting DEI promotion activities led by employees, we have formed the DEI Ally Network, which collaborates with volunteers from each region and the Diversity Promotion Department. At monthly regular meetings, we share objectives and information, exchange views, and consider DEI promotion activities tailored to each region to take specific action.

Note: We define allies as comprehensive supporters in promoting DEI, not limited to supporters of LGBTQ people.

# Establishment of a DEI portal site for employees

We have launched an internal DEI portal site, hoping that it will be the first step for each employee to take action. It is used to regularly disseminate and aggregate information on DEI promotion in the Group. In addition, it has contents that help both employees and the Diversity Promotion Department to deepen their understanding of DEI.

## Education/Training

#### FY2022 results (total number of participants: 1,400 in total)

Topic	Name of education/training	Subjects	Instructors
	DEI Training (Development and Management of Diverse Employees)	New management appointees	Outside Experts
	DEI Training & Harassment Prevention Training	New employees	Outside Experts
DEI	Online mini-course Unconscious Bias	Directors and employees	Diversity Promotion Department
	Improving Teamwork for Better Work Performance	Directors and employees	Prominent eminent people
	Training programs open to external applicants "Empowerment for the 21st Century School of Empowerment for Women	Female employees (mainly in leadership positions)	Outside Experts
Empowerment of women	Women's Network Seminar, a training program open to internal applicants	Female employees	Outside Experts
	Outside Directors Salon	Female employees and managers	Outside Director of the Company

<sup>\*</sup> SOGI harassment: Harassment related to sexual orientation and gender identity

Topic	Name of education/training	Subjects	Instructors
	"Career planning and childcare" support seminar for those returning to work after maternity leave	Female employees and their internal and external partners and supervisors	Outside Experts
Empowerment of	Osaka University-style industry-academia co-creation education program	Female employees (who are suitable for the program content)	Outside Experts
women	Lecture by IkuBOSS (bosses)	Directors and employees	Outside Experts
	Living Proactively in the 100-Year Life Era	Directors and employees	Advisor of another company
LGBTQ	LGBTQ understanding training	Directors and employees	Diversity Promotion Department
	Training for executives to promote understanding of employment of persons with disabilities	Board members	Outside Experts
People with disabilities	Training for employees to promote understanding of employment of persons with disabilities	District administration and human resources staff (open to all employees)	Outside Experts
	Online mini-lecture Color Universal Design	Directors and employees	Diversity Promotion Department

## (Reference) Major training and lectures held before FY2021

Item	Name of education/training	Subjects	Instructors
DEI	DEI Understanding Seminar	Directors and Employees (Attendance required)	External Experts
Empowerment of women	IkuBOSS Keynote Speech for Executives	Directors	External Experts
	LGBTQ understanding training	Directors and Employees	External Experts
LGBTQ	Salon by LGBTQ people	Directors and Employees	Diversity Promotion Department
	LGBTQ workshop, movie viewing & talk session	Directors and Employees	External Experts
	Work-nursing care and work-treatment balance support seminar (basic)	Directors and Employees	External Experts
People with	Work-nursing care and work-treatment balance support seminar (management)	Executives and managers mostly	External Experts
uisaviiities	Lectures on home medical care and home care	Directors and Employees	External Experts
	Harassment prevention seminar	Executives & Managers (Attendance required)	External Experts

## External evaluation

#### Awarded the highest "Gold" rating in the PRIDE Index for the fourth consecutive year

We received the highest "Gold" rating in the PRIDE Index 2022 for the fourth consecutive year. The PRIDE Index was established by the voluntary organization "work with Pride." By awarding companies that are making outstanding efforts to support LGBTQ people and disseminating specific LGBTQ-related measures to society, it aims to promote the creation of workplaces friendly to LGBTQ people and other sexual minorities and ensure that such workplaces become established in society.



#### Certified as a "Best Workplace," the highest rank in the D&I AWARD

In the D&I AWARD 2022, a certification system that evaluates companies that lead in diversity and inclusion, we were certified as a "Best Workplace," the highest rank in the award, for our active involvement in DEI initiatives. The D&I AWARD is organized by Job Rainbow Co., Ltd. In the award, four levels of certification are awarded according to the score given based on the evaluation of 100 items comprising five aspects: LGBTQ, the gender gap, disability, multicultural coexistence, and childcare/nursing care.



#### Awarded the 3-star "L-boshi" (the highest grade)

In March 2022, we received the 3-star "L-boshi" certification (the highest grade) from the Kyoto Labor Bureau. "L-boshi" is a system whereby the Minister of Health, Labour and Welfare certifies companies that have developed and submitted action plans based on the Act on the Promotion of Women's Active Engagement in Professional Life and have made excellent efforts to promote women's empowerment. There are three levels of certification, and we received a 3-star certification because we met the criteria for all evaluation items.



#### Awarded Kurumin / Platinum Kurumin certification

In August 2017, we received Platinum Kurumin certification from the Kyoto Labor Bureau. Platinum Kurumin certification is awarded to companies that have conducted higher-level initiatives among companies that have received Kurumin certification from the Ministry of Health, Labour and Welfare as a "company that supports parenting." In 2007, we were the first company in Kyoto Prefecture to receive Kurumin certification.



# **Human Resources**

Human Resources (HR) Development Diversity, Equity & Inclusion (DEI)

**Work Style Reform** 

Health and Productivity Management

In order to become "a company in which every employee feels pride and satisfaction in his/her work" and to further advance reforms, the Group is promoting work style reforms from the three perspectives: flexible work styles, business reforms, and the use of IT/AI. By offering a variety of work styles, we intend to create a work environment in which each employee can achieve results while feeling pride and job satisfaction.

# Targets and results

We achieved certain results through the Work Style Reform Action Plan from April 2018 to March 2023.

Systems	Contents
Telecommuting system	Introduced a telecommuting system in FY2019 for full-time employees (temporary and contract employees may apply at the discretion of their department head), with no restrictions on the reason or number of days of use.
Annual Paid Vacation Accumulation System (Expired Paid Vacation Reserve System)	Eliminated the free use of the Expired Paid Leave Reserve System, which was made available in FY 2018 for childcare and family care reasons.  The number of days accumulated was changed from 2 days/year to 5 days/year. In addition to full days and half days, employees can now take leave in one-hour increments.
Super Flextime System	Aiming to improve productivity through efficient work execution, a flextime system without core hours was introduced in FY2015 to allow employees to voluntarily and systematically set their own working hours to the extent that it does not interfere with their work.
Hourly Paid Holiday System	In FY2016, we introduced an hourly paid leave system to promote awareness of the importance of each hour of work and to change the way we think about time.
Flexible Leave System	Introduced a Flexible Leave System in FY2019 that allows employees to take a leave of absence for personal reasons for up to two years based on their own needs, such as for career development or to spend meaningful private time.
Nursing Care Support System	In FY2016, the nursing care leave period was increased from 93 days (statutory) to 365 days, and the shortened working hours for nursing care benefit was expanded from 1 hour/day to 2 hours/day.
Internal Multiple Role System	Introduced an Internal Multiple Role System in FY2021 that allows employees to expand their horizons by taking on projects of interest in parallel with their existing work.

## Systems to promote work-life balance

Based on the concept of "work hard, rest well," we will promote a true work-life balance through flexible work styles. In addition to weekly no overtime days, we have systems such as refreshment leave, memorial leave, hourly paid leave, and super flextime without core time. We are supporting more flexible work styles by easing restrictions on the reasons for using super flextime and by revising the system so that it can be used by employees who work shorter hours. In addition, although the reasons for taking paid leave under the unused paid leave reserve system had been limited to childcare and nursing care, the system has been made usable regardless of the reason. We also have a telecommuting system for all employees and a flexible leave system that allows employees to take personal leave once during their employment for a maximum of two years, at their own discretion. In FY2022, four employees used the flexible leave system for the purpose of obtaining qualifications, etc.

## Manufacturing Innovation(Monozukuri Transformation)

Envisioning where we want to be in five and 10 years, we have worked in two teams: one that aims for automatization, mechanization, and the elimination of the 3Ds (Dangerous, Dirty and Demanding) for the Monozukuri Transformation, and the other that aims for digitalization and the reform of work styles and education (work-style reform). We decided to conclude these activities in March 2023, and after selecting themes to be continuously promoted, we will work on these themes at each factory. Going forward, we will change the name of these reform activities to "Monozukuri Transformation," and establish the Monozukuri Transformation Center within the Nagoya Factory in July 2023. Regarding digitalization and work-style reforms, we will pursue process optimization, automatization, labor saving, etc.

#### Awareness reform and system building to create a workplace environment in which diverse human resources can play an active role

- Measures to promote women's empowerment [internal and external training program and exchange meeting, maiden name usage system, seminar to support work and childcare balance for those returning to work after childcare leave (partner participation recommended)]
- · Systematic planning to develop human resources and their systematic allocation
- Review of the course/job group system (eliminating generalist and specialist positions to unify them into an associate position)
- · Implementation of skill development interviews, etc.

# Internal Multiple Role System

Sanyo Chemical aims to create an "exciting company" that maximizes the potential of each and every employee to further enhance corporate value. In February 2022, as a measure to enhance employee job satisfaction and motivation, we began a trial operation of our Internal Multiple Role System that allows employees to expand their horizons by taking on projects of interest in parallel with their existing work.

Items at present (number of persons as of March 31, 2023)

- Development of odor sensors (7 persons)
- CO<sub>2</sub> absorber development of separation membrane (3 persons)
- · Peptide Agriculture (8 persons)
- Co-development of wearable body fluid sensor devices (4 persons)

# Open work environment

In order to create a state in which employees feel satisfaction and pride in doing their jobs safely and securely, and are willing to make a high level of contribution to the company while voluntarily demonstrating their abilities, it is important to have a thorough dialogue with executives, the organization, and people in various capacities. We actively provide opportunities for communication.

Dialogue with executives	The "Dojo" is a system that allows executives and employees to have thorough dialogues. The executives act as dojo owners and invite students (employees) to join a dialogue once a month for a period of six months to one year. The theme (message to be conveyed to the employees) is left entirely up to the dojo owner. Twelve dojos were open in FY2022, with six to eight participants (students) in each dojo. This system will continue in the future. In addition, the "morning meeting for all employees," in which executives give a lecture to all employees once a month, will continue to be held.
Training retreats	This is a system in which each division or department spend one or two days discussing organizational dreams and issues, and the company subsidizes the costs of the reception and lodging.
Salon	Managers and higher ranking executives lead the salon and talk with several employees.
Coffee meeting	This is a system to deepen mutual understanding through dialogue with the head of the organization.
Internal social exchange fees	Subsidies are provided for the holding of social gatherings within the company.

## **Business** innovation

- $\bullet \ \text{Introduction of a virtual desktop service that allows intranet access from outside the company } \\$
- · Utilization of RPA (Robotic Process Automation)
- · Utilization of a BI (Business Intelligence) system
- Introduction of an e-POST system that allows employees to make proposals directly to the president and executives through the intranet, etc.

## External evaluation

#### "First Best Practice Company" in Kyoto Prefecture

In 2016, our company was recognized by the Kyoto Labor Bureau as the first Best Practice Company in Kyoto Prefecture for its proactive efforts to "reform the way we work".

#### Certified with 3.5 stars in the 6th Nikkei Smart Work Management Survey

We were certified with 3.5 stars in the 6th Nikkei Smart Work Management Survey, which selects leading companies that take on the challenge of productivity innovation through work-style reforms. This survey has been conducted by Nikkei Inc. since 2017, targeting listed companies and leading unlisted companies across the country. It defines "smart work management" as efforts to maximize organizational performance through three elements: realization of diverse and flexible work styles, a system for creating new businesses, and market development capability. Companies are evaluated on a five-star scale. We received an S+ rating for innovation capability, an A+ rating for market development capability, and an A++ rating for human resource utilization.



# **Human Resources**

Human Resources (HR)
Development

Diversity, Equity & Inclusion (DEI)

**Work Style Reform** 

Health and Productivity Management

The Sanyo Chemical Group aims to further improve corporate value by helping all employees be highly motivated and always try new things, creating an exciting (WakuWaku) company. Therefore, it is essential that each and every employee be healthy. We think working while being in a mentally and physically healthy condition makes employees and their families happy, which also leads to company development. Accordingly, we consider not only the individual's role in personal healthcare, but also management's role to participate actively in promoting employees' health. We established the Health Management Declaration in 2018, to actively promote health and productivity management. We are promoting health by striving to improve employees' health literacy through the activities of our Health and Productivity management, creating an environment/system where it is easy for everyone to work. Then, we will truly become an exciting (WakuWaku) company.

# Health Management Declaration

The physical and mental health of its employees is the company's greatest asset. The Sanyo Chemical Group will actively support health promotion initiatives to realize a mindful and fulfilling corporate life, respect the diversity of its employees, and enable each individual to achieve self-fulfillment by exercising their independence and creativity, thereby contributing to society through the development of the company.

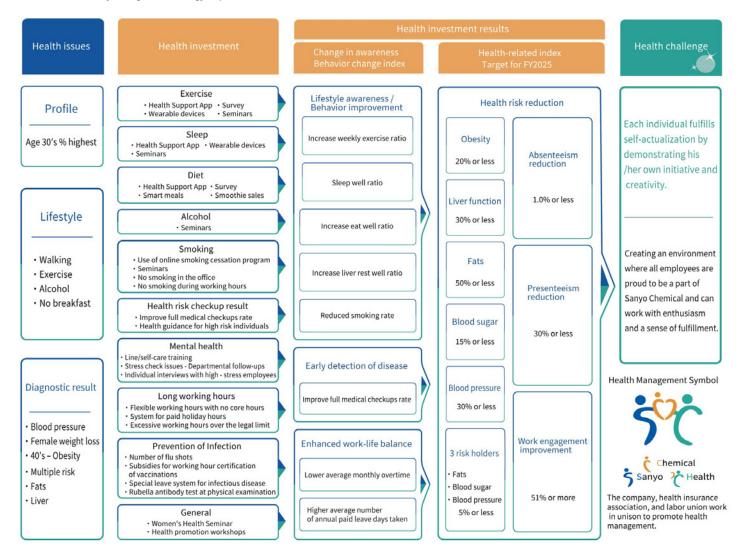
Akinori Higuchi

Representative Director, President and CEO

# Targets and results

In FY2020, we created a company-wide Health and Productivity Management Strategy Map using an external consultant. In the Health and Productivity Management Strategy Map, we established health investment measures for five health promotion initiatives, set evaluation indicators to verify their effectiveness, and determined target values for FY2025. At the end of FY2021, the Health Promotion Team in each region created a Health and Productivity Management Strategy Map for each region respectively, based on the company-wide strategy map. By planning and implementing not only company-wide measures but also measures unique to each region, we work to make health promotion more prevalent among all employees.

#### Health and Productivity Management Strategy Map Initiative



Action goals for the five initiatives

(unit: %)

Initiative	Item	FY 2019	FY 2020	FY 2021	FY 2022	FY 2025 (Target value)
Exercise	To have an exercise routine at least once a week	29	31	50	50	70 or more
Sleep	To be well rested with sleep	54	57	66	63	80 or more
Diet	To have a balanced diet*1	-	-	76	75	90 or more
Alcohol	To have two or more alcohol- free days per week	74	75	75	76	90 or more
Smoking	Not to smoke (Smoking rate reduction)	77	77	82	83	90 or more

<sup>\*1</sup> Item added in 2021.

# Checkups and guidance

(unit: %)

	FY 2019	FY 2020	FY 2021	FY 2022	FY 2025 (Target value)
Rate of regular health checkups	100	100	100	100	100
Rate of medical checkups	43	68	89	96	100
Rate of specific health guidance	14	80	94	94 or more	100

# Lifestyle-related disease risk retention rate (health checkup results)

(unit: %)

	FY 2019	FY 2020	FY 2021	FY 2022	FY 2025 (Target value)
Obesity	24	26	25	25	20 or less
Liver function	30	34	31	34	30 or less
Fats	51	57	55	56	50 or less
Blood sugar	24	17	21	17	15 or less
Blood pressure	31	37	34	29	30 or less
Triple risk holders (fats, blood sugar, blood pressure)	8	8	8	5	5 or less

# Health Management Evaluation Indexes

To verify the effectiveness of health investment measures, we have started measuring presenteeism and work engagement in addition to absenteeism since FY2021. We are actively developing health investment measures that will lead to improved productivity and job satisfaction, and ultimately resolve management issues.

#### Absenteeism\*2

	FY 2019	FY 2020	FY 2021	FY 2022	FY 2025 (Target value)
Personal injury/sickness absence rate (%)	1.5	1.5	1.8	1.9	1.0 or less

<sup>\*2</sup> A condition in which the employee cannot perform duties due to absence from work, leave of absence, or other reasons.

Measured by the number of employees on sick leave who are absent for more than one month.

#### Presenteeism\*3

	FY 2021	FY 2022	FY 2025(Target value)
Labor productivity loss rate (%)	37.5	36.6	30 or less

<sup>\*3</sup> A condition in which the employee is present at work but is not able to work sufficiently due to mental or physical health problems.

Measured by the WHO Health and Labor Performance Questionnaire.

#### Work engagement\*4

	FY 2021	FY 2022	FY 2025(Target value)
Self-motivated behavior and positive feelings toward work (deviation value)	49.7	50.1	51 or more

<sup>\*4</sup> A state of mind that is positive and full of accomplishment, vitality, enthusiasm, and immersion in one's work.

Measured by a proprietary survey instrument using eight items that correlate well with the Utrecht Work Engagement Scale.

# Progress in Health Promotion Activities

Contombox 2010	Health Massacrant Declaration	
September 2018	Health Management Declaration	-
July 2020	Held the First Health Promotion Conference	Inauguration of health promotion system and sharing of health issues
January 2021	Held the 2nd Health Promotion Conference	Shared information on health promotion activities interim report and health scoring report
June 2021	Held the 3rd Health Promotion Conference	Report on Health Promotion Activities FY2020 and Confirmation of Initiatives for FY2021 Shared the Group's health issues based on analysis of health checkup data over time
October 2021	Released a company-wide Health and Productivity Management Strategy Map	-
December 2021	Held the 4th Health Promotion Conference	Shared the Interim Report on Health Promotion Activities 2021 and the Group's Health and Productivity Management Strategy Map
	Health Management Workshop Held	Representatives of each region health promotion team participated
May-June 2022	Health Promotion Region Workshops Held	Each region health promotion team member participated
June 2022	Held the 5th Health Promotion Conference	Reported on Health Promotion Activities 2021 and sharing of each Region Health Promotion Team's Declaration of Activities
August 2022	Held a health management workshop for the management	Shared the Group's management issues for the management
	Held the 6th Health Promotion Conference	Interim Report on Health Promotion Activities 2022
December 2022	Health Management Workshop Held	The management and representatives of each region health promotion team participated
	87	

# Organizational structure and roles

Since FY2020, the Health Promotion Council, which includes the chairman, the president, and senior management, has deliberated and decided on policies and initiatives, while the Health Promotion Teams, which include employees from each region, have been promoting awareness and penetration of health and productivity management among employees and implementing specific measures in their respective regions. The company, the labor union, and the Health Insurance Society work in unison to promote company-wide health initiatives.



Health Promotion Conference



# Education / Training

## Workshop for health promotion members

The Health Promotion Secretariat plans and regularly holds a health and productivity management workshop for health promotion members, who are responsible for promoting health promotion measures in each region. At the workshop, health promotion members deepen their understanding of health and productivity management, exchange views with health promotion members from other business sites, and share ideas about issues and solutions for promoting health promotion measures. Thus, we support health promotion members so that they can independently carry out health promotion activities in each region.



## Various seminars

#### Improvement of health literacy

We have held regular online health seminars and have provided information since FY2020 to increase employees' health literacy and encourage behavioral changes toward better health. In addition to the five themes set as action goals, these seminars also cover measures to remedy stiff shoulders and lower back pain, which were topics of high interest in a questionnaire survey of employees. Moreover, to provide information that deepens understanding of the necessity of cancer screening, a seminar on cancer is also held. The seminars have received high levels of satisfaction from the employees who participated in them. Since FY2022, the seminars have been recorded and streamed online to provide more employees with the opportunity to view the seminars.



Online seminar for preventing stiff shoulders and back pain

Retention period (fiscal years)	Seminar contents	Number of participants (persons)	Understanding (%)	Satisfaction (%)
FY2020	Responsible Drinking Seminar	Approx.160	98	95
	Sleep Seminar	Approx.220	91	85
FY 2021	Cancer Seminar	Approx.200	98	92
	Seminar for preventing stiff shoulders and back pain	Approx.250	98	89
FY 2022	Diet and Sleep Seminar	Approx.220	87	75
	Hormone Balance Seminar for Men and Women	Approx.130	85	71
	Oral Care Seminar	Approx.270	93	90
	Diet and Body Weight (BMI) Seminar	Approx.270	93	84
	Lung Cancer Seminar	Approx.210	87	83

# Initiatives to support health promotion

Although the Group contains approximately 30% of young employees in their 30s, they tend to have higher health risk in terms of lifestyle habits. Accordingly, it is necessary to take measures to improve the lifestyle habits of employees from a young age. For the Group as a whole, behavioral changes in exercise, eating, and drinking have emerged as an issue. In light of these health issues, we have implemented health measures since FY2020, including introducing a health support app, subsidizing the purchase of a wearable device that visualizes exercise and sleep, holding health seminars online, and providing smart meals and smoothies. As a result, a company-wide questionnaire survey, conducted in FY2021, showed that the percentage of employees who exercise at least once a week had increased by approximately 20%, indicating that employees' health literacy was increasing. We will continue to implement measures to encourage the behavioral changes of employees in order to lead to improved employee performance and the revitalization of the organization.

## Health promotion support using the CALOmama PLUS app

We have introduced a smartphone health app "CALOmama PLUS" which allows users to record and manage their diet, exercise, and sleep data, and receive health advice from an Al assistant. Since FY2021, we have held regular company-wide ranking events to compete on the average number of steps they take and their health score on the CALOmama PLUS app. In post-event questionnaire surveys, participants answered: "It has become my habit to take a walk during my lunch break," and "I have got into the habit of eating vegetables every day," indicating that participation in events led to improvements in lifestyle habits such as exercise and diet.



Health app "CALOmama PLUS"

 $<sup>^{\</sup>star}$  Health score: A score that measures the degree of health based on the diet and exercise data entered into the app

## Promotion of smoking cessation

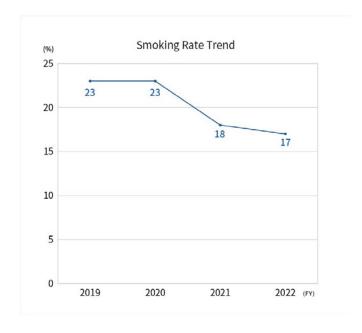
We strengthen our efforts to promote smoking cessation with the aim of preventing health problems caused by smoking and preventing employees from experiencing passive smoke.

## No smoking at our business sites

As a result of the gradual reduction and closure of smoking areas with the aim of banning smoking at our business sites for all employees of the Group, we achieved a complete ban on smoking at our business sites in January 2023.

#### Support through a smoking cessation program

We provide a smoking cessation program, in which our Health Insurance Society covers some of the costs of receiving support through a dedicated app and online interviews with nurses and pharmacists. In FY2021, eight employees successfully quit smoking. In FY2022, nine employees successfully quit smoking, and two were continuing to abstain from smoking as of March 2023.



## Implementation of health checkups and follow-up measures

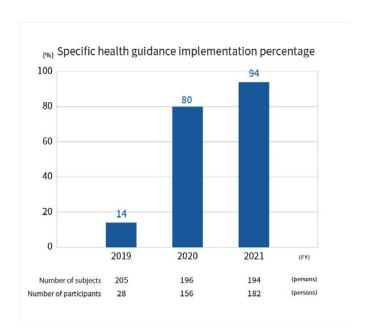
We conduct uniform health checkups across all Group companies, and maintain a 100% attendance rate for regular health checkups. For employees who have been determined by an occupational physician to require a thorough examination based on their health checkup results, in-house occupational health staff follow up with them by phone or email to encourage them to seek medical advice. We also provide advice on improving lifestyle habits to employees who are at high risk of developing lifestyle-related diseases. In the future, we aim to reduce the number of employees who are at risk for lifestyle-related diseases (due to abnormal Fats, blood sugar, blood pressure, etc.), and achieve a 100% participation rate in a thorough examination.

In FY2019, we introduced a health management system "Growbase" to centrally manage the results of regular health checkups for all employees of the Group. This has created an environment in which employees can check their regular health checkup results online at any time by accessing the employee page of the system.

## Specific health guidance

Our Health Insurance Society continues to provide a three-to-four month lifestyle improvement program (specific health guidance) for all those eligible for "active support" or "motivational support" as a result of specific health checkups and comprehensive medical checkups. By carefully encouraging applications for specific health guidance and following up the progress of the guidance, we achieved a guidance implementation rate of 94% in FY2021, exceeding our target of 90%. In FY2022, we aim for a 100% guidance implementation rate. Our ranking in the Health Scoring Report\* has significantly improved, to 1009th in 2018, 899th in 2019, 46th in 2020, and 7th in 2021.

\* Health Scoring Report: Issued jointly by the Ministry of Health, Labour and Welfare, the Ministry of Economy, Trade and Industry, and the Nippon Kenko Kaigi, the Health Scoring Report visualizes changes over time in the data of each health insurance society compared to the average of all health insurance societies and industry averages, regarding members' health conditions, medical costs, and the status of disease prevention and health promotion efforts.



## Health guidance for young employees

Our Health Insurance Society has focused on the health checkup results of employees in their 30s, who have the highest proportion of employees in the Group, and has begun providing health guidance to employees under 40 who are at risk for metabolic syndrome. We aim to motivate young employees to improve their lifestyle habits.

## Mental health measures

#### Implementation of stress checks and utilization of group analysis results

We conduct a stress check once a year for all employees of the Group, including those at overseas business sites. For employees judged to be under high stress, we recommend an interview with a doctor in an effort to prevent mental health problems. Based on the stress check results, group analysis is conducted, and its results are feedback to each organization along with a usage guide. Based on group analysis result data, we make individual interventions in the relevant organizations when necessary to improve the workplace environment.

(unit: %)

	FY 2019	FY 2020	FY 2021	FY 2022
Stress check inspection rate	99	99	98	99
Stress check high stress rate	9.3	8.9	8.6	7.1

#### Implementation of mental health training

We continuously provide self-care and line manager-care training.

## Measures for long working hours

To prevent health problems caused by long working hours, we use a health check sheet to assess the physical and mental health of employees who work overtime for more than 45 hours a month or on holidays, targeting all employees of the Group. When necessary, we arrange interviews between the relevant employees and an occupational physician, and work to give due considerations to their work based on the opinions of the occupational physician to ensure their health.

	FY 2019	FY 2020	FY 2021	FY 2022	FY 2025 (Target value)
Average monthly overtime hours (hours)	4.8	4.4	4.8	5.2	5.0 or less

#### Infectious disease measures

### Responses to COVID-19

On February 18, 2020, we launched the COVID-19 Headquarters. Based on the idea that each individual should take thorough infection prevention measures to prevent the spread of COVID-19 and prepare for business continuity, we provided appropriate instructions and information on responses, requests, and rules related to COVID-19 through the intranet. We also recommended the use of the COVID-19 contact confirmation app "COCOA," and in January 2021, we began subsidizing some of the costs for PCR and antibody tests for employees and their family members who wanted to be tested. These tests can be taken multiple times.

#### Implementation of workplace vaccinations

At the Kyoto Head Office, we completed the third round of workplace vaccinations for COVID-19. Those eligible for vaccination were not limited to employees of the Group who wished to be vaccinated, but were expanded to include employees' families and neighboring company employees.

#### Distribution of antigen test kits

At the end of 2021, infection of Omicron, which is one of the variants of COVID-19, spread rapidly, and in some areas of Japan, PCR and antigen tests were not readily available. In this situation, we distributed antigen test kits free of charge to all employees so that they could quickly confirm whether or not they had been infected if infection was suspected.

#### Subsidy for influenza vaccination

Our Health Insurance Society subsidizes the cost of influenza vaccination to help prevent infectious diseases for employees and their families.

	FY 2019	FY 2020	FY 2021	FY 2022
Flu vaccination rate (Employees only) (%)	74	81	67	64

Note: Health Insurance Society subsidy for vaccinations recipient percentage

# Health Management External Evaluation

#### Health and Productivity Management recognition



We have been recognized under the Health and Productivity Management Outstanding Organization Program, jointly hosted by the Ministry of Economy, Trade and Industry(METI) and the Nippon Kenko Kaigi (Japan Health Council) for the fifth consecutive year in 2023. In the certification system, the status of initiatives in philosophy/policy, the organizational structure, implementation of systems/measures, and evaluations/improvements is quantified and top 500 companies are certified as the White 500 based on the comprehensive evaluation points of these items.

Lecture at Data Health and Preventive Services Trade Fair 2021 (co-hosted online by the Ministry of Health, Labour and Welfare and the National Federation of Health Insurance Societies)

On November 30, 2021, a seminar titled "Toward increasing the value of health insurance business through a Pay For Success private sector outsourcing system (PFS)" was held, jointly organized by the National Federation of Health Insurance Societies and the Ministry of Health, Labour and Welfare, in which a representative from our Health Insurance Society delivered a speech. This was because the establishment of health and productivity management in the Group and rapid improvements in specific health guidance caught the attention of the Ministry of Health, Labour and Welfare.

#### "Cancer Control Promotion Company Action" award for the third consecutive year

Our Health Insurance Society was commended as a company with excellent performance in the Cancer Control Promotion Company Action program (FY2022) of the Ministry of Health, Labour and Welfare. The award was given in recognition of our efforts to promote cancer education and various cancer checkup initiatives such as colorectal cancer screening, breast ultrasonography, uterus cancer screening, stomach cancer risk classification screening, lifestyle-related diseases checkup, and specific health guidance.



In January 2023, we held an online cancer seminar as part of the Cancer Control Promotion Company Action program, with approximately 200 participants from across the company. The seminar was recorded and streamed online at a later date to provide an opportunity for more employees to learn about cancer screening and gain correct knowledge of cancer.

Message from the Minister of Health, Labour and Welfare for our specific health guidance implementation rate of 93.8% in FY2021



(\*) 厚生労働省

The specific health guidance implementation rate of our Health Insurance Society in FY2021 ranked among the top 10 among health insurance societies and mutual aid societies nationwide. Since this was a remarkable achievement, we received a message of appreciation from the Minister of Health, Labour and Welfare for our efforts.

# **Local Community / Social Contributions**

We collaborate with local government agencies, educational and research institutions, and other organizations to promote science, technology, education, culture, and welfare in local communities. In addition, by voluntarily and continuously promoting various activities such as donating to universities, medical institutions, NPOs and other organizations, crime prevention, and traffic safety, we make contributions to society.

## Social contribution policy

As a good corporate citizen, we contribute to the realization of an enriched society and sustained development.

- Our offorts
  - By joining forces with a wide cross-section of society and effectively using available resources, we proactively engage in social contribution activities toward the development of human resources who will lead the next generation and continue to provide solutions to social issues
- · Response to the needs of countries/regions
  - By sharing the philosophy of social contribution within the group and coordinating with the group bases in countries and regions, we will develop social contribution activities in accordance with the circumstances surrounding the individual countries and regions.
- Information disclosure
- By disclosing information and openly sharing the results of social contributions with society, we contribute to the realization of an enriched society and sustained development.

# Kyoto traditional industry

In Kyoto, there are 74 categories of traditional industries, including Nishijin textile, Kyoto Yuzen dyeing, and Kiyomizu ware, all of which are renowned both in Japan and overseas.

However, traditional industries in Kyoto have been in a predicament, due to a decline in shipment value and a lack of successors. With the survival of some of these categories at risk, the stagnation of Kyoto's traditional industries has become a matter of social concern in the region.

In February 2021, we launched the "Kyoto Culture x Technology of Sanyo Chemical Group = XX Innovation" project, which revitalizes Kyoto traditional industries by Sanyo Chemical Group technologies.

Driven by the passion of each and every employee to leverage our company's strengths to contribute to the revitalization of Kyoto's traditional industries as a chemical company nurtured in Kyoto, we will continue to take on challenges in collaboration with Kyoto City and Kyoto Prefecture.

#### Current status of the project

At present, we have six Traditional Industry teams, consisting of about 40 members in total. These projects are being conducted with Kyoto City, Kyoto Prefecture, and various industry associations. These teams are working with Kyoto Prefecture and various industry associations to contribute to society through our technology, starting with Kyoto City. As future goals, we are also considering the establishment of the Sanyo Chemical Kyoto Traditional Industry Development Fund as a subsidy program for fostering bearers of traditional industries, and the conclusion of an agreement with Kyoto Prefecture, Kyoto City, and the Kyoto Municipal Industrial Technology Research Institute for the purpose of supporting traditional industries. Through these activities, we want to revitalize the traditional industries of Kyoto, thereby contributing to our local communities.

# On-site chemistry lessons

In each area where our business sites are located, young employees from our research facilities and factories offer on-site chemistry lessons at elementary schools while serving as teachers. In FY2022, we offered lessons at a total of 12 schools in the Kyoto area (Head Office/Head Office Research Laboratory, Katsura Research Laboratory) and the areas where the Nagoya and Kashima factories are located, while taking measures to prevent the spread of COVID-19.

For the Kyoto area, on March 22, 2023, we received a letter of appreciation from Kyoto City and the Kyoto Chamber of Commerce and Industry for our 20 years of continuous contribution to the environmental learning project for elementary school students.



Award Certificates of Appreciation from Kyoto

#### Chemistry Classes Held in FY2022

District	Number of schools	Date of implementation	School, Event Name	Target grade (year)	Number of participants (persons)	Total number of participants (persons)
		October 12, 2022	Kyoto City Arashiyama Elementary School	5	52	
		November 16, 2022	Kyoto City Uji Hiramori Elementary School	4 and 5	45	
Kyoto Area	6	December 9, 2022	Kyoto City Tatehigashi Yamazumi Elementary and Junior High School	6	93	335
Alea		January 13, 2023	Kyoto City Rikkyo Kita Daigo Elementary School	6	27	
		February 2, 2023	Otsu City Wakai Elementary School	6	72	
		March 7, 2023	Kameoka City Chotoku Elementary School	6	46	
Nagoya	2	February 16, 2023	Tokai City Niwa Elementary School	City Niwa Elementary School 5 160		250
Factory	2	February 22, 2023	Tokai Midoriyo Elementary School	5	90	250
		November 26 and 27, 2022	Workshop Collection in Cali☆Fes Kamisu	Age 5 and up	70 <sup>*1</sup>	
Kashima Factory	4	December 6, 2022	Kamisu City Uematsu Elementary School	6	80	255 <sup>*2</sup>
		January 19, 2023	Kamisu City Suda Elementary School	6	38	200 -
		February 2, 2023	Kamisu City Onohara Nishi Elementary School	4	67	

<sup>\*1</sup> An estimate of the number of participants in the event

# Internships

In FY2022, we cooperated with an international internship program between the Technical University of Dortmund in Germany and Kyoto University, and accepted one international student majoring in chemical engineering from the Technical University of Dortmund to our Research Department from October to November.

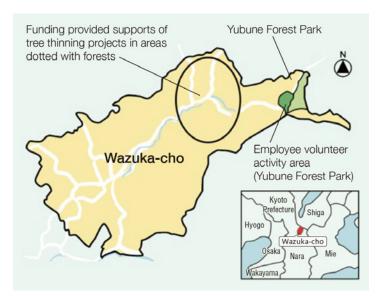
<sup>\*2</sup> Includes estimated number of event participants

# Sanyo Chemical Forestry

We have been conducting the Sanyo Chemical Woodland project in Wazuka Town, Souraku-gun, Kyoto Prefecture since FY2009 as a part of the Kyoto Model Forest Initiative (efforts made by Kyoto Prefecture to protect and nurture the forests in Kyoto together with Kyoto citizens who have been receiving the blessings of the forests).

With the cooperation of Wazuka Town, where the project is carried out, the Kyoto Prefecture Yamashiro Wide Area Promotion Bureau, the Kyoto Model Forest Association, and the Kyoto Forest Instructors Association, our employees and their families volunteer in activities such as providing a logging experience program and maintaining walking trails. In FY2022, the Sanyo Chemical Woodland project was held three times in total, including one time during new employee training (total number of participants: 164 people). In addition, we provide funding to the forest management fund of the Kyoto Model Forest Association to give support to the forest management project (thinning, etc.) in Wazuka Town.

The results for FY2022 were a thinning area of 2.4 ha and an increase in  $CO_2$  absorption capacity of 10.6 ton- $CO_2$  per year.



# Terraced rice field preservation

San Chemical Co., Ltd. has been conducting rice farming in Futagotanada, Chiba Prefecture. San Chemical Co., Ltd. conducts rice planting at the end of April, cut grass on a monthly basis, and reap rice during the end of August to early September. The harvest rice is distributed to the employees who participated and donated it to a local children's cafeteria. In FY2022, the area of terraced rice fields covered was 400 m<sup>2</sup>, the rice harvest was 270 kg, and the total number of participants was 71 people (number of events: 14).

# Donations (domestic)

Through the Sanyo Chemical Foundation for Social Contribution, we make donations that have been requested in connection with our projects and that we wish to make on our own.

Donation (unit: million yen)

	FY	2018	2019	2020	2021	2022
Social contribution	expenditure: Total amount (million JPY)	24.0	39.9	24.2	36.4	34.9
	1.Support for academics mainly concerning chemistry	14.4	17.0	14.8	27.0	14.1
	2.Support for human resource development	0.8	2.2	3.1	0.3	2.3
Donations by	3.Support for the preservation of art and culture, mainly in Kyoto	1.1	1.5	0.5	1.0	4.1
	4. Support for environmental conservation activities	1.1	11.0	1.6	1.6	1.5
	5.Support for social contribution activities wherever possible according to local social needs and requirements	6.6	8.1	4.2	6.5	13.0

Note: Expenditures of Sanyo Chemical Industries, Ltd. until FY2019. Expenditures of SANYO CHEMICAL Foundation for Social Contribution since September 2019 (In FY2019, sum of Sanyo Chemical Industries, Ltd. and SANYO CHEMICAL Foundation for Social Contribution)

## Support for Paralym Art

We support the independence of artists with disabilities as an official partner of Paralym Art, which is operated by the Shougaisha Jiritsu Suishin Kikou Association. Paralym Art is an activity that promotes the social participation and economic independence of people with disabilities through artistic expression.



# Overseas subsidiaries and affiliates

## Major support activities

#### China

In May 2023, San-Dia Polymers (Nantong) Co., Ltd. (SDN) carried out cleanup activities such as picking up litter at a park near the company as part of its environmental protection activities.

#### Thailand

Sanyo Kasei (Thailand) Ltd. (SKT) provided support to villagers and those concerned who were affected by floods in September 2022.

#### Malaysia

SDP GLOBAL (MALAYSIA) SDN. BHD. (SDPM) conducted cleanup activities as Go Green activities at a nearby beach in Johor State.

We also provide various other support, and will continue to work to resolve social issues overseas.



Cleaning up a park near SDN



Supporting victims of floods in Thailand





Cleaning up the coast near SDPM

## Donation activities

In FY2022 as well, overseas subsidiaries and affiliates made donations to their neighboring schools and other organizations.



SDN donated about 80 sets of examination review materials worth about NT\$20,000 to third-year junior high school students in China



SKN presents a large liquid product display to a local high school in Nantong, China



SKT donates to construction of dedicated cerebral palsy ward in Thailand

# **Corporate Governance**

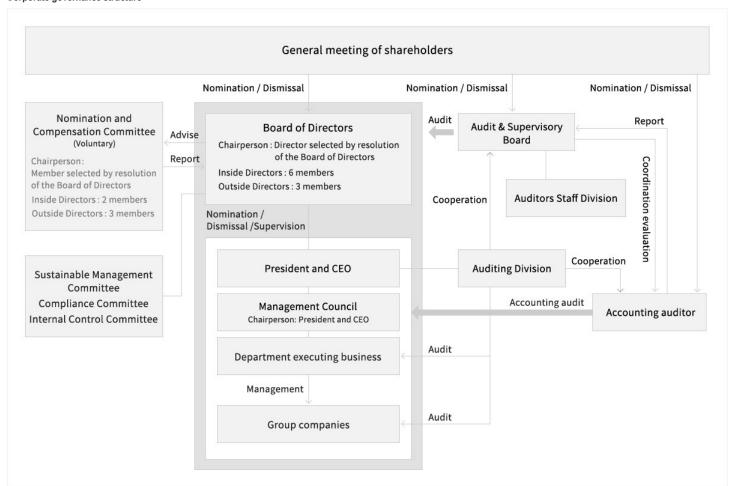
Based on the Company mission, "Establish a better society through our corporate activities," the Sanyo Chemical Group will realize sustainable growth toward the future by enhancing both economic and social values in close cooperation with all stakeholders. To this end, we consider the establishment of corporate governance that is trusted by stakeholders to be one of the highest priority management issues.

# Corporate governance system

We are a company with an Audit & Supervisory Board. The Company has also introduced the executive officer system, under which Executive Officers execute business in accordance with the management policy, etc., determined at meetings of the Board of Directors. In this manner, the Company clearly separates the management decision-making and supervisory function from the business execution function.

Click here for Corporate Governance Report (In Japanese Only)

#### Corporate governance structure



## Directors and the Board of Directors

The term of office of Directors is one year. With the objective of strengthening the management supervisory functions, three out of nine Company's Directors are independent Outside Directors; moreover, the Chairperson of the Board is appointed from among Directors who are not involved in the execution of business. The Board of Directors holds a meeting, in principle, once a month. It makes decisions on important matters, such as management policy, and supervises the status of business execution by Directors and Executive Officers. In FY2022, 15 meetings of the Board of Directors were held.

## Audit & Supervisory Board Members and the Audit & Supervisory Board

Of four Audit & Supervisory Board Members, three are Outside Audit & Supervisory Board Members. The Audit & Supervisory Board Members not only attend Board of Directors' meetings, Management Council meetings, and other important meetings, but also inspect important approval documents. They thus audit the status of Directors' business execution, capitalizing on the knowledge of inside members who are well versed in the wide range of businesses of the Company, as well as the expertise of outside members with experience relating to financial and accounting affairs or with business management experience. In addition, as an organization under the direct control of the Audit & Supervisory Board, the Company has established the Auditors Staff Division. The Division staff who assist the Audit & Supervisory Board Members in their duties are independent of the Directors. By establishing this structure, we strive to secure the effectiveness of audits.

## Management Council

The Management Council meets once a month, in principle, to make decisions on important matters regarding business execution by Executive Officers, based on the management policy, etc., determined at meetings of the Board of Directors.

## Committees

	Chairperson	FY2022 Frequency of meetings (times)	Role
Nomination and Compensation Committee	Chairman of the Company	5	An advisory body to the Board of Directors. The majority of its members are Outside Directors. The Committee reports to the Board of Directors the results of its deliberation on matters regarding the nomination of Directors and compensation for them.
Sustainable Management Committee	President and CEO	2	As a body under the direct control of the Board of Directors, the Committee deliberates and makes decisions on the policy for responding to important matters to be addressed with high priority, regarding the process for sustainable growth, the environment, society, and governance.
Compliance Committee	President and CEO	1	As a body under the direct control of the Board of Directors, the Committee deliberates and makes decisions on basic policies and measures to ensure full compliance with laws and regulations.
Internal Control Committee	President and CEO	2	As a body under the direct control of the Board of Directors, the Committee makes decisions on the entire internal control system, and provides instructions and supervision for the internal control system's development, operation, evaluation, and improvement activities.

# Standards for selection of Directors

The Company's policy is to form a Board of Directors consisting of inside directors who have objective judgement, foresight, and insight into management issues based on the expertise, knowledge, and experience they have accumulated in sales or research, or production or general affairs departments, and Outside Directors who can proactively provide advice and suggestions based on their rich experience from an objective perspective. In line with this policy, the Company selects candidates while taking into account the balance and diversity of the Board of Directors, and other elements.

# Standards for selection of Audit & Supervisory Board Members

The Company's policy is to form an Audit & Supervisory Board consisting of outside members who have legal independence in addition to high levels of expertise and discernment based on their experience in serving as a manager or person in charge of accounting in a listed company, and inside members who can express their opinions regarding objective auditing based on their knowledge and experience of finance and accounting or other specialized fields and who are sufficiently qualified to ensure their independence from those involved in business execution. In line with this policy, the Company selects candidates for the Audit & Supervisory Board with its agreement.

#### Reason for selection as Outside Director

Name	Independent Director	Supplementary explanation of applicable items	Reason for selection
Aya Shirai	0	No applicable items	We have designated Ms. Aya Shirai as an independent director since she meets the Company's independence standards and is therefore deemed to have no conflict of interest with our general shareholders. She has a wealth of experience gained through administrative activities from her many years of involvement in municipal administration. In addition, she has experience and achievements from having been involved in corporate management as an outside director of other listed companies. She was selected as an outside director because she is expected to contribute to the continuous enhancement of our corporate value by offering useful findings and opinions from an independent standpoint based on her extensive experience and knowledge.

Name	Independent Director	Supplementary explanation of applicable items	Reason for selection
Hideaki Obata	0	No applicable items	We have designated Mr. Hideaki Obata as an independent director since he meets the Company's independence standards and is therefore deemed to have no conflict of interest with our general shareholders. In addition to extensive practical experience in administrative departments mainly in HR and general affairs, he has many years of experience and a track record in management of companies with broad business domains. He was selected as an outside director because he is expected to contribute to the continuous enhancement of our corporate value by offering useful findings and opinions from an independent standpoint based on his extensive knowledge and experience.
Yumi Sano	0	She is a business executive (Kansai Office General Manager) of the Japan Institute for Women's Empowerment & Diversity Management, which is an outsourced contractor of the Company. Since the annual amount of actual transactions in the latest fiscal year is less than 2% of the ordinary profit of the said institute, it is not considered to be an organization whose main client is the Company.	We have designated Ms. Yumi Sano as an independent director since she meets the Company's independence standards and is therefore deemed to have no conflict of interest with our general shareholders. She has a wealth of practical experience in promoting diversity and developing human resources in a listed company and a public interest corporation. In addition, she has experience and achievements from having been involved in corporate management as an outside director of another listed company. She was selected as an outside director because she is expected to contribute to the continuous enhancement of our corporate value by offering useful findings and opinions from an independent standpoint based on her extensive experience and knowledge.

# Diversity of the Board of Directors

The Company selects candidates for its Board of Directors by comprehensively considering each member's personality and other aptitudes, in order to form a Board of Directors with a good overall balance of knowledge, experience, and ability to effectively perform its roles and responsibilities. It should also ensure it maintains an appropriate size and diversity, including in terms of gender, internationality, professional experience, and age. To enhance our corporate value in the medium to long term in keeping with the basic philosophy described below, the Nomination and Compensation Committee held discussions on the skill items required for the Company's Board of Directors, and decided on the following eight items: corporate management; compliance and risk management; understanding of diversity and sustainability; international business; R&D, production, and new business development; sales and marketing; human resources development and training; and finance and accounting. These skill items will be reviewed and revised, if necessary, in the light of the business environment and social circumstances.

## Basic philosophy

- Contribute to society through fulfillment of the Company mission: "Establish a better society through our corporate activities"
- · Steadfastly maintain a stable management base and proactively develop new businesses while leveraging the strength of our existing businesses
- Realize a WakuWaku company that respects diversity and where all employees enjoy high job satisfaction

As of June 30, 2023, the current Board of Directors consists of nine directors with knowledge in line with these skill items (including three independent Outside Directors, two of whom are female) and four Audit & Supervisory Board Members (one of whom is an independent Outside Audit & Supervisory Board Member). Independent Outside Directors include members who have management experience at other companies.

# Compensation and incentives for Directors

Compensation, etc., for the Company's Directors is designed to secure excellent human resources toward improving corporate performance, as well as to ensure that the compensation level and system reflect their duties. The compensation level and system are based on financial results, external objective data, and other factors, and the appropriateness thereof is verified by the Nomination and Compensation Committee, of which a majority of members are Outside Directors. The policy for determining compensation for Directors is deliberated on and determined at the Board Meeting. The compensation for Directors consists of basic compensation, bonuses, and stock-based compensation.

#### Overview of types of compensation, etc.

Compensation type	Overview
Basic compensation	The basic compensation is based on the roles and responsibilities of each Director, and is determined by taking into account the status of financial results over the medium to long term and for the relevant fiscal year, as well as levels at other companies. It is paid on a monthly basis.
Bonuses	The consolidated ordinary profit, which is a benchmark for a corporation's profitability, is used as an index to raise awareness to improve the financial results. The total amount to be paid is calculated based on the status of financial results for the relevant fiscal year and over the medium to long term. Allocation is determined based on the roles and responsibilities of each Director. Bonuses are paid at certain timings each year.
Stock-based compensation	Points are granted depending on the position, etc. based on the Share Delivery Regulations. In principle, the shares of the Company are delivered depending on the number of points when Directors retire.

# Training for Directors and Audit & Supervisory Board Members

For inside and full-time Directors and Audit & Supervisory Board Members, when they assume office, we provide explanations on relevant laws and regulations, the Company's Articles of Incorporation, the Board of Directors Regulations, and other internal regulations. For Outside Directors and full-time Outside Audit & Supervisory Board Members, we facilitate their understanding of the Company's businesses by conducting inspection tours of our factories and other operation sites. We also offer opportunities to acquire necessary knowledge and information by such means as participation in external seminars on corporate governance.

#### Skills matrix

							Sk	Skills				
Name	Position	Outside Ir	Independent	Corporate management	Compliance and risk	and	International business	R&D, production, and new business development	Sales and marketing	Human resource development and training	Finance and accounting	
Takao Ando	Chairman of the Company			•	•	•	•	•	•	•		
Akinori Higuchi	Representative Director, President and CEO			•	•	•	•	•	•	•		
Kohei Maeda	Representative Director			•	•	•		•	•			
Masahiro Harada	Director				•	•		•	•			
Hiroyuki Susaki	Director (newly appointed)				•	•	•		•			
Kenichi Nishimura	Director				•	•	•				•	
Aya Shirai	Director	•	•	•	•	•				•		
Hideaki Obata	Director	•	•	•	•	•	•	•		•		
Yumi Sano	Director	•	•		•	•				•		
Hirokazu Kurome	Audit & Supervisory Board Member	•		•	•	•	•	•				
Takafumi Horiie	Audit & Supervisory Board Member			•	•	•		•				
Jun Karube	Audit & Supervisory Board Member	•		•	•	•	•		•			
Yusuke Nakano	Audit & Supervisory Board Member	•	•	•	•	•					•	

# Major discussion topics and themes

## Board of Directors

- Formulation of the Medium-Term Management Plan and the Comprehensive Plan
- Policy on operating major businesses
- · Matters regarding investment, financing, and donations
- Confirmation of the results of the effectiveness evaluation of the Board of Directors
- ${\boldsymbol \cdot}$  Matters on which to seek advice from the Nomination and Compensation Committee
- Approval of closed financial statements
- · Matters regarding procedures for the general meeting of shareholders
- Resolutions on conflict-of-interest transactions, Directors' liability insurance, etc., appointment and dismissal of important employees, and matters related to compensation for Directors based on the Companies Act

## Nomination and Compensation Committee

- · Rearrangement of the structure (skills matrix) of the Board of Directors, including Audit & Supervisory Board Members
- Establishment of the ideal image of the President and CEO; study of a plan for the successor of the Representative Director, President and CEO, including the evaluation criteria and fostering method
- · Study of evaluation indices for performance-linked compensation
- · Study of the payment ratio by the compensation type

#### Sustainable Management Committee

- · Efforts to improve economic value
- · Methods of disclosure of non-financial information
- · Formulation of a human capital policy and a human rights policy
- · Initiatives to address climate change

#### Compliance Committee

- · Implementation and planning of corporate ethics study meetings
- Results of the use of whistleblowing contact points for consultation or reporting
- · Revision of the Whistleblowing Regulations
- · Policy of risk management activities

#### Internal Control Committee

- · Results of the evaluation of internal control activities related to financial reports
- · Regarding proposals for disclosing the operational status of the Internal Control System in the Business Report
- · Results of the evaluation of the operational status of the Internal Control System regarding significant risks other than those included in financial reports

## Effectiveness evaluation of the Board of Directors

The Company conducts an anonymous questionnaire survey on the effectiveness of the Board of Directors targeting all the Directors (nine persons), including Outside Directors, and all the Audit & Supervisory Board Members (four persons), including Outside Audit & Supervisory Board Members and evaluates the effectiveness of the Board of Directors based on the results. In FY2022, the questionnaire survey on the Board of Directors was conducted based on the main items below.

- 1. Composition and operation of the Board of Directors
- 2. Discussions at Board of Directors meetings
- 3. Monitoring function of the Board of Directors
- 4. Performance of Directors
- 5. Support system and training for Directors and Audit & Supervisory Board Members
- 6. Dialogue with shareholders
- 7. Efforts made by each Director

Respondents were asked to rate each item on a five-point scale or give a comment based on free description for each question. The survey was conducted in March 2023 using a third-party system to ensure objectivity. The results were reported to the Board of Directors meeting held in May 2023. Discussions were held and analysis was conducted based on the aggregate results of the ratings on a five-point scale and comments in the free description fields of the questionnaire survey, to evaluate the effectiveness of the Board of Directors. The previous year's evaluation results indicated that there was room for improvement in terms of "reinforcing the governance system," "improving discussions on management strategies from a medium- to long-term perspective," and "enhancing support to Outside Directors," in order to further improve the effectiveness of the Board of Directors. This year's results showed certain improvement in these matters. Based on the answers to the questions in the above questionnaire, it was evaluated that the effectiveness of the Board of Directors was generally ensured. Notably, regarding the operation of the Board of Directors, a Director who does not execute business serves as the Chairman of the Board of Directors to proceed with a meeting. We thereby endeavor to ensure operation from a fair viewpoint. Meanwhile, to further enhance the effectiveness of the Board of Directors into the future, we recognize the need for continuous improvement in terms of "reinforcing the governance system," "improving discussions on management strategies from a medium- to long-term perspective," and "enhancing support to Outside Directors," for which we previously found that there was room for improvement. We will be committed to making improvements to address these issues.

# Succession plan (plan to foster successors)

In FY2022, the Nomination and Compensation Committee discussed the establishment of "the ideal image of the President and CEO" in conformity with the corporate management principles and management strategies as well as the process to select a candidate for Representative Director, President and CEO and the systematic fostering method to achieve sustainable growth of the Company and improve the medium- and long-term corporate value, and made a report to the Board of Directors. In particular, regarding the "ideal image of the President and CEO," the committee identified the requirements that should be met by the next Representative Director, President and CEO to realize the vision of the Group by FY2030, which was specified in the management policy announced last year under the Company mission, "Establish a better society through our corporate activities." The Nomination and Compensation Committee also discussed the next-generation candidate in anticipation of the Representative Director, President and CEO in about 10 years' time and the method of fostering female candidates for Executive Officers, and made a report to the Board of Directors.

# **Compliance**

We, the Sanyo Chemical Group, declared in our Code of Corporate Ethics that it is essential corporate behavior to ensure legal compliance and to fulfill corporate social responsibility, which has been implemented to take the lead in the realization of a sustainable society. With good sense and integrity, we are committed to improving our society and are following our company mission, "Establish a better society through our corporate activities."

# Compliance system

We have appointed a Director in charge of corporate ethics and established the Compliance Committee, which is under the direct control of the Board of Directors.

The Compliance Committee is a deliberative and decision-making body on the basic policy and measures regarding compliance. The committee holds regular meetings. In FY2022, the committee studied the content to be learned by employees at corporate ethics study meetings, which are held on a company-wide basis, identified important risks that can be reduced through compliance activities, and formulated countermeasures.

We have also set up the Auditing Division under the direct control of the President, so as to strengthen our internal auditing function.

#### Compliance promotion structure



The Advice on Compliance and the Code of Conduct for Employees establishes specific criteria on daily behavior for employees.

#### Internal auditing

The Auditing Division conducts internal auditing. It objectively inspects and evaluates the business management and operation systems and the status of business execution in terms of legitimacy, effectiveness, and efficiency. Based on the results, it makes proposals for improvement or corrective recommendations, in order to facilitate the Company's sound management and sustainable development.

## Education activities

#### Corporate ethics study sessions

Every year, the Sanyo Chemical Group holds sessions to study corporate ethics across all departments with the objective of preventing the occurrence of corporate misconduct. In recent years, these sessions have placed particular focus on the kind of corporate culture that may form the background to corporate misconduct. Participants learn that corporate culture reform leads to improved compliance by watching videos (short dramas). In FY2022, participants watched a video on the theme of "a workplace where negative information is reported" and held group discussions. In total, 1,885 participants joined the sessions. After the sessions, a questionnaire survey was conducted to evaluate the overall compliance activities of the Group and reflect the results on the education activities in the following fiscal years.

#### Legal consultant program

Employees of the Legal Affairs Department offer legal consultants for Group employees in Japan. They give lectures on various themes. Personnel in charge of the Legal Affairs Department are designated as contact persons for respective organizations (including business divisions and subsidiaries and affiliates). Employees of the Legal Affairs Department visit respective business sites in Japan and offer legal consultation services ("visiting legal services"). Such arrangements make it easy to seek legal advice.

#### Training content for FY2022

Contents	Target group
Contract Basics	Employees in their first to fifth year of employment
Antimonopoly Act (Restriction of Trade and Business Alliance)	Sales staff
Prevention of Fake Contracts	Employees working with subcontractors
Export Trade Control Order	Research staff
Industrial Waste Disposal Consignment Agreement	Employees involved in the conclusion of industrial waste disposal consignment contracts
Non-Disclosure Agreement (NDA)	Employees involved in the signing of non-disclosure agreements
Joint development and joint application	Research Young and mid-career employees
Subcontract Act	Employees working with subcontractors
Trade secrets	Sales and research staff

## Internal whistleblowing system

If an employee becomes aware of a compliance problem, the employee should basically discuss it with his/her supervisor and/or the personnel concerned. However, if the problem cannot be resolved through such discussions, the whistleblowing contact points (compliance hotline) that conform with the Whistleblower Protection Act are set up both inside the Company and outside in accordance with the internal Whistleblowing Regulation. The General Manager of the Auditing Division, who is a member of the Compliance Committee Secretariat, serves as the internal contact point for whistleblowing. The corporate lawyer is available for the contact point outside the Company. We operate the regulation requiring that the whistleblowers' confidentiality be carefully protected to prevent the identification of whistleblowers.

In FY2022, four reports in total were submitted through the compliance hotline. All of these reports were related to harassment. The facts were investigated with utmost care so that whistleblowers would not be disadvantaged. For problems identified, guidance was offered and disciplinary action was taken for target individuals, and education was offered to correct the situation.

Previously, the Sexual Harassment, Maternity Harassment, and LGBT Contact Points dedicated to harassment problems were in place separately from the whistleblowing contact points. In April 2023, a consultation desk for harassment problems was newly established outside the Company. A mechanism will be created so that the whistleblowing contact points and the consultation desk are readily accessible to whistleblowers (employees seeking consultation services). The status of operation of the whistleblowing contact points is reported to the Compliance Committee.

#### Number of whistleblowing cases

FY	2018	2019	2020	2021	2022
Number of cases	1	4	1	2	4

## Action against violations

Action to be taken when compliance violations are found (e.g., procedures, or announcements in or outside the company) is stipulated in the Compliance Committee Regulations. When a violation is found, facts are scrutinized and punishment is determined based on the Rules of Employment and Disciplinary Actions Regulations in light of internal regulations, including the Operational Responsibilities Regulations. Company-wide measures to prevent recurrence are discussed and determined. In FY2022, there were four cases subject to disciplinary actions. Specifically, three cases were related to harassment, and one case was related to violation of company policy.

#### Fair trade and anti-corruption

Sanyo Chemical is a member of the United Nations Global Compact. The Code of Corporate Ethics and the Code of Conduct for Employees stipulate commitment to "fair competition, proper transactions, and responsible procurement." The Operational Responsibility Regulations of business divisions require the "prevention of unlawful transactions and acts, prohibition of bribery, and confirmation of non-violation of export regulations and laws related to chemical substances in respective countries." Education is offered to employees through "egal consultants."

We do not violate antimonopoly laws, antitrust laws, or competition laws of respective countries.

#### Political donations

We do not make political donations.

#### Transparency regarding the provision and use of research funds, etc.

In accordance with the "Transparency Guidelines" with medical institutions set forth by the Japan Association of Laboratory Medicine and the Japan Federation of Medical Devices Industries, we have established "Guidelines for Transparency in Relationships with Medical Institutions, etc." and announce the status of implementation every year.

Click here after the Guidelines for Transparency in Relationships with Medical Institutions and public information(In Japanese Only).

In addition, we have announced the appropriate operation and management system for public research expenses.

Click here for Management System for Public Research Funds(In Japanese Only).

# **Risk Management**

To avert business continuity crises and prepare for unforeseen circumstances, the Sanyo Chemical Group has established internal regulations to cope with each possible risk. We conduct risk management by raising the risk awareness of employees by providing training and holding drills.

# Risk management system

In order to address risks surrounding the Group, internal regulations such as the Operational Responsibilities Regulations, the Basic Regulations for Product Liability (PL), and the Information System Security Regulations have been formulated, and the departments in charge shall manage the risks. The Auditing Division (Business Auditing Department or Technical Auditing Department) under the direct control of the President monitors the status of risk management with the Group. If a risk is identified, the Auditing Division gives instructions to formulate correction and recurrence prevention measures, checks the details, and follows up on the status of implementation by the relevant departments. Regarding important compliance risks, the Compliance Committee discusses and determines the basic policies and measures.

#### Risk-based audit

In collaboration with the Internal Control Dept., the Business and Technical Auditing Departments conduct internal audit across the organization by preparing a risk-based audit map for performing business and operations and by setting audit themes for each fiscal year with priorities taken into account.

## Business continuity plan (BCP)

The Group draws up and operates BCPs that prepare for response in the event of a massive earthquake or a pandemic. The Internal Control Department of the BCP Secretariat takes the initiative in conducting a review every year to make the BCP further effective. We also continuously hold practical drills in each region.

## Information management

Information assets are crucially important for companies. Leakage of information assets is likely to pose the risk of damaging corporate value. Recognizing the importance of confidential information, we have the Security Management Regulations in place to prevent information leakage, ensure proper use, and prevent unauthorized acquisition, use, and disclosure of confidential information of third parties. We ensure security by establishing the Information System Security Regulations and the Personal Computer and Network Management Regulations, introducing a firewall and other network security systems, managing licenses for the use of information systems, and limiting access to the Internet. To raise the security awareness of employees and prevent information security accidents, we offer information security education every year.

#### Personal information protection

As for the protection of personal information, we have laid down the Personal Information Protection Policy, which stipulates the purpose and methods of use of personal information and its management, as well as consultation procedures regarding such information. The policy was revised in line with the amended Act on the Protection of Personal Information, which came into effect in April 2022. We have the Personal Information Protection Management Regulations in place to realize appropriate protection under this policy. Regarding the Individual Number (My Number) system, rules are established in the Specific Personal Information Handling Regulations. An IT system capable of ensuring security is used for operation. We also comply with the Social Media Policy, which was formulated regarding the operation of official social media accounts and the use of social media by respective employees.

## Overseas crisis management activities

The Sanyo Chemical Group has established and implemented the Basic Regulations for Overseas Crisis Management, which set forth basic points for reducing risks that may cause harm to the lives, bodies, and property of the Group employees outside Japan, and for responding to an overseas crisis if such an event should occur. The regulations specify the crisis management organizations and the chain of command that will function in the case of emergency and define the responsibilities and authority of the Overseas Crisis Management Secretariat and the response headquarters, so that appropriate responses can be made accordingly. The Overseas Crisis Management Secretariat is established within the Personnel Division to constantly gather and analyze information and issue overseas travel warnings as necessary. When a BCP is implemented, the overseas crisis management organizations will work in coordination with the Business Continuity Task Force.

#### Internal control

We, the Sanyo Chemical Group, declared in our Code of Corporate Ethics that it is essential corporate behavior to ensure legal compliance and to fulfill corporate social responsibility, which has been implemented to take the lead in the realization of a sustainable society. With good sense and integrity, we are committed to improving our society and are following our company mission, "Establish a better society through our corporate activities."

#### Structure



#### Internal control bodies and their roles

#### Internal Control Committee

The Internal Control Committee is in place under the direct control of the Board of Directors. The Internal Control Committee determines the basic policy on the overall internal control system, and provides instructions and supervision for the development, operation, evaluation, and improvement activities for the system.

#### Internal Control Dept.

The Internal Control Dept. gives advice on planning measures to cope with and avoid various risks related to business operations. The Internal Control Dept. is also responsible for building, evaluating, improving, and reporting on the three internal control systems.

- 1. Internal control related to the Companies Act
- 2. Internal control related to financial reports (in accordance with the Financial Instruments and Exchange Act)
- 3. Internal control related to risks other than financial reports

Regarding internal control related to the Companies Act, the basic policy on the internal control system was resolved by the Board of Directors and publicized in 2006 in accordance with the Companies Act and the Regulations for Enforcement of the Companies Act. It is reviewed as appropriate.

Regarding internal control related to financial reports, operational processing control and overall IT control, from company-wide internal control and sales to the financial reporting process, are evaluated. The results are compiled as the internal control report and are reported to the Internal Control Committee. The internal control audit report prepared by the accounting auditor is attached and submitted to the Kanto Finance Bureau.

Regarding internal control related to risks other than financial reports, a set of documents, including procedures for risk reduction measures against expected risks and self-check sheets, are prepared and posted on the intranet so that employees can read them at any time.

# **ESG Performance Data**

Environment Social Governance

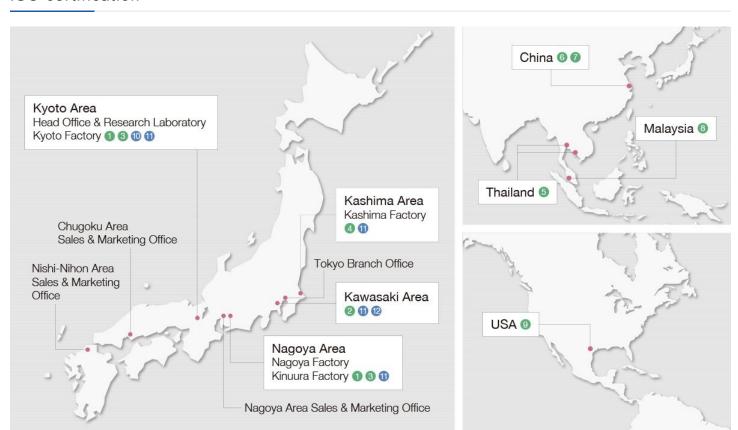
## Scope of data aggregation

On the following pages, the above-listed terms are to indicate the scope of data aggregation.

- SCI indicates all facilities in Sanyo Chemical Industries, Ltd.
- "Domestic" indicates SCI plus domestic affiliates/subsidiaries.
- "Overseas" indicates overseas affiliates/subsidiaries that have production facilities.

In case of no specific note, the scope is "domestic" plus "overseas."

# ISO certification



			Year	ISO1	4001	ISO	9001
	Location	Facility	established (in operation)	Year acquired	Certification authority	Year acquired	Certification authority
	_	Sanyo Chemical Kashima Factory	1977	_	_	1997	JCQA
	_	Sanyo Chemical Kyoto Factory	1949	_	_	1999	JCQA
	_	Sanyo Chemical Nagoya Factory	1969	_	_	1998	JCQA
	_	Sanyo Chemical Kinuura Factory	2010	_	_	2010	JCQA
	1)	SDP Global Co., Ltd.	2001	_	_	2000	JCQA
Φ	2	San Chemical Co., Ltd.	1982	_	_	2000	JCQA
Production Base	3	SAN NOPCO LIMITED	1966	_	_	2000	JCQA
Product	4	San-Petrochemicals Co., Ltd.	1977	_	_	_	_
	(5)	Sanyo Kasei (Thailand) Ltd.	1997	2009	TICA/J-VAC	2004	TICA/J-VAC
	6	Sanyo Kasei (Nantong) Co., Ltd.	2003	2012	TUV NORD	2006	TUV NORD
	7	San-Dia Polymers (Nantong) Co., Ltd.	2003	2013	CQM	2007	DET NORSKE VERITAS
	8	SDP GLOBAL (MALAYSIA) SDN. BHD.	2015	_	_	_	_
	9	Sanyo Chemical Texas Industries, LLC	2005	_	_	_	_
Base	10	San-Apro Ltd.	1966	_	_	2003	JCQA
duction	11)	Sanyo Chemical Logistics Co.,Ltd.	2020	_	_	_	_
Non-production Base	12)	Shiohama Chemicals Warehouse Co.,Ltd.	1983	_	_	_	_

Note: The four Sanyo Chemical factories and domestic affiliates/subsidiaries ① through ④ will discontinued their ISO 14001 certification in FY2020. ④San-Petrochemicals Co., Ltd also discontinued its ISO 9001 certification in FY2020.

## Environmental investment and environmental effects

#### Environmental accounting results:

Based on Ministry of the Environment (Japan) Guidelines

[Scope] Sanyo Chemical, seven domestic subsidiaries/affiliates, and five overseas subsidiaries/affiliates with production facilities

#### Environmental protection cost

Investment/expenses (unit: million yen)

Classification		2018	2019	2020	2021	2022
	(1) Pollution prevention costs	122 / 864	172 / 872	260 / 843	216 / 842	297 / 875
Facility area costs	(2) Global environment costs	39 / 622	83 / 676	81 / 650	64 / 671	27 / 663
	(3) Resource recycling costs	28 / 1,771	64 / 1,932	41 / 1,850	1 / 1,794	1 / 1,898
Upstream/downstream co	Upstream/downstream costs		0 / 30	0 / 34	2 / 40	0 / 33
Administrative costs		6 / 397	3 / 417	1 / 459	55 / 475	3 / 505
R&D costs		0 / 688	0 / 506	0 / 464	0 / 663	0 / 730
Social activity costs	Social activity costs		0 / 138	0 / 124	0 / 132	0 / 138
Environmental remediation costs		0 / 4	0 / 3	20 / 5	0 / 3	0 / 4
Total		195 / 4,504	322 / 4,573	404 / 4,428	338 / 4,620	327 / 4,846

Note: The investment amount is based on the acceptances during the corresponding period. The expense amount includes depreciation.

#### Environmental conservation measures by category

Investment/expenses (unit: million yen)

Classification	2018	2019	2020	2021	2022
(1)Costs related to global warming measures	27 / 615	65 / 675	40 / 633	19 / 646	34 / 642
(2)Costs related to ozone layer protection measures	0 / 1	1 / 1	0 / 1	1 / 5	0 / 2
(3)Costs related to air quality conservation measure	71 / 419	65 / 395	185 / 394	232 / 391	224 / 408
(4)Costs related to noise and vibration	3 / 70	3 / 73	5 / 75	1 / 64	0/74
(5)Cost related to environmental conservation measures for the aquatic, ground, and geologic environments	45 / 399	98 / 426	136 / 414	73 / 432	62 / 456
(6)Costs related to waste product and recycling measures	35 / 1,778	69 / 1,940	34 / 1,857	1 / 1,803	1 / 1,906
(7)Costs related to measures for reducing chemical risk and emissions	0 / 225	0 / 234	0 / 282	0 / 277	0 / 259
(8)Costs related to natural environmental conservation	0 / 13	10 / 19	0 / 16	3 / 17	1 / 16
(9)Other costs	16 / 295	11 / 304	3 / 292	9 / 322	5 / 354
Total	195 / 3,816	322 / 4,068	404 / 3,963	338 / 3,957	327 / 4,116

Note: Expenses for research and development are not classified.

Economic impact (unit: million yen)

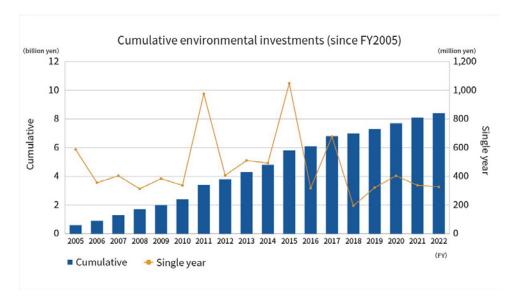
					,	, ,
Results		2018	2019	2020	2021	2022
Energy saving	72	81	6	41	20	
	Waste reduction	141	97	48	77	7
Resource saving	Raw material use reduction (yield improvement)	227	178	174	152	82
	Revenue from recycling	26	80	52	55	70
Total	466	436	279	325	179	

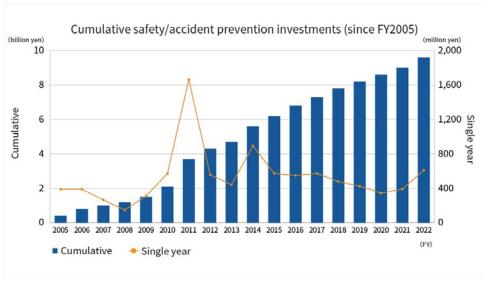
Note: Including effects of measures that do not involve investment (e.g., improvement of the manufacturing processes)

# Environment/safety/accident prevention investments

(unit: million yen)

FY	2018	2019	2020	2021	2022
Environment conservation	195	322	404	338	327
Safety/accident prevention	478	425	344	391	611
Total	673	747	747	729	938

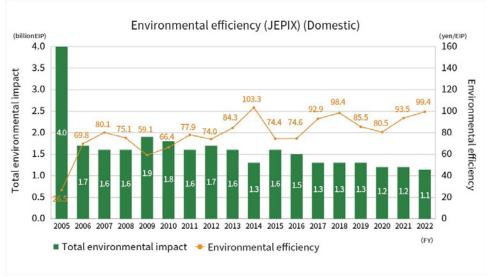




## Environmental complaints

	Unit	Scope	2018	2019	2020	2021	2022
		Domestic	0	1 (Noise complaints)	0	0	0
Claims and complaints on pollution, administrative guidance and lawsuit on environment, etc.	Cases	Overseas	0	0	0	0	0
		Total	0	1	0	0	0

# JEPIX: Japan Environmental Policy Priorities Index



Note: JEPIX (http://www.jepix.org) Calculated using PEPIX Calculation Sheet Ver. 2.0. The smaller the EPI, the better the environmental efficiency.

# Climate change related data

### Energy consumption and GHG emission

	Unit	Scope	2018	2019	2020	2021	2022
		Domestic	407,180	370,681	332,320	343,716	317,848
Production volume	tons	Overseas	175,204	201,817	238,468	179,998	149,516
		Total	582,384	572,498	570,788	523,714	467,365
		Domestic	478,147	435,736	383,120	400,002	362,825
Raw materials	tons	Overseas	228,727	267,626	319,739	236,875	198,151
		Total	706,874	703,363	702,859	638,877	560,976
		Domestic	192,372	176,494	157,435	152,579	146,226
GHG emissions <sup>*1</sup>	CO <sub>2</sub> tons	Overseas	120,842	134,731	150,568	123,562	109,031
		Total	313,214	311,225	308,003	276,140	255,257
		Domestic	95,875	90,037	81,073	81,013	78,229
Energy consumption	kL in crude oil equivalent	Overseas	49,205	57,322	64,981	51,205	44,993
		Total	145,080	147,359	146,054	132,218	123,221
CO <sub>2</sub> emissions as a consignor*2	CO <sub>2</sub> tons	Domestic	11,931	11,596	10,398	10,368	8,765

<sup>\*1</sup> Calculated in conformity with the Act on Promotion of Global Warming Countermeasures. However, the CO<sub>2</sub> conversion factors for electricity in overseas facilities is according to the U.S. Energy Information Administration (EIA) figures in the case of the U.S.A. and the Institute for Global Environmental Strategies (IGES) figures in the case of China, Thailand, and Malaysia.

<sup>\*2</sup> Total domestic transportation of Sanyo Chemical Industries, Ltd., SDP Global Co., Ltd., and SAN NOPCO LIMITED

# Indicator concerning energy saving and GHG emission reduction

		Unit	Scope	2018	2019	2020	2021	2022
			Domestic	17,837	15,894	15,975	13,165	13,332
Energy generated or	n-site (cogeneration)	kL in crude oil equivalent	Overseas	847	2,177	2,824	2,782	3,047
			Total	18,684	18,071	18,799	15,946	16,379
			Domestic	13	13	12	13	13
Renewable energy ugeneration)	Renewable energy use (solar power generation)		Overseas	50	26	30	32	20
			Total	63	39	42	45	32
Increase in forest CC	O <sub>2</sub> absorption*1	CO <sub>2</sub> tons	Domestic	_	_	13	39	11
CO <sub>2</sub> reduction by us	ing our products*2	10,000 CO <sub>2</sub> tons	_	25.8	41.6	47.7	49.4	49.3
	Purchased electric power			17.8	15.2	13.0	17.1	18.4
	Purchased steam			32.0	32.3	30.4	33.0	33.1
Energy composition	Fuel oil	%	Domestic and overseas	1.6	2.2	2.0	0.8	0.5
	Natural gas			32.4	33.8	35.6	37.6	38.1
	LPG			16.2	16.5	19.1	11.6	10.0

 $<sup>^{\</sup>star}1$  The increase in absorbed  $\text{CO}_2$  thanks to forest tree thinning projects.

<sup>\*2</sup> CO<sub>2</sub> reduction volume associated with the use of our products compared to conventional products is multiplied by sales volume in a fiscal year.

#### GHG emissions in Scope 1, 2, 3

Cat.: category (unit: CO<sub>2</sub> tons)

	2018	2019	2020	2021	2022
Scope 1 Direct emissions	164,993	172,349	181,509	145,753	130,031
Scope 2 Indirect emissions from the use of electricity, heat, or steam supplied by others	148,038	138,876	126,495	130,283	125,226
Scope 3 Supply chain emissions sum of categories	2,803,414	2,575,909	2,322,571	2,393,925	2,512,571
Cat.1*1 Purchased goods and services	1,438,389	1,317,142	1,178,559	1,216,830	1,448,976
Cat.2 Capital goods	27,909	18,974	18,367	20,922	19,670
Cat.3 Fuel and energy-related activities (not included in Scope 1 or Scope 2)	28,396	25,969	24,564	24,219	23,853
Cat.4 Upstream transportation and distribution	30,836	29,240	21,789	26,482	20,780
Cat.5 Waste generated in operations	12,525	12,404	409	812	820
Cat.6 Business travel	188	185	189	184	181
Cat.7 Employee commuting	475	475	476	472	463
Cat.8 <sup>*2</sup> Upstream leased assets	_	_	_	_	_
Cat.9 <sup>*3</sup> Downstream transportation and delivery	_	_	_	_	_
Cat.10 <sup>*3</sup> Processing of sold products	_	_	_	_	_
Cat.11 <sup>*3</sup> Use of sold products	_	_	_	_	_
Cat.12*4 End-of-life treatment of sold products	1,211,933	1,118,975	1,027,575	1,055,712	948,355
Cat.13 <sup>*2</sup> Downstream leased assets	_	_	_	_	_
Cat.14 <sup>*5</sup> Franchises	_	_	_	_	_
Cat.15 Investments	52,763	52,545	50,643	47,391	49,473

Note: Scope 3 was calculated based on the Basic Guidelines on Accounting for Greenhouse Gas Emissions Throughout the Supply Chain issued by the Ministry of the Environment.

(https://www.env.go.jp/earth/ondanka/supply\_chain/gvc/en/files/GuideLine.pdf) and by reference to the Ministry of the Environment's Policy on Emissions Unit Values for Accounting of Greenhouse Gas Emissions, etc., by organizations throughout the supply chain.

#### [Scope of Calculation]

- Scope 1, Scope 2: Sanyo Chemical, domestic affiliates/subsidiaries, overseas affiliates/subsidiaries with production facilities
- Scope 3 Cat. 1-7: Sanyo Chemical Industries, Ltd., SDP Global Co., Ltd., San Chemical Co., Ltd.
- Cat. 12: Sanyo Chemical Industries, Ltd., SDP Global Co., Ltd., San Chemical Co., Ltd., a part of sales products of overseas affiliates/subsidiaries
- Cat. 15: Sanyo Chemical Industries, Ltd.
- \*1 Changed the coefficient of CO<sub>2</sub> conversion of purchased raw materials to "IDEA ver.2" of the National Institute of Advanced Industrial Science and Technology (AIST) from FY2022. Before FYE2021: "Common Unit CO<sub>2</sub> Conversion Database ver. 4.01," Ministry of the Environment of Japan, Carbon Footprint System Pilot Project
- $^{\star}2$  Only the leases within the group and calculated in Scopes 1 and 2
- \*3 Collection of data necessary for calculation was difficult and no calculations was made.
- \*4 Until FYE2021, biomass feedstock was deducted from the total, but The calculation was changed to be calculated without deductions beginning in FY2022, and the figures were revised accordingly prior to FY2021. The figures for Scope 3 total have been revised accordingly.
- \*5 Out of scope as there were no relevant activities

# Waste and resource saving related data

	Unit	Scope	2018	2019	2020	2021	2022
		domestic	53,959	50,907	44,705	38,324	34,587
Waste generated	tons	overseas	6,919	8,302	8,803	7,891	9,607
		Total	60,878	59,209	53,508	46,215	44,194
		domestic	20,454	18,453	16,665	14,590	14,541
Waste emissions	tons	overseas	6,741	8,236	9,004	7,424	8,562
		Total	27,195	26,689	25,669	22,013	23,103
		domestic	21,526	19,910	16,194	12,113	7,113
Recycled waste*1	tons	overseas	1,073	2,986	3,891	3,315	4,508
		Total	22,600	22,896	20,085	15,428	11,621
		domestic	39.9	39.1	36.2	31.6	20.6
Recycle rate <sup>*2</sup>	%	overseas	15.5	36.0	44.2	42.0	46.9
		Total	37.1	38.7	37.5	33.4	26.3
		domestic	2.5	15.7	2.0	1.0	2.5
Landfill	tons	overseas	14.0	7.6	3.0	5.1	3.9
		Total	16.5	23.3	5.0	6.1	6.4
		domestic	0.00	0.03	0.00	0.00	0.01
Landfill rate <sup>*3</sup>	%	overseas	0.20	0.09	0.03	0.06	0.04
		Total	0.03	0.04	0.01	0.01	0.01

<sup>\*1</sup> The total value of the recycle amounts both inside and outside the company, including thermal recycling

 $<sup>^{\</sup>star}2$  Ratio of recycled volume to waste generated: Amount of recycled waste  $\div$  Amount of waste generated  $\times 100$ 

<sup>\*3</sup> Ratio of final landfill disposal to waste generated: Final landfill disposal volume + waste generated×100 Note: Since there may be inaccuracies in the waste data, a retrospective review is planned for FY2023.

# Water resource related data

	Unit	Scope	2018	2019	2020	2021	2022
		domestic	154	143	132	137	139
Drinking water	thousand m <sup>3</sup>	overseas	111	244	263	284	261
		Total	265	387	395	421	400
		domestic	0	0	0	0	0
Ground water	thousand m <sup>3</sup>	overseas	0	0	0	0	0
		Total	0	0	0	0	0
		domestic	3,621	3,531	3,367	3,558	3,513
Industrial water	thousand m <sup>3</sup>	overseas	440	436	507	315	421
		Total	4,060	3,967	3,873	3,874	3,933
Total water usage	thousand m <sup>3</sup>	Domestic and overseas	4,325	4,354	4,269	4,295	4,333
		domestic	3,730	2,894	2,738	3,039	3,024
Water discharge	thousand m <sup>3</sup>	overseas	124	114	149	132	274
		Total	3,854	3,008	2,887	3,171	3,298
		domestic	150	161	117	156	142
COD in water discharge	tons	overseas	40	29	23	17	29
		Total	189	190	140	173	171
		domestic	0.70	0.62	0.83	0.77	0.97
Total phosphorus in water discharge	tons	overseas	0.00	0.00	0.00	0.00	0.00
		Total	0.70	0.62	0.83	0.77	0.97
		domestic	6.3	4.6	5.0	4.2	4.0
Total nitrogen in water discharge	tons	overseas	1.1	0.8	0.6	0.8	1.3
		Total	7.3	5.3	5.6	5.0	5.3

<sup>\*</sup> We don't use sea water.

#### Discharge area and environmental impact (domestic, FY2022)

	Unit	Nagoya area	Kawasaki area	Kashima area	Kyoto area	Kinuura area
Business facilities		Nagoya Factory SDP Global Co., Ltd. SAN NOPCO LIMITED	San Chemical Co., Ltd.	Kashima Factory San-Petrochemicals Co., Ltd.	Kyoto Factory Head Office, Research Laboratory and Katsura Research Laboratory	Kinuura Factory
Discharge area		Ise Bay	Tokyo Bay	Sewage System	Sewage System	Sewage System
Water discharge	thousand m <sup>3</sup>	1,924	116	838	144	1
COD	tons	10.9	2.9	127.4	127.4 1.2	
Phosphorus	tons	0.3	0.0	0.6	0.1	0.0
Nitrogen	tons	1.4	0.3	1.9	0.4	0.0

# Chemical substance emission data

## Emissions to the air

			2018	2019	2020	2021	2022
		domestic	62	66	87	39	89
NOx	tons	overseas	25	105	36	20	15
		Total	87	171	123	60	104
		domestic	1.0	0.8	1.1	1.6	0.6
SOx	tons	overseas	22.8	70.1	10.0	5.0	4.1
		Total	23.7	70.9	11.1	6.6	4.7
		domestic	4.3	4.3	3.1	2.0	4.6
Soot and dust	tons	overseas	21.1	23.1	3.9	2.2	1.9
		Total	25.4	27.4	7.0	4.2	6.5
	tons	domestic	75	89	70	73	66
VOC emissions*1		overseas	7	22	23	17	8
		Total	82	112	93	90	74
Substances subject to the PRTR Act ; Release to air	tons	domestic	44	48	44	47	42
Substances subject to the PRTR Act ; Release to water	tons	domestic	0.5	0.6	0.4	0.4	0.3
Substances subject to the PRTR Act; Transfer to waste	tons	domestic	584	518	365	577	517
Fluorocarbons leakage  CO <sub>2</sub> equivalent  Ozone-depleting substance* <sup>2</sup>	kg		147	184	106	252	102
	CO <sub>2</sub> tons	domestic	318	403	280	827	339
	kg CFC-11		2	0	3	1	1

<sup>\*1</sup> Total emission of substances subject to the revised and former PRTR law, and the substances specified by the Japan Chemical Industry Association.

<sup>\*2</sup> The HCFCs leakage from refrigeration and air conditioning equipment according to the Fluorocarbons Recovery and Destruction Law was converted to CFC-11 volume equivalent.

# Emission/transfer of substances subject to PRTR Law (domestic)

Substances of which more than 0.01 tons of annual emissions were released to the air or water, or transferred to waste are listed below.

(unit: tons)

Base	Cabinet order number	Cabinet order name	Release to air	Release to water	Transfer to waste
	001	Zinc water-soluble compounds	0	0.06	0
	004	Acrylic acid and its water-soluble salts	0.90	0.00	0
	009	Acrylonitril	0.05	0	0
	037	4,4'-Isopropylidenediphenol (synonym: Bisphenol A)	0	0.02	0
	053	Ethylbenzene	0.13	0.00	0
	056	Ethylene oxide	0.08	0	0
058	058	Ethylene glycol monomethyl ether		0	0
	066	1,2-Epoxybutane	0.29	0	0
Nagoya Factory	068	1,2-Epoxypropane (synonym: Propylene oxide)	1.68	0	0.0
	080	Xylen	0.08	0.00	0
	134	Vinyl acetate	0.04	0	0
	178	1,2-Dichloropropane	0.87	0.01	0.1
	232	N,N-Dimethylformamide	0.16	0.09	40.0
	300	Toluene	4.90	0.00	0
	398	Benzyl chloride	0.03	0	0
	405	Boron compounds	0	0.05	0
		95 Substances handled Total release or transfer amount	9.29	0.24	40.2

Base	Cabinet order number	Cabinet order name	Release to air	Release to water	Transfer to waste
	003	Ethyl acrylate	0.02	0	0
	004	Acrylic acid and its water-soluble salts	0.03	0	0
	007	n-Butyl acrylate	0.10	0	0
	008	Methyl acrylate	0.02	0	0
	053	Ethylbenzene	1.04	0.02	110.3
	065	Epichlorohydrin	1.44	0.01	4.8
	076	ε-Caprolactam	0.03	0	0
	080	Xylen	0.61	0.02	73.6
	123	3-Chloropropene (synonym: Allyl chloride)	0.43	0	0
	128	Chloromethane (synonym: Methyl chloride)	15.14	0	0
	131	3-Chloro-2-methyl-1-propene	0.07	0	0
	134	Vinyl acetate	0.31	0	0
Kashima Factory	157	1,2-Dichloroethane	0.44	0.00	12.7
	232	N,N-Dimethylformamide	0.06	0	33.9
	239	Organic tin compounds	0	0	16.7
	240	Styrene		0	2.5
	277	Triethylamine	0	0	0.2
	300	Toluene	0.60	0.02	0
	351	1,3-Butadiene	0.03	0	0
	399	Benzaldehyde	0	0	0.4
	414	Maleic anhydride	0.00	0	2.1
	415	Methacrylic acid	0.31	0	36.8
	418	2-(Dimethylamino)ethyl methacrylate	0.21	0	113.5
	420	Methyl methacrylate	4.79	0	39.8
	60 Substances handled To		25.86	0.07	447.2
	053	Ethylbenzene	0.00	0	4.0
	080	Xylen	0.00	0	2.7
	232	N,N-Dimethylformamide	0.00	0	4.6
Kyoto Factory	300	Toluene	0.00	0	5.3
	420	Methyl methacrylate	0.03	3	1.1
		62 Substances handled Total release or transfer amount	0.04	0	17.5

Base	Cabinet order number	Cabinet order name	Release to air	Release to water	Transfer to waste
	056	Ethylene oxide	0.07	0	0
Kinuura Factory	068	1,2-Epoxypropane (synonym: Propylene oxide)	0.21	0	0
		7 Substances handled Total release or transfer amount	0.33	0	0
	056	Ethylene oxide	0.11	0	0
San Chemical Co., Ltd.	068	1,2-Epoxypropane (synonym: Propylene oxide)	0.37	0	0
		28 Substances handled Total release or transfer amount	0.49	0.00	0.1
SDP Global Co,.	004	Acrylic acid and its water-soluble salts	5.12	0	0.1
Ltd.		2 Substances handled Total release or transfer amount	5.12	0	0.1
	004	Acrylic acid and its water-soluble salts	0.02	0	0.0
	008	Methyl acrylate	0.02	0	0
	053	Ethylbenzene	0.00	0	0.6
	080	Xylen	0.00	0	0.4
	232	N,N-Dimethylformamide	0.00	0	2.8
San Nopco Ltd.	298	Tolylene diisocyanate	0	0	0.2
	300	Toluene	0.09	0	4.2
	407	Poly (oxyethylene) alkyl ether (limited to those the alkyl group is C=12-15 and mixture thereof)	0	0	0.3
	409	Sodium poly (oxyethylene) dodecyl ether sulfate	0	0	0.1
		40 Substances handled Total release or transfer amount	0.15	0	8.9
	190	Dicyclopentadiene	0.04	0	0.0
	337	4-Vinyl-1-cyclohexene	0.09	0	0.3
San-Petrochemicals Co., Ltd.	351	1,3-Butadiene	0.04	0	0
	400	Benzene	0.06	0	0.0
		6 Substances handled Total release or transfer amount	0.23	0	0.4

Dioxins (unit: mgTEQ)

Base	Cabinet order number	Cabinet order name	Release to air	Release to water	Transfer to waste
Nagoya Factory	243	Dioxins	29.12	5.56	66.74
Kyoto Factory	243	Dioxins	2.00	0.13	1.66

#### Major emission of substances subject to PRTR Law (domestic)

(unit: tons)

Classification         Substance name         2001         2018         2019         2020         2021         2022           Alkylene oxides         17.9         0.2         0.5         0.5         0.3         0.3           Vinyl monomers         Propylene oxide         56.2         4.5         3.7         3.3         3.4         2.3           Acrylic acid         4.9         11.3         11.3         10.4         5.0         6.1           Acrylonitrile         13.0         0.1         0.1         0.1         0.1         0.0           Styrene         1.6         0.2         0.2         0.2         0.2         0.2         0.2           Methyl methacrylate         19.3         5.0         10.1         4.5         4.8         4.8           Chlorine compounds         Epichlorohydrin         1.0         1.7         1.6         1.4         1.4         1.4           Chloromethane         9.2         14.4         13.6         17.8         17.2         15.1           Chlorine compounds         1.2-Dichloropropane         3.0         1.1         1.1         0.8         0.4         0.4      <	wajor emission of substances subject to FRTR Law (domestic)					(unit: tons)		
Alkylene oxides   Propylene oxide   56.2   4.5   3.7   3.3   3.4   2.3	classification	Substance name	2001	2018	2019	2020	2021	2022
Propylene oxide   56.2   4.5   3.7   3.3   3.4   2.3	Alludana avidas	Ethylene oxide	17.9	0.2	0.5	0.5	0.3	0.3
Acrylonitrile	Alkylene oxides	Propylene oxide	56.2	4.5	3.7	3.3	3.4	2.3
Vinyl monomers         Styrene         1.6         0.2         0.2         0.2         0.2         0.2           1,3-Butadiene         3.2         0.2         0.1         0.1         0.1         0.1           Methyl methacrylate         19.3         5.0         10.1         4.5         4.8         4.8           Epichlorohydrin         1.0         1.7         1.6         1.4         1.4         1.4           1,2-Dichloroethane         9.2         14.4         13.6         17.8         17.2         15.1           1,2-Dichloroethane         4.3         0.3         0.3         0.6         0.4         0.4           1,2-Dichloropropane         3.0         1.1         1.1         0.8         1.0         0.9           Organic solvents         Ethylbenzene         3.8         1.2         1.2         1.1         1.2         1.2           N,N-Dimethylformamide         2.6         0.3         0.3         0.3         0.2         0.2         0.2		Acrylic acid	4.9	11.3	11.3	10.4	5.0	6.1
1,3-Butadiene   3.2   0.2   0.1   0.1   0.1   0.1		Acrylonitrile	13.0	0.1	0.1	0.1	0.1	0.0
Methyl methacrylate 19.3 5.0 10.1 4.5 4.8 4.8  Epichlorohydrin 1.0 1.7 1.6 1.4 1.4 1.4  Chloromethane 9.2 14.4 13.6 17.8 17.2 15.1  1,2-Dichloroethane 4.3 0.3 0.3 0.6 0.4 0.4  1,2-Dichloropropane 3.0 1.1 1.1 0.8 1.0 0.9  Ethylbenzene 3.8 1.2 1.2 1.1 1.2 1.2  Xylene 4.6 0.7 0.7 0.6 0.7 0.7  Organic solvents  N,N-Dimethylformamide 2.6 0.3 0.3 0.3 0.2 0.2 0.2	Vinyl monomers	Styrene	1.6	0.2	0.2	0.2	0.2	0.2
Epichlorohydrin 1.0 1.7 1.6 1.4 1.4 1.4 1.4 Chlorine compounds    Chlorine compounds		1,3-Butadiene	3.2	0.2	0.1	0.1	0.1	0.1
Chlorine compounds  Chloromethane  9.2  14.4  13.6  17.8  17.2  15.1  1,2-Dichloroethane  4.3  0.3  0.3  0.6  0.4  0.4  1,2-Dichloropropane  3.0  1.1  1.1  0.8  1.0  0.9  Ethylbenzene  3.8  1.2  1.2  1.1  1.2  1.2  Xylene  4.6  0.7  0.7  0.6  0.7  0.7  0.7  0.7  0		Methyl methacrylate	19.3	5.0	10.1	4.5	4.8	4.8
Chlorine compounds         1,2-Dichloroethane       4.3       0.3       0.3       0.6       0.4       0.4         1,2-Dichloropropane       3.0       1.1       1.1       0.8       1.0       0.9         Organic solvents       Ethylbenzene       3.8       1.2       1.2       1.1       1.2       1.2         Xylene       4.6       0.7       0.7       0.6       0.7       0.7         N,N-Dimethylformamide       2.6       0.3       0.3       0.2       0.2       0.2		Epichlorohydrin	1.0	1.7	1.6	1.4	1.4	1.4
1,2-Dichloroethane       4.3       0.3       0.3       0.6       0.4       0.4         1,2-Dichloropropane       3.0       1.1       1.1       0.8       1.0       0.9         Organic solvents       Ethylbenzene       3.8       1.2       1.2       1.1       1.2       1.2         Xylene       4.6       0.7       0.7       0.6       0.7       0.7         N,N-Dimethylformamide       2.6       0.3       0.3       0.2       0.2       0.2	Chloring compounds	Chloromethane	9.2	14.4	13.6	17.8	17.2	15.1
Ethylbenzene         3.8         1.2         1.2         1.1         1.2         1.2           Xylene         4.6         0.7         0.7         0.6         0.7         0.7           N,N-Dimethylformamide         2.6         0.3         0.3         0.2         0.2         0.2	Chiorine compounds	1,2-Dichloroethane	4.3	0.3	0.3	0.6	0.4	0.4
Xylene         4.6         0.7         0.7         0.6         0.7         0.7           N,N-Dimethylformamide         2.6         0.3         0.3         0.2         0.2         0.2		1,2-Dichloropropane	3.0	1.1	1.1	0.8	1.0	0.9
Organic solvents  N,N-Dimethylformamide 2.6 0.3 0.3 0.2 0.2 0.2	Organic solvents	Ethylbenzene	3.8	1.2	1.2	1.1	1.2	1.2
N,N-Dimethylformamide 2.6 0.3 0.3 0.2 0.2 0.2		Xylene	4.6	0.7	0.7	0.6	0.7	0.7
Toluene 30.2 0.8 0.8 0.7 8.6 5.6		N,N-Dimethylformamide	2.6	0.3	0.3	0.2	0.2	0.2
		Toluene	30.2	0.8	0.8	0.7	8.6	5.6

# VOC reduction measures and results

(unit: tons)

			(unit: tons)
Implementation (FY)	Facility	Measures	Result(reduction volume per year)
2001	Nagoya Factory	Improvement of propylene oxide acceptance system	-50 tons of propylene oxide emissions to the air
2001-2005	SPCC Kashima	Production procedure improvement	-1.4 tons of butadiene emissions to the air
2001-2005	Nagoya Factory Kashima Factory	Reduction of chlorinated solvents (production procedure change, replacement, abolition, etc.)	-7 tons of mainly 1,2-dichloroethane emissions to the air
2002-2004	Kyoto Factory	Production procedure improvement and emissions cooling device installations	-9 tons of methyl methacrylate emissions to the air
2002	Nagoya Factory	Replacement with other substance and/or abolition	-0.6 tons of water soluble hydrogen fluoride emissions to water
2003	Nagoya Factory	VOC processing device installations	-25 tons of mainly acrylonitrile emissions to the air
2004	SCC Kawasaki	Propylene oxide emissions combustion device Installations	-6 tons of propylene oxide emissions to the air
2005	Kashima Factory	Production procedure improvement	-3 tons of methyl methacrylate emissions to the air
2005	Nagoya Factory	VOC processing device installations	-17 tons of mainly toluene emissions to the air
2005	Nagoya Factory	Ethylene oxide emissions processing device installations	-20 tons of ethylene oxide emissions to the air
2005	SDP Ogaki	Cyclohexane absorption/collection device installations	-300 tons of cyclohexane emissions to the air
2006	Kashima Factory	Enhancement of the cooling systems	-4 tons of methyl methacrylate emissions to the air
2007	Nagoya Factory	VOC absorption/collection device installations	-5 tons of mainly 1,2-dichloropropane emissions to the air
2007	Kyoto Factory	VOC absorption/collection device installations	-12 tons of ethyl acetate emissions to the air
2008	Nagoya Factory	Enhancement of the cooling systems	-12 tons of hexane and methylethyl ketone emissions to the air
2009	Nagoya Factory	VOC absorption/collection device installations	-45 tons of hexane and methylethyl ketone emissions to the air
2010	Kyoto Factory	VOC processing device installations	-4 tons of methyl methacrylate emissions to the air
2012	Kinuura Factory	Propylene oxide emissions combustion device installations	-8 tons of propylene oxide emissions to the air
2012	SCC Kawasaki	Propylene oxide emission combustion device installations	-1.5 tons of propylene oxide emissions to the air
2015	Kashima Factory	VOC processing device installations	-150 tons of ethyl acetate and -18 tons of methyl methacrylate emissions to the air
2018	SDP Ogaki	Factory closure	-14 tons of cyclohexane emissions to the air

Implementation (FY)	Facility	Measures	Result(reduction volume per year)
2020	Nagoya Factory	Production procedure improvement, etc.	-0.7 tons of propylene oxide emissions to the air
2020	SKN Nantong	VOC combustion/absorption/collection device installations	-9.4 tons of mainly 1,2-dichloropropane and ethyl acetate emissions to the air
2022	Nagoya Factory Kashima Factory	Production procedure improvement	-9 tons of chloromethane emissions to the air

Note: SPCC Kashima; San-Petrochemical Co,. Ltd. Kashama Factory SCC Kawasaki; San Chemical Co,. Ltd. Kawasaki Factory SDP Ogaki; SDP Global Co,. Ltd. Ogaki Factory SKN Nantong; Sanyo Kasei (Nantong) Co., Ltd.

## Sanyo Chemical domestic facilities

# Nagoya Factory

Location	31-1, Shinpomachi, Tokai, Aichi 476-0005, Japan
Main products	Thermoplastic polyurethane beads for the interior parts of automobiles (TUB), polyurethane chemicals, base materials for electronic materials and surfactants, specialty products, etc.
Established	Established: 1968
Site area	Area: approx. 100,000 m <sup>2</sup>
ISO certification	ISO 9001: certificated in 1998
Employees	253 employees (at the end of March, 2023)

The Nagoya Factory has our largest production capacity and is located in a coastal industrial zone in South Nagoya. SAN NOPCO LIMITED and SDP Global Co., Ltd., Sanyo Chemical subsidiaries, are also located on the site.



	INPUT			
Energy	Energy consumption in crude oil equivalent	21,908	kL	
Raw material	Purchased raw materials and containers	133,796	tons	
Water resource	Water intake volume	2,290	thousand m <sup>3</sup>	
	Drinking water	33	thousand m <sup>3</sup>	
	Industrial water	2,257	thousand m <sup>3</sup>	



		<u> </u>		
		OUTPUT		
	Global environment	GHG (CO <sub>2</sub> equivalent)	46,973	tons
		NOx	66.2	tons
		SOx	0.5	tons
		Soot and dust	2.5	tons
	Air quality	Substances subject to the PRTR Act	9.3	tons
		VOC emissions volume	17.5	tons
		Fluorocarbons (CO <sub>2</sub> equivalent)	247	tons
	Water quality	Aqueous discharge	1,854	thousand m <sup>3</sup>
		COD	10.9	tons
Environment		Total nitrogen	1.4	tons
		Total phosphorus	0.3	tons
		Substances subject to the PRTR Act	0.2	tons
		Outsourced waste treatment	2,997	tons
		External recycling	2,997	tons
	Waste	External landfill	0	tons
		Waste plastics	455	tons
		Substances subject to the PRTR Act	40.2	tons
	Soil condition	No emi	ssions	

# Kinuura Factory

Location	4-43, Nitto-cho, Handa, Aichi 475-0033, Japan
Main products	Raw materials for polyurethane foams
Established	Established: 2010
Site area	Area: approx. 140,000 m <sup>2</sup>
ISO certification	ISO 9001: certificated in 2010
Employees	19 employees (at the end of March, 2023)

The Kinuura Factory was built for producing alkylene oxide adducts (AOAs, raw materials for polyurethane foams, etc.) as the third domestic base, following Nagoya Factory and San Chemical Co., Ltd.



INPUT			
Energy	Energy consumption in crude oil equivalent	1,298	kL
Raw material	Purchased raw materials and containers	41,397	tons
Water resource	Water intake volume	39	thousand m <sup>3</sup>
	Drinking water	1	thousand m <sup>3</sup>
	Industrial water	38	thousand m <sup>3</sup>



OUTPUT				
	Global environment	GHG (CO <sub>2</sub> equivalent)	2,296	tons
		NOx	0.4	tons
		SOx	0.0	tons
		Soot and dust	0.0	tons
	Air quality	Substances subject to the PRTR Act	0.3	tons
		VOC emissions volume	0.3	tons
		Fluorocarbons (CO <sub>2</sub> equivalent)	0	tons
	Water quality	Aqueous discharge	1	thousand m <sup>3</sup>
		COD	0.0	tons
Environment		Total nitrogen	0.0	tons
		Total phosphorus	0.0	tons
		Substances subject to the PRTR Act	0.0	tons
	Waste	Outsourced waste treatment	264	tons
		External recycling	264	tons
		External landfill	0	tons
		Waste plastics	0	tons
		Substances subject to the PRTR Act	0.0	tons
	Soil condition		No e	missions

# Kashima Factory

Location	11-1, Sunayama, Kamisu, Ibaraki 314-0255, Japan
Main products	Polyester beads (PEBs) used as a core component of polymerization toners, toner resins, lubricant additives, long-lasting antistatic agents, etc.
Established	Operation Date: 1976
Site area	Area: approx. 130,000 m <sup>2</sup>
ISO certification	ISO 9001: certificated in 1997
Employees	175 employees (at the end of March, 2023)

The Kashima Factory located in Ibaraki Prefecture was established in 1976 to use as Sanyo Chemical's principal production and distribution facility in the Kanto area.



INPUT			
Energy	Energy consumption in crude oil equivalent	17,942	kL
Raw material	Purchased raw materials and containers	55,509	tons
Water resource	Water intake volume	702	thousand m <sup>3</sup>
	Drinking water	26	thousand m <sup>3</sup>
	Industrial water	675	thousand m <sup>3</sup>



		OUTPUT		
	Global environment	GHG (CO <sub>2</sub> equivalent)	26,769	tons
		NOx	0.2	tons
		SOx	0.0	tons
		Soot and dust	0.0	tons
	Air quality	Substances subject to the PRTR Act	25.9	tons
		VOC emissions volume	39.5	tons
		Fluorocarbons (CO <sub>2</sub> equivalent)	31	tons
	Water quality	Aqueous discharge	807	thousand m <sup>3</sup>
		COD	127	tons
Environment		Total nitrogen	1.9	tons
		Total phosphorus	0.6	tons
		Substances subject to the PRTR Act	0.1	tons
	Waste	Outsourced waste treatment	5,885	tons
		External recycling	868	tons
		External landfill	1	tons
		Waste plastics	457	tons
		Substances subject to the PRTR Act	447.3	tons
	Soil condition		No emi	ssions

# Kyoto Factory

Location	11-721, Honmachi, Higashiyama-ku, Kyoto 605-0981, Japan
Main products	lubricant additives, coating-adhesive agents and surfactants
Established	Operation Date: 1949
Site area	Area: approx. $26,000 \text{ m}^2$ (including Head office and laboratory)
ISO certification	ISO 9001 : certificated in 1999
Employees	87 employees (at the end of March, 2023)

The Kyoto Factory is Sanyo Chemical's first production facility. The Kyoto Factory, Head Office, and Research Laboratory are located on a 260,000  $\rm m^2$  site.



INPUT			
Energy	Energy consumption in crude oil equivalent	4,065	kL
Raw material	Purchased raw materials and containers	22,473	tons
Water resource	Water intake volume	184	thousand m <sup>3</sup>
	Drinking water	41	thousand m <sup>3</sup>
	Industrial water	143	thousand m <sup>3</sup>



	OUTPUT			
	Global environment	GHG (CO <sub>2</sub> equivalent)	6,786	tons
		NOx	1.8	tons
		SOx	0.1	tons
		Soot and dust	0.2	tons
	Air quality	Substances subject to the PRTR Act	0.0	tons
		VOC emissions volume	0.1	tons
		Fluorocarbons (CO <sub>2</sub> equivalent)	6	tons
	Water quality	Aqueous discharge	128	thousand m <sup>3</sup>
		COD	1.2	tons
Environment		Total nitrogen	0.4	tons
		Total phosphorus	0.1	tons
		Substances subject to the PRTR Act	0.0	tons
		Outsourced waste treatment	3,490	tons
		External recycling	66	tons
	Waste	External landfill	0	tons
		Waste plastics	38	tons
		Substances subject to the PRTR Act	17.5	tons
	Soil condition		No e	missions

# Head Office, Research Laboratory and Katsura Research Laboratory

Location	Research Laboratory ; 11-1, Ikkyo Nomoto- cho, Higashiyama-ku, Kyoto 605-0995, Japan Katsura Research Laboratory ; 1-40, Goryo Ohara, Nishikyo-ku, Kyoto 615-8245, Japan
Business Locations	Sanyo Chemical Headquarter, laboratory, Katsura laboratory, SAN NOPCO LIMITED, San-Apro Ltd., and SDP Global Co., Ltd.
Employees	518 employees in Head Office and Research Laboratory 122 employees in Katsura Research Laboratory (at the end of March 2023)

These facilities located in Kyoto are our R&D base. The research departments of SDP Global Co., Ltd. and San-Apro Ltd. are also located together in these facilities.





Head Office, Research Laboratory

Katsura Research Laboratory

INPUT			
Energy	Energy consumption in crude oil 1,677 kL equivalent		kL
Water resource	Water intake volume	15	thousand m <sup>3</sup>
	Drinking water	15	thousand m <sup>3</sup>
	Industrial water	0	thousand m <sup>3</sup>



OUTPUT				
	Global environment	GHG (CO <sub>2</sub> equivalent)	2,136	tons
		NOx	0	tons
		SOx	0	tons
		Soot and dust	0	tons
	Air quality	Substances subject to the PRTR Act	0.00	tons
		VOC emissions volume	0.05	tons
		Fluorocarbons (CO <sub>2</sub> equivalent)	3	tons
	Water quality	Aqueous discharge	15	thousand m <sup>3</sup>
		COD	0	tons
Environment		Total nitrogen	0	tons
		Total phosphorus	0	tons
		Substances subject to the PRTR Act	0	tons
	Waste	Outsourced waste treatment	163	tons
		External recycling	131	tons
		External landfill	0	tons
		Waste plastics	7	tons
		Substances subject to the PRTR Act	2.7	tons
	Soil condition		No e	missions

#### **Domestic SUBSIDIARIES & AFFILIATES**

# SDP Global Co., Ltd.

Location	31-1, Shinpomachi, Tokai, Aichi 476-0005, Japan
Main products	Line of business: Manufacture and sales of superabsorbent polymers
Established	2001
ISO certification	ISO 9001: certificated in 2000
Employees	Employees: 18 persons (at the end of March, 2023)

SDP Global Co., Ltd.'s Nagoya Factory specializes in superabsorbent polymers. The SDP Group's Nagoya Factory consists of SDP Global Co., Ltd. in Japan, San-Dia Polymers (Nantong) Co., Ltd. in China and SDP GLOBAL (MALAYSIA) SDN.BHD. in Malaysia.

INPUT			
Energy	Energy consumption in crude oil equivalent	18,524	kL
Raw material	Purchased raw materials and containers	Combined with Sanyo Chemical Nagoya Factory	
	Water intake volume	126	thousand m <sup>3</sup>
Water resource	Drinking water	1	thousand m <sup>3</sup>
	Industrial water	126	thousand m <sup>3</sup>



OUTPUT				
	Global environment	GHG (CO <sub>2</sub> equivalent)	36,899	tons
		NOx	14.7	tons
		SOx	0.0	tons
		Soot and dust	1.6	tons
	Air quality	Substances subject to the PRTR Act	5.1	tons
		VOC emissions volume	5.1	tons
		Fluorocarbons (CO <sub>2</sub> equivalent)	31	tons
	Water quality	Aqueous discharge		
		COD	Combined with Sanyo Chemical Nagoya Factory	
Environment		Total nitrogen		
		Total phosphorus		
		Substances subject to the PRTR Act	0	tons
	Waste	Outsourced waste treatment	619	tons
		External recycling	619	tons
		External landfill	0	tons
		Waste plastics	9	tons
		Substances subject to the PRTR Act	0.1	tons
	Soil condition		No emis	sions

# SAN NOPCO LIMITED

URL	https://www.sannopco.co.jp/eng/
Location	31-1, Shinpomachi, Tokai, Aichi 476-0005, Japan
Main products	Line of business: Manufacture and sales of industrial agents for pulp & paper, paints, latex, ceramics, and electronics
Established	1966
ISO certification	ISO 9001: certificated in 2000
Employees	83 employees (at the end of March, 2023)

In 1966, it was established as a joint venture between Nopco Chemical Company of the United States and Sanyo Chemical Industries, Ltd. of Japan. At present, it is a wholly owned subsidiary of Sanyo Chemical.

INPUT			
Energy	Energy consumption in crude oil equivalent	1,791	kL
Raw material	Purchased raw materials and containers	17,343	tons
Water resource	Water intake volume	83	thousand m <sup>3</sup>
	Drinking water	2	thousand m <sup>3</sup>
	Industrial water	81	thousand m <sup>3</sup>



ОИТРИТ				
	Global environment	GHG (CO <sub>2</sub> equivalent)	4,186	tons
		NOx	0	tons
		SOx	0	tons
		Soot and dust	0	tons
	Air quality	Substances subject to the PRTR Act	0.2	tons
		VOC emissions volume	1.8	tons
		Fluorocarbons (CO <sub>2</sub> equivalent)	12	tons
	Water quality	Aqueous discharge	70	thousand m <sup>3</sup>
		COD	0	tons
Environment		Total nitrogen	0	tons
		Total phosphorus	0	tons
		Substances subject to the PRTR Act	0	tons
	Waste	Outsourced waste treatment	55	tons
		External recycling	14	tons
		External landfill	0	tons
		Waste plastics	22	tons
		Substances subject to the PRTR Act	8.9	tons
	Soil condition		No e	missions

# San Chemical Co., Ltd.

URL	http://www.san-chemical.com/
Location	13-2, Chidori-cho, Kawasaki, Kanagawa, Japan
Main products	Line of business: Manufacture of raw materials for polyurethane foams and polyethylene glycols
Established	1982
ISO certification	ISO 9001: certificated in 2000
Employees	Employees: 39 persons (at the end of March, 2023)

Jointly established with Nippon Oil Corporation (now ENEOS Corporation) in 1982. As a specialized manufacturer of raw materials for polyurethane foam, polyethylene glycol, etc., Sanyo Chemical Industries, Ltd. took over the Kawasaki Plant, which started operation in 1960.

INPUT			
Energy	Energy consumption in crude oil equivalent	3,089	kL
Raw material	Purchased raw materials and containers	71,708	tons
Water resource	Water intake volume	142	thousand m <sup>3</sup>
	Drinking water	15	thousand m <sup>3</sup>
	Industrial water	127	thousand m <sup>3</sup>



ОИТРИТ				
	Global environment	GHG (CO <sub>2</sub> equivalent)	6,021	tons
		NOx	0	tons
		SOx	0	tons
		Soot and dust	0	tons
	Air quality	Substances subject to the PRTR Act	0.5	tons
		VOC emissions volume	1.1	tons
		Fluorocarbons (CO <sub>2</sub> equivalent)	10	tons
	Water quality	Aqueous discharge	116	thousand m <sup>3</sup>
		COD	2.9	tons
Environment		Total nitrogen	0.3	tons
		Total phosphorus	0.0	tons
		Substances subject to the PRTR Act	0.0	tons
	Waste	Outsourced waste treatment	1,013	tons
		External recycling	972	tons
		External landfill	1	tons
		Waste plastics	15	tons
		Substances subject to the PRTR Act	0.1	tons
	Soil condition		No e	missions

# San-Petrochemicals Co., Ltd.

URL	https://www.san-petrochemicals.com/en/
Location	11-2, Sunayama, Kashima, Ibaraki, Japan
Main products	Line of business: Manufacture of EPDM rubber materials [e.g., Ethylidene Norbornene (ENB)]
Established	1977
Employees	38 employees (at the end of March, 2023)

This is a joint venture of Sanyo Chemical and ENEOS corporation (equity ratio: 50:50), and is the world's leading manufacturer of ENB.

INPUT			
Energy	Energy consumption in crude oil equivalent	7,503	kL
Raw material	Purchased raw materials and containers	20,599	tons
Water resource	Water intake volume	68	thousand m <sup>3</sup>
	Drinking water	3	thousand m <sup>3</sup>
	Industrial water	66	thousand m <sup>3</sup>



OUTPUT				
	Global environment	GHG (CO <sub>2</sub> equivalent)	13,480	tons
		NOx	5.5	tons
		SOx	0.1	tons
		Soot and dust	0.3	tons
	Air quality	Substances subject to the PRTR Act	0.2	tons
		VOC emissions volume	0.2	tons
		Fluorocarbons (CO <sub>2</sub> equivalent)	0	tons
	Water quality	Aqueous discharge	32	thousand m <sup>3</sup>
		COD	0.4	tons
Environment		Total nitrogen	0.0	tons
		Total phosphorus	0.0	tons
		Substances subject to the PRTR Act	0.0	tons
	Waste	Outsourced waste treatment	52	tons
		External recycling	51	tons
		External landfill	0	tons
		Waste plastics	6	tons
		Substances subject to the PRTR Act	0.4	tons
	Soil condition		No er	missions

## San-Apro Ltd.

URL	https://www.san-apro.co.jp/eng/ ==
Location	Laboratory: 1-40, Goryo Ohara, Nishikyo-ku, Kyoto 615-8245, Japan Sales office: Tokyo, Osaka
Line of business	Manufacture and sales of DBU and DBN super base compounds, urethane catalysts, curing accelerators for epoxy resins, photo-acid generators, water soluble rust inhibitors, etc.
Established	1966
ISO certification	ISO 9001: certificated in 2003
Employees	33 employees (at the end of March, 2023)

San-Apro conducts R&D and sells products specializing in catalysts. As a fabless company, it does not have an in-house production facility but commissions manufacturing to other companies, including Sanyo Chemical.

The company was established in 1966 as a joint venture with Abbott (a U.S. company). Later, in 1986, the partner company changed to Air Products (a U.S. company), and the company name was changed to "San-Apro." In 2017, Evonik (a German company) took over the business of Air Products. At present, San-Apro is a joint venture of Sanyo Chemical and Evonik (equity ratio: 50:50).

## Sanyo Chemical Logistics Co.,Ltd.

Location	Head Office :31-1, Shinpomachi, Tokai, Aichi, Japan Business office: Kyoto, Nagoya, Kashima, and Kawasaki
Line of business	Warehousing, forwarding, cargo work in the factories and trucking of Sanyo Chemical Group products
Established	2020

Sanyo Chemical Logistics was established in 2020 through the merger of Nagoya Sanyo Warehouse Co., Ltd., which undertook storage and shipping of products and cargo handling on the premises, and Sanyo Transport Co., Ltd., which mainly undertook the transportation of Sanyo Chemical products. The company aims to increase operational efficiency, reduce transportation costs, and improve overall logistics services by centralizing functions related to the supply chain.

#### Shiohama Chemicals Warehouse Co., Ltd.

Location	2-2-6, Yako, Kawasaki, Kanagawa, Japan
Line of business	Warehousing for hazardous goods
Established	1983

This is a joint venture of Sanyo Chemical and ENEOS corporation (equity ratio: 50:50). This warehouse company located near San Chemical Co., Ltd. handles San Chemical products.

#### Overseas affiliates/subsidiaries

# San-Dia Polymers (Nantong) Co., Ltd.

Location	Nantong, China
Line of business	Manufacture and sales of superabsorbent polymers
Established	2003
ISO	ISO 9001: certificated in 2007 ISO 14001: certificated in 2013
Employees	174 persons (at the end of March, 2023)

This is a Chinese subsidiary of SDP Global Co., Ltd. which is a specialized manufacturer of superabsorbent polymers.

INPUT					
Energy	Energy consumption in crude oil equivalent	23,749	kL		
Raw material	Purchased raw materials and containers	110,315	tons		
Water resource	Water intake volume	279	thousand m <sup>3</sup>		
	Drinking water	68	thousand m <sup>3</sup>		
	Industrial water	211	thousand m <sup>3</sup>		



ОИТРИТ				
	Global environment	GHG (CO <sub>2</sub> equivalent)	62,296	tons
		NOx	14.1	tons
		SOx	3.7	tons
	Air quality	Soot and dust	1.6	tons
		VOC emissions volume	2.2	tons
	Water quality Waste	Aqueous discharge	37	thousand m <sup>3</sup>
Environment		COD	2.8	tons
		Total nitrogen	0.2	tons
		Total phosphorus	0.0	tons
		Outsourced waste treatment	938	tons
		External recycling	513	tons
		External landfill	0	tons
	Soil condition		No emissions	

# SDP GLOBAL (MALAYSIA) SDN. BHD.

Location	Johor, Malysia
Line of business	Manufacture and sales of superabsorbent polymers
Established	2015
Employees	78 persons (at the end of March, 2023)

This is a production site in Southeast Asia for SDP Global Co., Ltd., a specialized manufacturer of superabsorbent polymers, which began operations in FY2018.

INPUT					
Energy	Energy consumption in crude oil equivalent	15,132	kL		
Raw material	Purchased raw materials and containers	69,447	tons		
	Water intake volume	170	thousand m <sup>3</sup>		
Water resource	Drinking water	170	thousand m <sup>3</sup>		
	Industrial water	0	thousand m <sup>3</sup>		



ОИТРИТ					
	Global environment	GHG (CO <sub>2</sub> equivalent)	30,974	tons	
		NOx	0.5	tons	
		SOx	0.4	tons	
	Air quality	Soot and dust	0.3	tons	
		VOC emissions volume	0.0	tons	
	Water quality Waste	Aqueous discharge	14	thousand m <sup>3</sup>	
Environment		COD	0.7	tons	
		Total nitrogen	0	tons	
		Total phosphorus	0	tons	
		Outsourced waste treatment	1,240	tons	
		External recycling	859	tons	
		External landfill	0	tons	
	Soil condition		No em	nissions	

# Sanyo Kasei (Thailand) Ltd.

URL	https://www.sanyo-kasei.co.th/EN/home.html
Location	Head Office : Bangkok, Thailand Factory : Rayong Factory
Line of business	Manufacture and sales of textile chemicals, surfactants, papermaking chemicals, paint & ink resins, etc.
Established	1997
ISO certification	ISO 9001: certificated in 2004 ISO 14001: certificated in 2009
Employees	91 persons (at the end of March, 2023)

This	operates	as our	base	of	operations	in	the	ASEA	N region.

INPUT					
Energy	Energy consumption in crude oil equivalent	2,502	kL		
Raw material	Purchased raw materials and containers	6,417	tons		
Water resource	Water intake volume	209	thousand m <sup>3</sup>		
	Drinking water	0	thousand m <sup>3</sup>		
	Industrial water	209	thousand m <sup>3</sup>		



OUTPUT					
	Global environment	GHG (CO <sub>2</sub> equivalent)	5,474	tons	
		NOx	0.2	tons	
		SOx	0.1	tons	
	Air quality	Soot and dust	0.0	tons	
		VOC emissions volume	5.0	tons	
	Water quality Waste	Aqueous discharge	197	thousand m <sup>3</sup>	
Environment		COD	24	tons	
		Total nitrogen	1.1	tons	
		Total phosphorus	0.0	tons	
		Outsourced waste treatment	2,631	tons	
		External recycling	255	tons	
		External landfill	0	tons	
	Soil condition		No e	missions	

# Sanyo Kasei (Nantong) Co., Ltd.

Location	Nantong, China
Line of business	Manufacture of textile chemicals, surfactants, papermaking chemicals, paint & ink resins, etc.
Established	2003
ISO certification	ISO 9001: certificated in 2006 ISO 14001: certificated in 2012
Employees	98 persons (at the end of March, 2023)

This operates as our production base in China.

INPUT						
Energy	Energy consumption in crude oil equivalent	3,205	kL			
Raw material	Purchased raw materials and containers	10,863	tons			
	Water intake volume	24	thousand m <sup>3</sup>			
Water resource	Drinking water	24	thousand m <sup>3</sup>			
	Industrial water	0	thousand m <sup>3</sup>			



OUTPUT							
	Global environment	GHG (CO <sub>2</sub> equivalent)	9,545	tons			
		NOx	0	tons			
		SOx	0	tons			
	Air quality	Soot and dust	0	tons			
		VOC emissions volume	0.8	tons			
	Water quality	Aqueous discharge	25	thousand m <sup>3</sup>			
Environment		COD	1.1	tons			
		Total nitrogen	0.0	tons			
		Total phosphorus	0.0	tons			
		Outsourced waste treatment	3,706	tons			
	Waste	External recycling	2,838	tons			
		External landfill	0	tons			
	Soil condition		No er	missions			

# Sanyo Chemical Texas Industries, LLC

Location	Texas, USA
Line of business	Manufacture of thermoplastic polyurethane beads
Established	2005
Employees	13 persons (at the end of March, 2023)

This is a production base for thermoplastic polyurethane beads for the interior parts of automobiles in the United States.

INPUT						
Energy	Energy consumption in crude oil equivalent	405	kL			
Raw material	Purchased raw materials and containers	1,108	tons			
	Water intake volume	0.4	thousand m <sup>3</sup>			
Water resource	Drinking water	0.1	thousand m <sup>3</sup>			
	Industrial water	0.3	thousand m <sup>3</sup>			



ОИТРИТ							
	Global environment	GHG (CO <sub>2</sub> equivalent)	742	tons			
		NOx	0	tons			
	Air quality	SOx	0	tons			
		Soot and dust	0	tons			
	Water quality	Aqueous discharge	0.6	thousand m <sup>3</sup>			
		COD	0	tons			
Environment		Total nitrogen	0	tons			
		Total phosphorus	0	tons			
	Waste	Outsourced waste treatment	47	tons			
		External recycling	43	tons			
		External landfill	4	tons			
	Soil condition		No e	emissions			

# **ESG Performance Data**

**Environment** 

Social

Governance

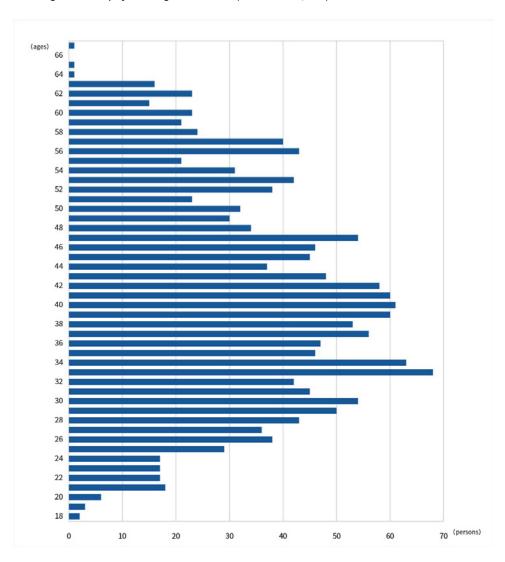
# Employee-related data

# | Employment (domestic)

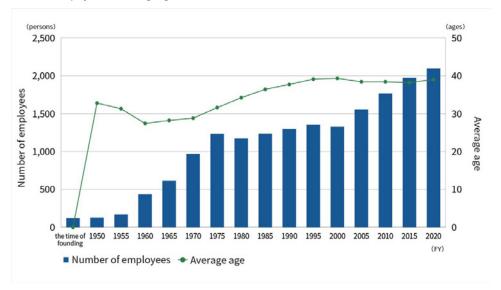
		unit	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022
Employage	Male		1,272	1,267	1,278	1,281	1,237
Employees	Female	persons	276	283	300	319	323
Newsperson	Male		41	34	25	30	16
New employees	Female	persons	11	10	8	15	5
Mid-career recruits	Male		15	7	10	6	7
Mid-career recruits	Female	persons	3	4	6	3	4
Percentage of females		%	18	18	19	20	21
Female managers	persons	persons	6	9	13	15	16
remale managers	per all managers	%	2.0	3.0	4.0	4.6	4.6
Annual holidays		days	127	129	129	126	127
Annual workdays		days	238	236	237	239	238
Annual regular working hours		hours	1,845	1,829	1,837	1,852	1,845
Monthly average overtime work		hours	6.7	4.8	4.4	4.8	5.2
Paid leave usage ratio		%	58.1	55.7	58.5	50.6	70.2
Average years of service		years	15.6	15.8	15.9	16.5	17.0
Turnover up to three years after joining the company		persons	3	5	5	5	5
rumover up to timee years after joining the company		%	5.9	8.6	9.6	6.8	9.1
Employees with disabilities	Employees with disabilities		26	26	26	26	27
Ratio of employees with disabilities		%	2.18	2.18	2.17	2.09	2.23
Re-employment of mandatory retirees		persons	24	27	14	20	20
Re-employment rate of fixed-term retirees		%	80	87	81	87	100
Non-Japanese employees		persons	18	17	12	13	25

		unit	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022
Employees on maternity leave		persons	13	18	14	12	17
Employees on childcare leave	Male		27	37	40	47	55
	Female	persons	14	13	17	11	17
Percentage of male employees taking childcare leave		%	48.2	77.1	66.7	79.7	98.2
Employees return rate from childcare leave		%	100	100	100	100	100
Employees on short working hours for childcare	Male		1	0	0	0	0
Employees on short working flours for childcare	Female	persons	50	16	12	4	6
Employees on family care leave		persons	0	1	1	1	1
Employees on reduced working hours for family care		persons	1	1	0	0	0

#### Percentage of male employees taking childcare leave (As of March 31, 2023)



#### Number of employees and average age



## Education and training (domestic)

(unit: persons)

							(ariti porcorio)
FY			2018	2019	2020	2021	2022
Study abroad			2	1	0	0	1
Overseas training			1	4	0	0	0
Expatriate development program			3	5	2	1	1
Personal research challenge			1	0	0	0	0
Challenge contract			5	0	0	0	0
Safety, Technology, and Education Center	Participante	Employees (including transfers)	239	210	93	168	96
	Participants	Subcontract employees	33	71	12	35	20
	Visitors/guests		313	394	19	55	47

## Occupational accidents (domestic + overseas)

F	Y 2018	2019	2020	2021	2022
Lost-work injuries (Sanyo Chemical Group)(cases)	2	0	0	6	1
Wherein, fatalities occurred(cases)	0	0	0	0	0
Lost-work injuries frequency (Sanyo Chemical Group)*1	0.56	0	0	1.61	0.27
Lost-work injuries severity (Sanyo Chemical Group)*2	0.00	0	0	0.05	0.05
Lost-work injuries (subcontractors)(cases)	0	2	2	2	3
Wherein, fatalities occurred(cases)	0	0	0	1	0
Lost-work injuries frequency (subcontractors)*1	0	2.28	1.94	1.69	2.37
Lost-work injuries severity (subcontractors)*2	0	0.09	0.04	6.33	0.13
Employees lost time (cases)	4	4	2	2	7
Partner company employee lost time (cases)	6	1	5	4	5

<sup>\*1</sup> Frequency rate = (Number of employees subject to accident with lost time) ÷ (total working hours) × 1,000,000

This value indicates the frequency of accident victims (Group company employees) per 1 million hours

<sup>\*2</sup> Severity rate = (labor lost days) + (total working hours) × 1,000

This value indicates the severity of accidents per 1,000 working hours

# Health productivity management related data (domestic)

## Action goals for the five initiatives

(unit: %)

Initiative	Item	FY 2019	FY 2020	FY 2021	FY 2022	FY 2025 (Target value)
Exercise	To have an exercise routine at least once a week	29	31	50	50	70
Sleep	To be well rested with sleep	54	57	66	63	80
Diet	To have a balanced diet	_	_	76	75	90
Alcohol	To have two or more alcohol-free days per week	74	75	75	76	90
Smoking	Not to smoke (Smoking rate reduction)	77	77	82	83	90

Note: This survey is based on a questionnaire concerning lifestyle diseases conducted at regular medical checkups.

# Checkups and guidance

(unit: %)

FY	2019	2020	2021	2022	2025 (Target value)
Rate of regular health checkups	100	100	100	100	100
Rate of medical checkups	43	68	89	96	100
Rate of specific health guidance	14	80	94	94 or more	100

## Lifestyle-related disease risk retention rate (health checkup results)

(unit: %)

FY	2019	2020	2021	2022	2025 (Target value)
Obesity	24	26	25	25	20 or less
Liver function	30	34	31	34	30 or less
Fats	51	57	55	56	50 or less
Blood sugar	24	17	21	17	15 or less
Blood pressure	31	37	34	29	30 or less
Triple risk holders (fats, blood sugar, blood pressure)	8	8	8	5	5 or less

## Mental health measures

FY	2019	2020	2021	2022
Stress check inspection rate (%)	99	99	98	99
Stress check high stress rate (%)	9.3	8.9	8.6	7.1

## Health Management Evaluation Indexes

FY	2019	2020	2021	2022	2025 (Target value)
Absenteeism*1 Personal injury/sickness absence rate (%)	1.5	1.5	1.8	1.9	1.0 or less
Presenteeism*2 Labor productivity loss rate (%)	_	_	37.5	36.6	30 or less
Work engagement*3 Self-motivated behavior and positive feelings toward work (deviation value)	_	_	49.7	50.1	51 or more

<sup>\*1</sup> A condition in which the employee cannot perform duties due to absence from work, leave of absence, or other reasons. Measured by the number of employees on sick leave who are absent for more than one month.

## Communication

## IR information

(unit: times)

FY	2018	2019	2020	2021	2022
Financial results announcement	2	2	2	2	2
Financial results briefing for institutional investors	2	2	2	2	2
Financial results briefing for private investors	2	2	0	0	0

#### Website information

(unit: times)

FY	2018	2019	2020	2021	2022
IR information	24	25	23	23	22
Press release	25	28	35	36	37
News	28	41	66	49	42

Note: Number does not include personal changes

#### Exhibitions

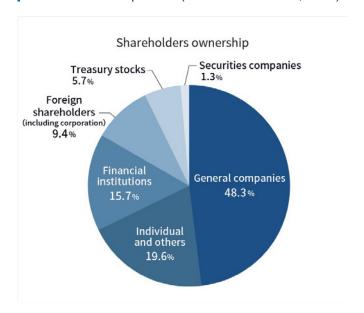
(unit: times)

					(
FY	2018	2019	2020	2021	2022
Domestic	1	2	3	4	6
Overseas	4	5	1	2	2

<sup>\*2</sup> A condition in which the employee is present at work but is not able to work sufficiently due to mental or physical health problems. Measured by the WHO Health and Labor Performance Questionnaire.

<sup>\*3</sup> A state of mind that is positive and full of accomplishment, vitality, enthusiasm, and immersion in one's work. Measured by a proprietary survey instrument using eight items that correlate well with the Utrecht Work Engagement Scale.

## Shareholders composition (at the end of March, 2023)



#### Social contributions

#### Donations

(unit: million ven)

					(	million yen)
	FY	2018	2019	2020	2021	2022
Social contribution e	expenditure: Total amount	24.0	39.9	24.2	36.4	34.9
	Support for academic promotion mainly concerning chemistry	14.4	17.0	14.8	27.0	14.1
	Support for human resource development	0.8	2.2	3.1	0.3	2.3
Donations by Item	3. Support for the preservation activities of art and culture, mainly in Kyoto	1.1	1.5	0.5	1.0	4.1
	Support for environmental conservation activities	1.1	11.0	1.6	1.6	1.5
	5. Support for social contribution activities wherever possible according to local social needs and requirements	6.6	8.1	4.2	6.5	13.0

Note: Expenditures of Sanyo Chemical Industries, Ltd. until FY2019. Expenditures of SANYO CHEMICAL Foundation for Social Contribution since September 2019 (in FY2019, sum of Sanyo Chemical Industries, Ltd. and SANYO CHEMICAL Foundation for Social Contribution)

## Elementary school chemistry lessons

Upper: Number of sessions (unit:times), Lower: Number of participants (unit:persons)

eppor. Harmoor of deceloring (anical med), 2040. Harmoor of participante (anicaperoof								
Area	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	Instructors		
Vijeko	8	7	4	6	6	DOD and Hand affine shaff		
Kyoto	449	390	209	446	335	R&D, and Head office staff		
Negovo	2	2	0	1	2	Nagova Factory eteff		
Nagoya	280	235	0	73	250	Nagoya Factory staff		
Kashima	3	2	0	1	4	Kashima Fastary staff		
Kashima	224	198	0	50 <sup>*1</sup>	255* <sup>2</sup>	Kashima Factory staff		

<sup>\*1</sup> An estimate of the number of participants in the event

<sup>\*2</sup> Includes estimated number of event participants

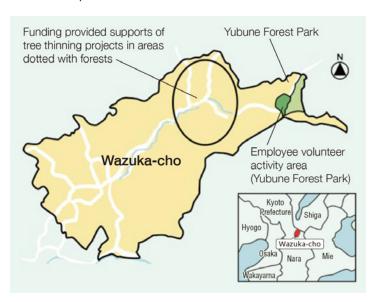
## Acceptance of foreign students

(Unit: persons)

FY	2018	2019	2020	2021	2022
Acceptance of the students in the departments of science, technology, and agriculture through IAESTE*	1	1	0	0	0
International internship program between TU Dortmund University and Kyoto University	1	1	0	0	1
Other	_	_	_	1	0

<sup>\*</sup>IAESTE: The International Association for the Exchange of Students for Technical Experience, which is an NGO mediating the overseas internship for the students in the departments of science, technology, and agriculture

## Forestry activities: Sanyo Chemical's Forest in the Kyoto Prefecture of Japan



### Employee volunteer forestry activities

		unit	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022
Carrie Charrie d'a favorte, activities	Number of times conducted	times	3	2	2	1	3
Sanyo Chemical's forestry activities	Total number of participants	persons	194	87	60	34	101
Cumparton Aggasiation*1	Number of times conducted	times	7	8	7	4	7
Supporter Association*1	Total number of participants	persons	34	46	63	28	63

### FY2022 results

	Date	Participants (persons)	Activity
New employee training	April 8, 2022	23	Walking trail improvements
The 24th forestry activities	June 11, 2022	27	Walking trail improvements, wildlife viewing
The 25th forestry activities	December 10, 2022	51	Tree planting, installation of animal fencing, pine cone crafts, Mountain Kids exchange meeting $^{\ast 2}$
Supporter Association*1 in FY2022	Total 7 times	63	Preparations for the forestry creation activities, walking trail improvements, etc.

<sup>\*1</sup> Supporter Association: Forest volunteers consisting of employees, their families, and retired employees

<sup>\*2</sup> Mountain Kids: Activities to foster younger generations who will bear responsibility for forests, so that forests can be reliably passed on to the future. The Junior Green Club and Kyoto Model Forest Association cooperate and implement these activities.

### Funding provided for tree thinning project

	unit	FY 2020	FY 2021	FY 2022	FY 2009 - FY 2017 and from FY 2020
Thinned area	ha	3.5	3.7	2.4	58.6
CO <sub>2</sub> absorption volume	CO <sub>2</sub> tons/year	12.6	38.5	10.6	363.3

Note: Implemented since FY2009; suspended in FY2018 and FY2019.

## Rice cultivation in Futago terraced rice fields

	unit	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022
Terraced rice field area	m²	300	400	400	400	400
Number of times implemented	times	7	7	8	9	14
Total number of participants	persons	88	94	45	74	71
Rice harvest	kg	220	230	230	240	270

# **ESG Performance Data**

Environment Social Governance

### Board members

## List of Board members

		unit	2018	2019	2020	2021	2022
	Total number of directors	persons	10	10	10	9	9
Composition of the Decad of Directors *1	Outside directors	persons	3	3	3	3	3
Composition of the Board of Directors*1	Independent directors	persons	3	3	3	3	3
	Female directors	persons	1	1	1	2	2
Board of Directors Meeting*2	Frequency	times	15	17	17	15	15
Board of Directors Meeting	Average attendance	%	100	100	100	99.1	99.2
	Total number of the Audit & Supervisory Board members	persons	4	3	4	4	4
Composition of the Audit & Supervisory	Outside A&S Board members	persons	3	2	3	3	3
Board	Independent A&S Board members	persons	1	1	1	1	1
	Female A&S Board members	persons	0	0	0	0	0
Audit & Supervisory Board Meeting*2	Frequency	times	12	12	11	12	12
Audit & Supervisory board infeeting	Average attendance	%	97.9	95.8	100	100	100

<sup>\*1</sup> Number of directors and A&S Board members after the General Shareholders' Meeting in June

## Board members' remuneration

(unit: million yen)

					(
Classification	2018	2019	2020	2021	2022
Directors (internal)	289	304	319	308	260
Audit & Supervisory Board (internal)	32	30	27	33	32
Outside Directors	25	28	29	27	26
Outside Audit & Supervisory Board	47	44	41	49	50
Total	395	408	418	418	369

Note: There is no individual board member whose total amount of remuneration is 100 million yen or higher. Including the amounts paid to board members who resigned during the term.

<sup>\*2</sup> Fiscal year from April to March

## Committee

Committee	Chairperson	Committee members	Secretariat	Observer	Frequency (FY2022)
Nomination and Compensation Committee (Established in 2021)	Chairman of the Board of Directors	Five board members selected by resolution of the Board of Directors (Majority of them are independent outside directors)	_	-	5
Sustainable Management Committee (Established in 2021)	President	Full-time Directors	General Manager of the Corporate Planning Division and those appointed by the General Manager of the Corporate Planning Division	Full-time Audit & Supervisory Board Member	2
Compliance Committee	President	Full-time Directors	General Manager of the Auditing Division and the General Manager of the Legal Affairs Department	Full-time Audit & Supervisory Board Member	1
Internal Control Committee	President	Those who are in charge of the sales, research, production, and indirect departments	General Manager of the Auditing Division	Full-time Audit & Supervisory Board Member	2

# Compliance

## Whistleblowing, disciplinary actions, and violations

(unit: cases)

					,	u oacoc,
	FY	2018	2019	2020	2021	2022
Number of cases of	of using the whistle-blower hotlines	1	4	1	2	4
Disciplinary actions	s	2	4	1	0	4
	Legal violation/Administrative guidance concerning fair trade and anti-corruption	0	0	0	0	0
	Legal violation/Administrative guidance concerning chemical substances and export control	0	0	0	0	0
Violations ato	Other Legal violation/Administrative guidance concerning compliance with laws and regulations	0	0	0	0	0
Violations, etc.	Lawsuit related to the above	0	0	0	0	0
	Legal violation/Administrative guidance concerning environmental laws and regulations	0	0	0	0	0
	Complaints on pollution	0	1*	0	0	0

<sup>\*</sup> Noise compliant from neighborhood

## Political donations

(unit:yen)

					(driit.y ori)
FY	2018	2019	2020	2021	2022
Total amount of donations to political parties	0	0	0	0	0

# **Policies, Standards and Guidelines**

Code of Ethics and Management

Responsible Care, Environment and Safety

Social

Governance

## Company Mission

Establish a better society through our corporate activities.

To achieve this purpose, we will endeavor to promote the followings:

- 1. We believe that the company is an organic entity of capital, management, and labor harmoniously linked together. Keeping this in mind, we will strive to achieve dynamic growth.
- 2. Trusting that our inventive power has no limits, we will ceaselessly try to develop new business areas and supply original and high-quality products to the market.
- 3. We believe that perpetual profits come only from the creation of value, and we do not seek superficial profits.
- 4. We will fulfill the customers' expectation and earn their trust by providing high-quality cost-effective products and superior technical service.
- 5. When all the members of the company share the same vision for the company's future and challenge for innovation on our own initiative, we will be rewarded with an abundant profit. This profit will then be fairly distributed among internal reserves, shareholders, management and employees.
- 6. We will strive for perfection in safety and harmony with the environment, which is the first required mission in the society.

(Established in 1959; revised on December 21, 1995)

### Code of Corporate Ethics

We, Sanyo Chemical Group, are maintaining our Code of Corporate Ethics, believing that it is essential corporate behavior to ensure legal compliance and to fulfill corporate social responsibility, which has been implemented to take the lead in the realization of a sustainable society. With good sense and integrity we are committed to improving our society and are following our company mission, "Establish a better society through our corporate activities."

Based on these corporate ethics, we prescribe our principles of corporate behavior as follows:

- 1. We, Sanyo, shall develop and provide socially beneficial and safe products and services, through innovation, and strive for sustainable economic growth and the resolution of social issues. And provide consumers and customers with appropriate information about products and services, communicate with them in good faith, earn the satisfaction and confidence of our consumers and customers.
- 2. In our business activity, we shall be devoted to fair competition, appropriate transactions and responsible procurement.
- 3. We shall proactively take initiatives to conserve the environment and prevent accidents and disasters as crucial requirements for the sustainability and activity of our business.
- 4. We shall engage in active, effective and fair disclosure of corporate information, not only to shareholders, but also a wide range of stakeholders.
- 5. We shall protect our intellectual properties and respect those of others, as well as be thorough in our protection and management of personal information and customer information.
- 6. We shall conduct business that respects the human rights of all persons.
- 7. As a "good corporate citizen," we shall actively engage in community involvement activities and contribute to community development.
- 8. We shall realize work practices that will improve the capability of employees and that respect their diversity, character, and individuality. Also, we shall provide a safe and healthy working environment.
- 9. We shall conduct thorough and organized crisis management in the face of actions antisocial forces, terrorism, cyber attacks, natural disasters and other crises that pose a threat to civil society and corporate activity.

All management must undertake the responsibility and take all necessary actions for implementing and promoting this Code of Corporate Ethics within Sanyo Chemical Group.

Management must promote the development and imple-mentation of systems that will contribute to the achievement of the Code of Corporate Ethics. Management must also encourage behavior based on the principles of this Charter within the corporation's supply chain.

In the event of any violation of these principles and loses the trust of society, top management must take responsibility to respond to the situation, including resolving the problem, investigating the causes, and preventing the problem from recurring.

Established: April 1, 2003

The 2nd version revised: January 1, 2005

The 3rd version revised: March 26, 2008

The 4th version revised: April 1, 2011

The 5th version revised: November 1, 2018

### Advice on Compliance

In the Code of Corporate Ethics we have declared that it is essential corporate behavior to ensure legal compliance and to fulfill our corporate social responsibility. We Sanyo Chemical Group are voluntarily adopting this advice in order to promote a sustainable society and are following our company mission, keeping in mind good sense and integrity towards the surrounding society. All company executives and employees are expected to follow this code of corporate ethics:

Therefore, we expect all of us to answer positively to each question below.

- 1. Can you confirm that your judgment of compliance is not clouded by anything such as profit-making motives or budget short fall?
- 2. Can you confirm that your decisions have not been founded on over-optimism or wishful thinking and thus containing legal risk?
- 3. Can you confirm that your decisions comply with the code of corporate ethics and are in no way damaging to Sanyo Chemical Group corporate reputation?
- 4. Can you confirm that you have not concealed information or have not made judgments that could be considered unfair or selfishly motivated?
- 5. Can you confirm that you have conducted yourself in a fair and honest manner and have not engaged in illegal or legally risky actions?
- 6. Can you confirm that you have not been forced to do something that you suspected it was unfair or might have been illegal? Can you confirm that you have not been forced to do something that you suspected it was unfair or might have been illegal?
- 7. Can you declare openly that your actions have always been legal, just and fair?

If you are having difficulty in your decision making, please do not hesitate to discuss duly with your superiors or people concerned. If you feel necessary, you can also consult the compliance hotlines listed below.

#### Hotlines

- Internal Hotline: General Manager of Audit Division (Secretary of Compliance committee)
- External Hotline: The contact information is withheld.

Established: April 1, 2003

The 2nd edition revised: January 1, 2005

### **CSR** Guidelines

Basic Policy	Our mission has been to establish a better society through our corporate activities since our foundation. Sanyo Chemical Group aims for sustainable growth of our own group through corporate activities that contribute to the "realization of a sustainable global environment."
1.Safety and accident prevention	We will give top priority to safety and accident prevention in all our business activities. We will strive for the continuance of accident-free and injury-free operation, and contribute to social safety. At the same time, we will protect the safety and health of everyone involved in our operations, and strive to create a comfortable work environment.
2.Compliance	All directors and employees of our Group make sure to take action with the questions in "Advice on Compliance" in mind, including "Can you declare openly that your actions have always been legal, just, and fair?"
3.Reduction of environmental impact	We work voluntarily and steadily on effective measures to reduce greenhouse gas emissions and the generation of plastic and industrial waste. Notably, to reduce greenhouse gas emissions, we actively promote energy conservation and the shift to renewable energy.
4.Product development	We aim to develop products that are useful in society and that can "realize a sustainable global environment" and "improve convenience and comfort," by combining the strengths that we have acquired with new strengths that we will acquire and external expertise.
5.Sustainable purchasing	We have our Sustainable Purchasing Policy in place and steadily fulfill the policy to contribute to "realizing a sustainable global environment," and avoid complicity in human rights violations throughout the supply chain, including suppliers.
6.Product safety and quality reliability	We provide accurate product information to external parties to ensure safety throughout the product lifecycle, from development and manufacture to use and disposal of products. To improve the quality reliability of products, we ensure rigorous quality control in-house.
7.DEI and human resource development	We respect the diversity, personalities, and individuality of our employees, and ensure a safe and comfortable workplace environment. We develop human resources who can achieve self-actualization by demonstrating self-initiative and creativity in addition to realizing well-being, abundance, and mental and physical health. We endeavor to eliminate harassment and respect human rights in the workplace.
8.Dialogue with stakeholders	We disclose financial and non-financial information of our Group in an active and fair manner and promote dialogue so that our stakeholders, including customers, shareholders, investors, suppliers, local communities, local governments, mass media, and employees can correctly understand the corporate value of our Group, and so that we can understand the expectations and evaluations of our Group from the viewpoint of our stakeholders and reflect them in our corporate activities.
9. Social contribution activities	We maintain our voluntary activities to contribute to educational and research institutions, medical institutions, local communities, NPOs, and NGOs, with the aim of promoting science and technology, art, culture, education, and welfare.

Code of Ethics and Management Responsible Care, Environment and Safety

Social

Governance

## Management policies concerning responsible care (RC)

- 1. We will set continuance of accident-free/injury-free operation and harmony with the global environment as priority managerial issues.
- 2. We will thoroughly comply with laws and regulations in every aspect of business activities and cooperate in the measures implemented by authorities and international agreements.
- 3. We will put all our energy into continuous improvement of the environment and safety throughout the whole product lifecycle ranging from product development through manufacturing, physical distribution, use, and final consumption to disposal.
- 4. To reduce the environmental load, we will endeavor to reduce the emissions of greenhouse gases and save energy and resources in the product development and manufacturing stages and will promote recycling, decrease of waste, and reduction of the emission of chemical substances.
- 5. We will not only provide products that can be used by customers with satisfaction and safety but also try to collect the latest information on product safety and provide customers with the collected information.
- 6. We will deepen our understanding and appreciation of conservation of biodiversity and promote activities with due consideration for biodiversity. We will promote communications concerning environmental conservation activities with the concerned authorities and local community.
- 7. We will promote communications concerning environmental conservation activities with the concerned authorities and local community.

(Established on November 1, 1996; revised on August 6, 1999; revised on June 2, 2005; revised on November 30, 2009; revised on May 9, 2013)

## Action Policy Concerning Kyoto Protocol

As a company based in the city of Kyoto where an international agreement (Kyoto Protocol) for global warming prevention was made, we acknowledge the activity for global warming prevention as an important managerial issue and proactively engage in the activities shown below.

- 1. We will design products by considering the minimization of the emissions of greenhouse gases throughout the lifecycle of our products.
- 2. In manufacturing and physical distribution, we will proactively incorporate the latest technologies to promote energy saving and work to reduce our dependence on fossil fuels.
- 3. We will instruct our employees to practice energy saving/resource saving that leads to global warming prevention in their private lives and will support those activities.
- 4. We will reduce the emissions of greenhouse gases through our own efforts and introduce emission reduction by means of greenhouse gas emission trading at home and abroad.

(Established on June 2, 2005; revised on June 8, 2006)

## Action Policy Concerning Biodiversity

With the acknowledgement that business affects biodiversity, our group will deepen the understanding and acknowledgement of the preservation of biodiversity and promote our activities with consideration for biodiversity.

- 1. We will develop products in consideration of the environment and contribute to the preservation of biodiversity through the provision and diffusion of those products.
- 2. In the procurement of materials, raw materials, office supplies, and others, we will give consideration to the preservation of biodiversity.
- 3. We will reduce the environmental loads, such as the emissions of greenhouse gases, utilization of water resources, and release of chemical substances and waste, from the workplaces so as to alleviate their impact on biodiversity.
- 4. All of our employees will enhance the understanding and acknowledgement of biodiversity and try to enhance the awareness of the preservation of biodiversity.
- 5. We will promote efforts in cooperation with the local community.

(Established on May 9, 2013)

## Safety Philosophy and Policy

## Safety philosophy

We place the highest priority on Safety and Compliance in all our business activities.

### Safety policy

Safety comes first. Recognizing that safety is the foundation of our business activities, and with a strong determination to ensure that no one will be injured or will injure others, we will work on the following as our basic policy.

- 1. Observance of basic safety rules
- 2. Execution of health and safety activities
- 3. Improvement of crisis management capabilities

(Established on December 27, 2022)

Code of Ethics and Management Responsible Care, Environment and Safety

Social

Governance

## Sanyo Chemical Group Human Rights Policy

#### 1. Basic attitude

As corporate activities become increasingly globalized, companies are expected to take the initiative in eliminating human rights violations from the perspective of creating an inclusive society. The Group will conduct management that respects the human rights of all people and recognizes that its business activities may have a negative impact on human rights. At the same time, we will work with our customers, business partners, suppliers, and government agencies to avoid such negative impacts, thereby gaining recognition from investors, customers, and society at large. We will also cooperate with diverse stakeholders to support the socially vulnerable.

#### 2. Scope of application

This policy applies to all executives and employees of the Sanyo Chemical Group. The Sanyo Chemical Group will continue to encourage its customers, business partners, and suppliers to support this policy and participate in similar initiatives, and will work together to promote initiatives to respect human rights.

#### 3. Responsibility to respect human rights

The Sanyo Chemical Group will fulfill its responsibility to respect human rights by not infringing on the human rights of those affected by its business activities and by taking appropriate measures to correct any adverse impact on human rights that its business activities may cause. If any adverse impact on human rights is caused by our customers, business partners, and suppliers, we will demand them to take appropriate action.

#### 4. Compliance with applicable laws and regulations

The Sanyo Chemical Group will strive to understand internationally recognized human rights norms and the relevant laws and regulations in each country, including those stipulated in the following documents. Where local national laws and regulations are incompatible with internationally recognized human rights norms, we will seek ways to respect the latter.

- International Bill of Human Rights: Universal Declaration of Human Rights and International Covenants on Human Rights (International Covenant on Civil and Political Rights / International Covenant on Economic, Social and Cultural Rights)
- International Labour Organization's (ILO's) Core Labour Standards (child labor, forced labor, freedom of association and the right to collective bargaining, elimination of discrimination in employment, etc.)
- · United Nations "Guiding Principles on Business and Human Rights"
- · OECD Guidelines for Multinational Enterprises
- · United Nations Global Compact (voluntary efforts of companies based on the Ten Principles in the areas of human rights, labor, the environment, and anti-corruption)
- · IS026000 "Guidance on social responsibility"
- · Japanese government "Guidelines on Respect for Human Rights in Responsible Supply Chains"
- · UK Modern Slavery Act

### 5. Human rights due diligence

The Sanyo Chemical Group will establish a human rights due diligence system to identify adverse impacts on human rights, conduct preventive surveys and investigations, implement appropriate measures to correct adverse impact, and continue to strive to prevent and mitigate its adverse human rights impact on society.

### 6. Identification of human rights risks

The Sanyo Chemical Group has identified the following three items as outstanding human rights issues, and will continue to address these issues.

- · Labor in the supply chain
- Employee safety and health
- · Human rights risks due to the effects of geopolitical situations and conflicts

#### 7. Prevention and mitigation measures

The Sanyo Chemical Group will not engage in discrimination or acts that undermine the dignity of individuals based on factors such as thoughts, creed, age, social status, nationality, birthplace, ethnic group, religion, immigration, gender, sexual orientation, gender identity, pregnancy, poverty, disease, and disability. To that end, we will also strive to understand the issues faced by socially vulnerable people who suffer from discrimination and acts that undermine personal dignity based on these reasons, and cooperate with various stakeholders such as government agencies, local governments, and social welfare organizations to provide support.

### 8. Corrective and remedial measures

The Sanyo Chemical Group fully recognizes that human rights violations pose a management risk. It will prevent human rights violations and respond fairly and appropriately in the event of any human rights violations. It will not only oppose child labor and forced labor, but will also not use raw materials that are thought to have been produced by child labor or forced labor. It will also establish a whistleblowing contact point that allows anonymous reporting for internal employees, and will take necessary measures while appropriately handling the confidentiality of the whistleblowers and reported information. It will prohibit any disadvantageous treatment or retaliation against whistleblowers, and will ensure their protection.

#### 9 Education

The Sanyo Chemical Group will continue to provide appropriate education to ensure that a correct understanding of this policy is permeated both inside and outside the company, and that it is effectively implemented.

#### 10. Information disclosure/engagement

The Sanyo Chemical Group will disclose the status of its efforts regarding Respect for Human Rights. It will also evolve a series of efforts based on this policy through dialogue and consultation with various internal and external stakeholders.

(Established: March, 2023)

### Sustainable Procurement

- 1. We conduct procurement activities based on social common sense and corporate ethics in addition to ensuring compliance, and strive to cooperate with our business partners, and build relationships based on trust.
- 2. We provide fair business opportunities to both domestic and overseas companies and conduct procurement activities from a global perspective.
- 3. We consider various conditions such as the quality, price, and stable supply of materials and raw materials in procurement activities. Moreover, we make efforts to set appropriate prices and maintain and improve quality in cooperation with our business partners. Simultaneously, we promote green procurement in terms of environmental conservation and chemical substance control.
- 4. We aim to create a sustainable society throughout the supply chain in conjunction with our business partners to fulfill the corporate social responsibility, including considerations related to the global environment and protection of human rights and the working environment.

(Established: January, 2022)

### Sustainable Procurement Guidelines

#### I. Sound Corporate Management

- 1. We emphasize the realization of a sustainable society as management policy, establish a system to promote sustainability, work on this, make our business partners aware of the significance of Sustainable Procurement, and attempt to disseminate such knowledge throughout the supply chain.
- 2. We comply with laws and regulations, adhere to social norms, and conduct fair and transparent corporate governance.
- 3. We have established a management system and mechanisms that ensure the effectiveness and efficiency of the company's business operations, reliability of financial reports, compliance with business-related laws and regulations, and preservation of assets.
- 4. We have established a system for the continuation or early recovery of important operations or businesses in the event of a disaster.
- 5. We ensure supply chain transparency and are not involved in conflict mineral procurement, crime, etc.
- 6. We ensure transparency and accountability to society and stakeholders.

#### II. Fair Corporate Activities

- 1. We comply with laws and regulations related to commercial transactions, such as each country's prohibition and competition laws, and conduct fair corporate activities based on corporate ethics.
- 2. To prevent corruption, we refrain from paying inappropriate profits to or receiving them from business partners and maintain a healthy relationship between companies and public servants.
- 3. We have eliminated relationships with antisocial forces and groups.
- 4. We respect and do not infringe on the intellectual property of third parties (patent rights, copyrights, trademark rights, etc.).
- 5. We have in place a whistleblowing system that ensures the confidentiality and protection of whistleblowers who come across important risk information.
- 6. We carefully manage and protect confidential information, including personal details, and take protective measures against threats to computer networks.

### III. The Environment

- 1. We comply with environment-related legal requirements in business activities and control chemical substances associated with products/services and manufacturing processes as specified by laws and regulations.
- 2. We adhere to and comply with laws and regulations related to soil, air, and water.
- 3. We set voluntary targets to save and effectively use resources and energy.
- 4. We set voluntary targets and make efforts to achieve greenhouse gas reduction.
- 5. We set voluntary targets and make efforts to ensure waste reduction.
- 6. We manage the use of water, reduce its use as much as possible, and take measures to prevent direct drainage of water into the environment.
- 7. We work on biodiversity conservation and sustainable use.
- 8. We strive for green procurement through environmental conservation and chemical substance management.

### IV. Human Rights

- 1. We support and respect the protection of international human rights. In addition, we do not discriminate based on race, nationality, gender, age, religion, sexual orientation, sexual identity, disability, pregnancy, poverty, infectious diseases, and other differences.
- 2. We do not generate any impact that may support or promote human rights infringement, directly or indirectly, through our business activities.

#### V. Labor

- 1. We respect diversity and strive to eliminate discrimination in recruitment and employment to ensure equal opportunities for employees' development and evaluation and fair treatment.
- 2. We respect the individual human rights of employees and prohibit inhumane treatment such as abuse, bullying, and harassment.
- 3. In addition to the statutory minimum wages, we pay employees other benefits, including overtime work allowance and statutory benefits, in a fair manner.
- 4. We appropriately manage employees' working hours, holidays, and leaves to prevent exceeding the statutory limits.
- 5. We hire all employees based on their free will and do not force them to work.
- 6. We do not employ children below the minimum working age or engage in work that may impair their growth.
- 7. We respect employees' right to organize to realize labor-management consultation on their working environment, wage level, etc.
- 8. We understand the accident risks that occur during work, including chemicals, noise, and odors that may harm employees' health, and ensure a safe workplace environment. We also respect employees' work—life balance and adopt measures for their sound mental health.

#### VI. Quality and Safety

- 1. We ensure quality and safety when delivering products and services to the market.
- In the event of an accident related to products/services or the distribution of defective products, we disclose information to our suppliers, notify the competent authorities, recall products, and ensure systemic improvements such as safety measures.

### VII. Building Connections with Local Communities

1. We respect the cultures and customs of the countries and regions where we conduct business activities and contribute toward the sustainable development of local communities.

(Established: January, 2022)

### Health Management Declaration

Employees' mental and physical health is the company's most important asset.

The Sanyo Chemical Group actively promotes health to realize the richness in both private and company life. Together, we respect the diversity of employees, where each and every employee is able to achieve personal fulfillment by showing their autonomy and creativity, and will continue to contribute to society through the development of our company.

(Established: September, 2018)

### Social contribution policy

As a good corporate citizen, we contribute to the realization of an enriched society and sustained development.

#### 1. Our efforts

By joining forces with a wide cross-section of society and effectively using available resources, we proactively engage in social contribution activities toward the development of human resources who will lead the next generation and continue to provide solutions to social issues.

#### 2. Response to the needs of countries/regions

By sharing the philosophy of social contribution within the group and coordinating with the group bases in countries and regions, we will develop social contribution activities in accordance with the circumstances surrounding the individual countries and regions.

#### 3. Information disclosure

By disclosing information and openly sharing the results of social contributions with society, we contribute to the realization of an enriched society and sustained development.

(Established: March, 2017)

Code of Ethics and Management

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Advice on Compliance ^

DISCLOSURE POLICY

PRIVACY POLICY

SOCIAL MEDIA POLICY

GUIDLINES ON THE RELATIONSHIP WITH MEDICAL INSTITUTIONS (In Japanese Only)

PUBLIC RESEARCH SPENDING (In Japanese Only)

# **Independent Review**

Regarding the content of the Sanyo Chemical Group Sustainability Report 2023, the RC activities are verified by an outside organization, a third party, Responsible Care Verification Center of the Japan Chemical Industry Association.

## Report verification: Independent Review

Report verification: Responsible Care Report Verification

The report verification includes numerical verification of performance metrics aggregated by the head office, confirmation of documentation, and on-site checking of implementation and operation at factories. We started to undergo an audit in 2005 at four factories of Sanyo Chemical and two subsidiaries/affiliates (two factories) in stages. The Nagoya Factory, which has undergone an audit, is subject to verification for the fourth time.



三洋化成グループ サステナビリティレポート 2023

第三者検証 意見書

2023年8月31日

三洋化成工業株式会社 代表取締役社長 樋口 章憲 殿

> 一般社団法人 日本化学工業協会 レスポンシブル・ケア検証センター長

> > 尾崎

#### ■検証の目的

レスポンシブル・ケア報告書検証は、三洋化成工業株式会社が作成した「サステナビリティレポート 2023」(以後、報告書と略す)に記載された下記の事項について、レスポンシブル・ケア検証センターが化学業界の専門家の意見を表明することを目的としています。

- 1) パフォーマンス指標(数値)の算出・集計方法の合理性及び数値の正確性
- 2) 数値以外の記載情報の正確性
- 3) レスポンシブル・ケア活動及びCSR活動の評価
- 4) 報告書の特徴

#### ■ 検証の手順

- ・本社において、各サイト(事業所、工場等)から報告される数値の集計方法の合理性、及び数値以外の記載情報の正確性について調査を行いました。 調査は、報告書の内容について各業務責任者及び報告書作成責任者に質問すること、並びにそれぞれの責任者より資料提示と説明を受けることにより行いました。
- ・名古屋工場において、本社に報告する数値の算出方法の合理性、数値の正確性及び数値以外の記載情報の正確性 の調査を行いました。調査は、各業務責任者及び報告書作成責任者に質問すること、資料提示・説明を受けること、並 びに証拠物件と照合することにより行いました。
- ・数値及び数値以外の記載情報の調査についてはサンプリング手法を適用しました。

#### ■意見

- 1) パフォーマンス指標(数値)の算出・集計方法の合理性及び数値の正確性について
- ・数値の算出・集計方法は、本社及び名古屋工場において、合理的な方法を採用しています。
- ・データ集計システムの活用と担当者間の相互確認で、パフォーマンスの数値は正確に算出・集計されています。
- 2) 数値以外の記載情報の正確性について
- ・報告書に記載された情報は、正確であることを確認しました。原案段階では表現の適切性あるいは文章の分かり易さに関し、若干の問題があることを指摘しましたが、現報告書では修正されており、現在修正事項は認められません。
- 3) レスポンシブル・ケア(RC)活動及びCSR活動の評価
- ・取締役会の実効性評価は、全取締役、全監査役のアンケート結果で、確認する取組みを評価します。
- ・エコ製品の定義を自社で定め、この製品比率を高める取組みをし、環境改善に貢献していることを評価します。
- ・保安力向上センターによる安全基礎力診断、外部の学識経験者の意見を、安全・防災計画に反映させようと努力していることに対して、評価します。
- ・DEIに積極的に取組まれ、企業価値を高めていることに対して、これを高く評価します。
- ・名古屋工場では、化学物質のリスクアセスメントについて、アセスメントのレベルアップや、短期間で事業関連の全化学物質の検討を目指すなど、意欲的な取組みを評価します。
- 4) 報告書の特徴について
- ・①カーボンリサイクル(CCU)、エネルギー(有機正極)等、新規事業開発の目指す姿及び②社内複業制度等、働き方 改革の取組みが読者の参考になります。

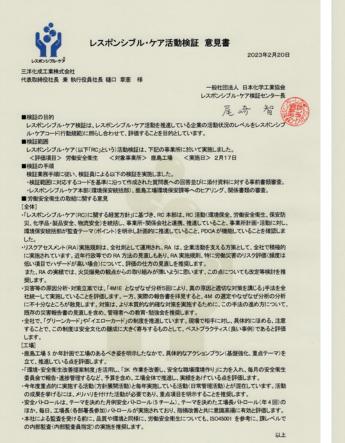
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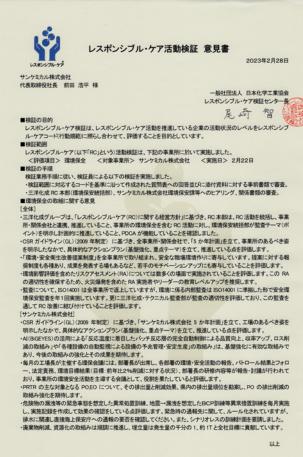
### [Verification history]

FY	Target	Auditee's place
2005	Environmental & Social Report 2005	Nagoya Factory
2006	Environmental & Social Report 2006	Kashima Factory
2007	Environmental & Social Report 2007	Kyoto Factory
2008	CSR Report 2008	Kawasaki Factory in San Chemical Co., Ltd.
2009	CSR Report 2009	Nagoya facilities in SAN NOPCO LIMITED
2010	CSR Report 2010	Nagoya Factory
2011	CSR Report 2011	Kyoto Factory
2012	CSR Report 2012	Kawasaki Factory in San Chemical Co., Ltd.
2013	CSR Report 2013	Nagoya facilities in SAN NOPCO LIMITED
2014	CSR Report 2014	Kashima Factory
2015	CSR Report 2015	Kinuura Factory
2016	CSR Report 2016	Nagoya Factory
2017	CSR Report 2017	Kyoto Factory
2018	CSR Report 2018	Kawasaki Factory in San Chemical Co., Ltd.
2019	CSR Report 2019	Nagoya facilities in SAN NOPCO LIMITED
2020	CSR Report 2020	Kashima Factory
2021	CSR Report 2021	Kinuura Factory
2022	CSR Data Book 2022	Kyoto Factory
2023	Sustainability Report 2023	Nagoya Factory

## RC verification: Independent Review

In FY2022, the Kashima Plant underwent verification of occupational health and safety activities, and the company underwent verification of environmental preservation activities.





Verification of Occupational Health and Safety Activities for the Kashima Factory

Verification of environmental conservation activities for San Chemical Co., Ltd.

#### [Results of verification audits]

Date	Auditee's place	Target activities
October 2021	Nagoya Factory	Occupational safety and health
March 2022	Nagoya Factory	Environmental conservation
April 2022	Nagoya facilities in SAN NOPCO LIMITED	Environmental conservation
February 2023	Kashima Factory	Occupational safety and health
February 2023	Kawasaki Factory in San Chemical Co., Ltd.	Environmental conservation

### **RC Verification System**

The Responsible Care Verification Center of the Japan Chemical Industry Association quantitatively evaluates the RC activities of companies and reports the results with advice according to the Responsible Care Codes\*. This system validates each activity by RC code and reports the verification, such as the RC report.

Responsible Care Codes are used to decide fundamental principles when implementing responsible care and describe the items necessary to move us toward our current understanding of the ideal state. These codes consist of seven individual codes: the Management System Code plus the six codes in each filed of activity, such as Environmental Conservation, Accident Prevention, Occupational Safety and Health, Logistics Safety, Chemicals/Product Safety, and Dialog with Society.

<sup>\*</sup> Responsible Care Codes

# **GRI Content Index**

## General Disclosures

Statement of use Sanyo Chemical Group has reported the information contained in this GRI index for the period from April 1, 2022 to March 31, 2023 with reference to

the GRI Standards.

GRI 1 used GRI 1: Foundation 2021

GRI Standards	Disclosures	References or reasons for omission
General Disclosures 2021		
1.The organization and its reporting practices		
2-1	Organizational details	COMPANY OVERVIEW  OVERSEAS BASES  SUBSIDIARIES & AFFILIATES
2-2	Entities included in the organization's sustainability reporting	DOMESTIC BASES  OVERSEAS BASES  SUBSIDIARIES & AFFILIATES
2-3	Reporting period, frequency and contact point	Editorial Policy =
2-4	Restatements of information	Securities report (Japanese only)
2-5	External assurance	Independent Review
2. Activities and work	ers	
2-6	Activities, value chain and other business relationships	Securities report (Japanese only)
2-7	Employees	Securities report (Japanese only) ☐ Employee-related data
2-8	Workers who are not employees	Information unavailable/incomplete: data not aggregated
3. Governance		
2-9	Governance structure and composition	Corporate Governance
2-10	Nomination and selection of the highest governance body	Securities report (Japanese only)  Standards for selection of Directors  Diversity of the Board of Directors  Skills matrix
2-11	Chair of the highest governance body	Corporate Governance Report (In Japanese Only)
2-12	Role of the highest governance body in overseeing the management of impacts	Sustainability Management
2-13	Delegation of responsibility for managing impacts	Sustainability Management

GRI Standards	Disclosures	References or reasons for omission
2-14	Role of the highest governance body in sustainability reporting	Sustainability Management  Message from the Director in Charge of Sustainability
2-15	Conflicts of interest	Corporate Governance Report (In Japanese Only) Securities report (Japanese only)
2-16	Communication of critical concerns	Corporate Governance   Compliance   Complia
2-17	Collective knowledge of the highest governance body	Skills matrix =
2-18	Evaluation of the performance of the highest governance body	Effectiveness evaluation of the Board of Directors
2-19	Remuneration policies	Corporate Governance Report (In Japanese Only)
2-20	Process to determine remuneration	Corporate Governance Report (In Japanese Only)
2-21	Annual total compensation ratio	Information incomplete: not aggregated
4. Strategy, policies a	nd practices	
2-22	Statement on sustainable development strategy	Message from the President  Message from the Director in Charge of Sustainability
2-23	Policy commitments	Message from the President  Message from the Director in Charge of  Sustainability.  Respect for Human Rights
2-24	Embedding policy commitments	Human rights due diligence: to start in 2023
2-25	Processes to remediate negative impacts	Human Rights Policy
2-26	Mechanisms for seeking advice and raising concerns	Internal whistleblowing system
2-27	Compliance with laws and regulations	Fair trade and anti-corruption  Whistleblowing, disciplinary actions, and  violations
2-28	Membership associations	Major participating organizations
5. Stakeholder engag	ement	
2-29	Approach to stakeholder engagement	Stakeholder and Communication
2-30	Collective bargaining agreements	Securities report (Japanese only)

## Economic

GRI Standards	Disclosures	References or reasons for omission
GRI 201: Economic P	Performance 2016	
201-1	Direct economic value generated and distributed	Securities report (Japanese only)
201-2	Financial implications and other risks and opportunities due to climate change	Disclosure based on TCFD recommendations
201-3	Defined benefit plan obligations and other retirement plans	Securities report (Japanese only)
201-4	Financial assistance received from government	Selected for medical research and development promotion grants in FY2019, FY2020, and FY2021. The grants were awarded. Selected for medical field research results deployment grants in FY2020, FY2021, and FY2022. The grants were awarded.
GRI 202: Market Pres	sence 2016	
202-1	Ratios of standard entry level wage by gender compared to local minimum wage	Information incomplete: data not calculated
202-2	Proportion of senior management hired from the local community	Information incomplete: data not calculated
GRI 203: Indirect Eco	nomic Impacts 2016	
203-1	Infrastructure investments and services supported	Local Community / Social Contributions
203-2	Significant indirect economic impacts	Difficult to obtain information: recognized as a future issue, but no action has been taken.
GRI 204: Procuremer	nt Practices 2016	
204-1	Proportion of spending on local suppliers	Information incomplete: data not calculated
GRI 205: Anti-corrupt	ion 2016	
205-1	Operations assessed for risks related to corruption	Difficult to obtain information: recognized as a future issue, but no action has been taken.
205-2	Communication and training about anti-corruption policies and procedures	Compliance =
205-3	Confirmed incidents of corruption and actions taken	Compliance
GRI 206: Anti-compet	itive Behavior 2016	
206-1	Legal actions for anti-competitive behavior, anti-trust, and monopoly practices	Compliance
GRI 207: Tax 2019		
207-1	Approach to tax	Difficult to obtain information: recognized as a future issue, but no action has been taken.
207-2	Tax governance, control, and risk management	Difficult to obtain information: recognized as a future issue, but no action has been taken.
207-3	Stakeholder engagement and management of concerns related to tax	Difficult to obtain information: recognized as a future issue, but no action has been taken.
207-4	Country-by-country reporting	Difficult to obtain information: recognized as a future issue, but no action has been taken.

## Environmental

GRI Standards	Disclosures	References or reasons for omission
GRI 301: Materials 2	016	
301-1	Materials used by weight or volume	Material flow   Climate change related data   ■
301-2	Recycled input materials used	Information unavailable/incomplete: Raw materials: difficult to define and determine Containers: not aggregated
301-3	Reclaimed products and their packaging materials	Information unavailable/incomplete: There are no products returned from the market for recycling. Packing materials: not aggregated
GRI 302: Energy 20°	16	
302-1	Energy consumption within the organization	Material flow   GHG emission reduction and energy savings   Climate change related data   ■
302-2	Energy consumption outside of the organization	Disclosure based on TCFD recommendations  Climate change related data
302-3	Energy intensity	GHG emissions in Scope 1, 2, 3 ■
302-4	Reduction of energy consumption	Material flow   GHG emission reduction and energy savings   Climate change related data   ■
302-5	Reductions in energy requirements of products and services	Environmental Performance Chemicals
GRI 303: Water and	Effluents 2018	
303-1	Interactions with water as a shared resource	Water consumption targets and results   Reduction of water consumption   ■
303-2	Management of water discharge related impacts	Reduction of water pollutants discharge  Water resource related data  Emission/transfer of substances subject to PRTR Law
303-3	Water withdrawal	Material flow   Water consumption targets and results   Reduction of water consumption   ■
303-4	Water discharge	Material flow Reduction of water pollutants discharge Water resource related data Emission/transfer of substances subject to PRTR
303-5	Water consumption	Material flow   Water consumption targets and results   Reduction of water consumption   Site report   ■

GRI Standards	Disclosures	References or reasons for omission
GRI 304: Biodiversity	2016	
304-1	Operational sites owned, leased, managed in, or adjacent to protected areas and areas of high biodiversity value outside protected areas	Our factories are located in areas that are deemed appropriate in each country and region. Although these areas do not fall under protected areas or areas with high biodiversity value, green spaces, ponds, etc. have been created around all the factories as voluntary initiatives to conserve the ecosystem in adjacent areas.
304-2	Significant impacts of activities, products, and services on biodiversity	The quality of the wastewater discharged exceeds the wastewater quality standards established by the local governments having jurisdiction over the respective factories. There is no impact on the ecosystem conservation in adjacent areas.
304-3	Habitats protected or restored	Our factories are located in areas that are deemed appropriate in each country and region. Although these areas do not fall under protected areas or areas with high biodiversity value, green spaces, ponds, etc. have been created around all the factories as voluntary initiatives to conserve the ecosystem in adjacent areas.
304-4	IUCN Red List species and national conservation list species with habitats in areas affected by operations	Not investigated
GRI 305: Emissions 2	2016	
305-1	Direct (Scope 1) GHG emissions	GHG emission reduction and energy savings ■ GHG emissions in Scope 1, 2, 3 ■
305-2	Energy indirect (Scope 2) GHG emissions	GHG emission reduction and energy savings ■ GHG emissions in Scope 1, 2, 3 ■
305-3	Other indirect (Scope 3) GHG emissions	GHG emission reduction and energy savings   GHG emissions in Scope 1, 2, 3   ■
305-4	GHG emissions intensity	GHG emission reduction and energy savings   GHG emissions in Scope 1, 2, 3   ■
305-5	Reduction of GHG emissions	GHG emission reduction and energy savings   GHG emissions in Scope 1, 2, 3   ■
305-6	Emissions of ozone-depleting substances (ODS)	Fluorocarbons   Emissions to the air
305-7	Nitrogen oxides (NOx), sulfur oxides (SOx), and other significant air emissions	Material flow   Emissions to the air   ■

GRI Standards	Disclosures	References or reasons for omission
GRI 306: Waste 2020		
306-1	Waste generation and significant waste-related impacts	Environmental management indicators
306-2	Management of significant wasterelated impacts	Resource Saving and Waste Reduction
306-3	Waste generated	Environmental action plan 21-24  Material flow  Chemical Substance Control Resource Saving and Waste Reduction Waste and resource saving related data
306-4	Waste diverted from disposal	Material flow  Resource Saving and Waste Reduction  Waste and resource saving related data  Site report   ■
306-5	Waste directed to disposal	Material flow  Resource Saving and Waste Reduction  Waste and resource saving related data  Site report   ■
GRI 308: Supplier En	vironmental Assessment 2016	
308-1	New suppliers that were screened using environmental criteria	Suppliers that were evaluated to meet a certain level based on a CSR questionnaire or an environment/chemical substances management survey sheet at the time of screening are selected.
308-2	Negative environmental impacts in the supply chain and actions taken	Sustainable Procurement ■

## Social

GRI Standards	Disclosures	References or reasons for omission
GRI 401: Employmen	t 2016	
401-1	New employee hires and employee turnover	Employee-related data
401-2	Benefits provided to full-time employees that are not provided to temporary or parttime employees	Not disclosed due to confidential information
401-3	Parental leave	Employee-related data   Diversity, Equity & Inclusion (DEI)   ■
GRI 402: Labor/Mana	gement Relations 2016	
402-1	Minimum notice periods regarding operational changes	The minimum notification period is not determined by labor and management in advance. However, when an employee is transferred for business reasons, the employee is notified promptly after a decision is made.
GRI 403: Occupationa	al Health and Safety 2018	
403-1	Occupational health and safety management system	Occupational Safety and Health/Accident  Prevention
403-2	Hazard identification, risk assessment, and incident investigation	Occupational Safety and Health/Accident  Prevention
403-3	Occupational health services	Health and Productivity Management
403-4	Worker participation, consultation, and communication on occupational health and safety	The Occupational Safety and Health Committee promotes occupational safety and health activities based on a consensus between labor and management.
403-5	Worker training on occupational health and safety	Occupational Safety and Health/Accident  Prevention
403-6	Promotion of worker health	Health and Productivity Management
403-7	Prevention and mitigation of occupational health and safety impacts directly linked by business relationships	Details of a fatal occupational accident on  January 15, 2022   ■
403-8	Workers covered by an occupational health and safety management system	Occupational Safety and Health/Accident  Prevention
403-9	Work-related injuries	Details of a fatal occupational accident on  January 15, 2022   Occupational Safety and Health/Accident  Prevention   Employee-related data   ■
403-10	Work-related ill health	Health and Productivity Management

GRI Standards	Disclosures	References or reasons for omission
GRI 404: Training and Education 2016		
404-1	Average hours of training per year per employee	Education/training system   Employee-related data   ■
404-2	Programs for upgrading employee skills and transition assistance programs	Education/training system
404-3	Percentage of employees receiving regular performance and career development reviews	100% for full-time Sanyo Chemical employees. The figure has not been determined for overseas employees.
GRI 405: Diversity ar	d Equal Opportunity 2016	
405-1	Diversity of governance bodies and employees	Promotion of women's empowerment
405-2	Ratio of basic salary and remuneration of women to men	Securities report (Japanese only)
GRI 406: Non-discrin	nination 2016	
406-1	Incidents of discrimination and corrective actions taken	Respect for Human Rights  Compliance
GRI 407: Freedom of	Association and Collective Bargaining 2016	
407-1	Operations and suppliers in which the right to freedom of association and collective bargaining may be at risk	Sustainable Procurement
GRI 408: Child Labor	2016	
408-1	Operations and suppliers at significant risk for incidents of child labor	Due diligence will be promoted in accordance with the Human Rights Policy, which was established in March 2023.  Sanyo Chemical Group Human Rights Policy
GRI 409: Forced or C	compulsory Labor 2016	
409-1	Operations and suppliers at significant risk for incidents of forced or compulsory labor	Due diligence will be promoted in accordance with the Human Rights Policy, which was established in March 2023.  Sanyo Chemical Group Human Rights Policy
GRI 410: Security Pra	actices 2016	
410-1	Security personnel trained in human rights policies or procedures	Not applicable
GRI 411: Rights of Inc	digenous Peoples 2016	
411-1	Incidents of violations involving rights of indigenous peoples	Due diligence will be promoted in accordance with the Human Rights Policy, which was established in March 2023.  Sanyo Chemical Group Human Rights Policy
GRI 413: Local Comr	nunities 2016	
413-1	Operations with local community engagement, impact assessments, and development programs	Local Community / Social Contributions
413-2	Operations with significant actual and potential negative impacts on local communities	The Sanyo Chemical Group recognizes that there are no business sites that have a significant negative impact (actual and potential) on local communities.

GRI Standards	Disclosures	References or reasons for omission
GRI 414: Supplier Social Assessment 2016		
414-1	New suppliers that were screened using social criteria	Suppliers that were evaluated to meet a certain level based on a CSR questionnaire at the time of screening are selected.
414-2	Negative social impacts in the supply chain and actions taken	Sustainable Procurement
GRI 415: Public Poli	cy 2016	
415-1	Political contributions	Compliance   ESG Performance Data > Compliance   ■
GRI 416: Customer	Health and Safety 2016	
416-1	Assessment of the health and safety impacts of product and service categories	Provision of safe and secure products   Design management
416-2	Incidents of non-compliance concerning the health and safety impacts of products and services	Not applicable: no violations  Organizations related to quality assurance, quality control, and product liability (PL) and their roles
GRI 417: Marketing	and Labeling 2016	
417-1	Requirements for product and service information and labeling	Quality
417-2	Incidents of non-compliance concerning product and service information and labeling	Quality =
417-3	Incidents of non-compliance concerning marketing communications	Not applicable: no violations  Whistleblowing, disciplinary actions, and violations
GRI 418: Customer Privacy 2016		
418-1	Substantiated complaints concerning breaches of customer privacy and losses of customer data	Not applicable: no violations  Whistleblowing, disciplinary actions, and violations.