

Products to Enhance Sustainability

- Contribution to Solving Social Issues through Products and Services -



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Products to Enhance Sustainability

SEKISUI CHEMICAL Group is accelerating efforts to create and expand markets for products that make a significant contribution to solving issues in the natural and social environments while working to realize a sustainable society and securing the Group's growth.

Basic Concept

SEKISUI CHEMICAL Group has positioned products to enhance sustainability as the most appropriate conduit through which to realize both a sustainable society and the sustainable growth of the Group itself. Through the creation and expansion of products to enhance sustainability, the Group aims to help achieve the SDGs while improving its contributions and ability to solve social issues as well as grow as a company. Under the current Medium-term Management Plan, SEKISUI CHEMICAL Group has evolved the operation of the products to enhance sustainability system with the aim of transforming its product portfolio to accelerate corporate growth and the realization of a sustainable society by solving social issues. We have also strengthened technology platforms that are the source of innovation, developing human resources, and creating opportunities that transcend organizational boundaries. Under the next Medium-term Management Plan, our goal is to achieve sales of products to enhance sustainability in excess of ¥1 trillion in fiscal 2025. We will vigorously invest management resources in key businesses and products in enhancement areas, which focus on expansion as an extension of existing businesses, as well as in innovation areas, which create new innovations through fusion. In this manner, we will expand our contributions to solving social issues through our business activities and further accelerate the creation of new products that will drive future growth.

Evolution of the Product Evaluation System based on Internal Strategies

SEKISUI CHEMICAL Group has continued to promote a product evaluation system in a bid to rapidly solve issues related to the natural and social environments since fiscal 2006. As part of this effort, we certify and register products that contribute significantly to solving issues based on the determination criteria established through discussions among internal committee members. Since fiscal 2010, we have received opinions and advice from outside advisors on the criteria and approach, as well as the validity of results, to ensure high standards and transparency.

- **Fiscal 2006: Launched the Environment-Contributing Products system**

Based on internal criteria, SEKISUI CHEMICAL Group launched a product system to certify and register products that contribute significantly to the solving of issues in a bid to promote the creation and expansion of products that contribute to the solving of issues in the natural environment.

- **Fiscal 2017: Expanded the scope of the system to include not only products that contribute to solving natural environment issues, but also those that focus on the social environment.**

SEKISUI CHEMICAL Group is promoting the creation and greater use of problem-solving products. We have also reaffirmed that the SDGs and our goals are one in the same.

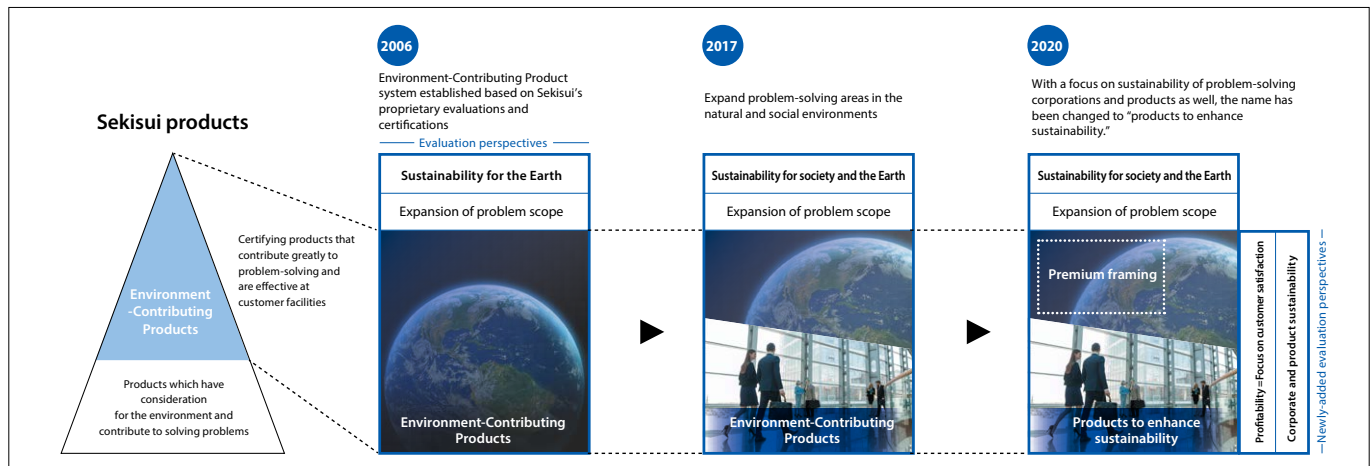
- **Fiscal 2020: Evolution as products to enhance sustainability**

Introduced Premium Framing and sustainability assessments. Sustainability assessments were concluded in fiscal 2022.

- **Fiscal 2023: Introduced negative checks for environmental issues**

At the time of registration, we check whether or not products have a negative impact on various environmental issues, or confirm what measures are being considered to prevent a negative impact.

Evolution of the Product System at SEKISUI CHEMICAL Group

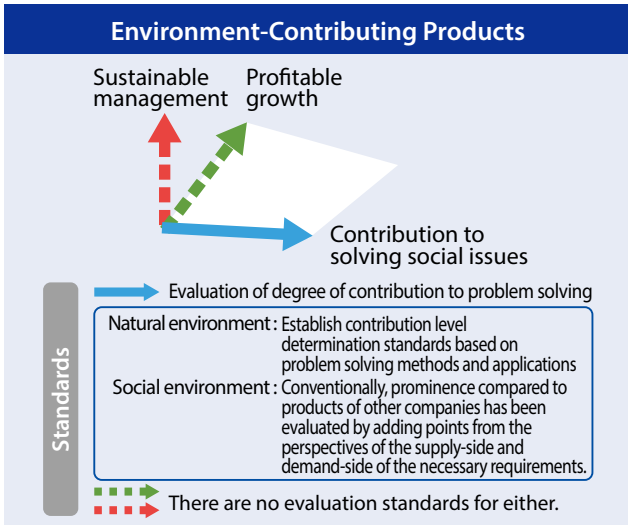


In order to drive the achievement of a sustainable society and to realize sustainable corporate growth as outlined under Vision 2030, SEKISUI CHEMICAL Group launched the following initiatives in fiscal 2020 in concert with efforts to improve its ability to contribute to solving social issues.

- (1) To bolster profitability, unify the business portfolio in a way that expands business through products that contribute significantly to solving social issues, and establish Premium Framing in a way that strategically expands contributing products.
- (2) To boost its capabilities in sustainable management, conduct sustainability assessments that confirm and evaluate items necessary to improve the sustainability of products and businesses with related departments.

SEKISUI CHEMICAL Group has established Premium Framing as a framework for strategically expanding products that contribute to solving social issues and is committed to expanding this framework with medium-term targets. Our goal is to accelerate contributions to solving social issues by crafting strategies that balance the solving of social issues and profitability.

In addition, ensuring the sustainability of the Group and Group products themselves is vital to continue making products that contribute significantly to solving social issues and expanding that contribution. For this reason, in fiscal 2020 we adopted a new perspective on evaluating corporate and product sustainability in addition to the conventional process of certifying products that contribute significantly to the solving of issues based on internal criteria. Using confirmation assessments for initiatives undertaken by related departments regarding profitability, process evaluations, and Governance (Internal Control) across the supply chain, we confirmed the sustainability of the Group and its products. Moreover, the implementation of sustainability assessments was concluded in fiscal 2022, as the risks identified for each product through the assessments were addressed on a Group-wide basis through the renewal of the risk management and supply chain management system.



Targets

Medium- to long-term targets

Sales of products to enhance sustainability (growth rate (compared with 2019))

Current Medium-term Management Plan (2020-2022)

¥800 billion

Growth rate equivalent of 22% (compared with 2019)

2030 Targets

Expand sales of problem-solving products

2050 Targets

Drive sustainable corporate growth through products and services that improve environmental and social sustainability

Number of new registered products

Current Medium-term Management Plan (2020-2022)

6 per year

2050 target

Drive sustainable corporate growth through products and services that improve environmental and social sustainability

In the next Medium-term Management Plan, we have set the following milestones to further accelerate the pace of efforts aimed at solving social issues and securing corporate growth.

Next Medium-term Management Plan (2023-2025)

Sales of products to enhance sustainability in excess of ¥1 trillion

System

Products to enhance sustainability are products that make a significant contribution to solving issues in the natural and social environments. An internal screening committee evaluates the degree of product contribution based on certain internal criteria, and certifies and registers them based on the results.

Vision 2030 positions products to enhance sustainability as the outcomes of efforts to resolve materialities with an important impact on management and society. By creating and expanding such product lines, SEKISUI CHEMICAL Group aims to solve social issues while growing its business.

We defined our target* for the creation and expansion of products to enhance sustainability as a key performance indicator (KPI), and devise strategies and carry out measures toward achievement.

* This target is a milestone back-cast from SEKISUI Environment Sustainability Vision 2050, a long-term environmental vision that sets goals for solving natural and social environmental issues that require a long-term approach.

As such, this milestone is defined as a management target in the Group's Environmental Medium-term Plan, Sekisui Environment Sustainability Plan: Accelerate II (2020-2022), and in the next Environmental Medium-term Plan, Sekisui Environment Sustainability Plan: EXTEND (2023-2025). Progress on this target is managed based on the environmental management promotion system (see Environmental Management Promotion System for details) in an ongoing manner.

Discussion with External Advisors

SEKISUI CHEMICAL Group has held meetings of the External Advisory Board since fiscal 2010. These meetings are an opportunity to receive opinions and advice from outside experts regarding standards and the registration of Environment-Contributing Products.

Composed of internal and external members, the External Advisory Board meetings are organized by the supervising director of the organization in charge of the environment and sustainability.

Members of the internal certification screening committee* for products to enhance sustainability, including executive officers from each divisional company who oversee organizations in charge of the technical side and organization heads who are in charge of management planning work with a grasp for business conditions as a whole, participate in External Advisory Board meetings as internal committee members.

We also ask others from outside the Company with various backgrounds in industry, government, and academia, and who are currently engaged in environmental and other sustainability-related work, to take part as external experts.

Since fiscal 2022, we have appointed six external members with diverse backgrounds to run the committee and provide expert opinions from various perspectives. (Table A). In fiscal 2022, the External Advisory Board held two online meetings in October and one in February. At these meetings, SEKISUI CHEMICAL Group received opinions and advice regarding the significance of contributions made to the natural and social environments by newly registered products, how best to convey that significance, and future expectations.

Name	Affiliated Institution and Position	Specialist Areas	Anticipated Role(s)
Masatsugu Taniguchi	Representative of the Resource and Environment Strategic Planning Office	<ul style="list-style-type: none"> • Experience as a company manager • Well versed in resource-centered environmental strategies, a leading figure who advocated natural capital management from an early stage 	The giving of opinions/advice on management including natural capital and the product portfolio
Juichi Shibusawa	President of the specified non-profit corporation Network for Coexistence with Nature	<ul style="list-style-type: none"> • Experience in business as a Doctor of Agriculture • As president of an NPO, implements activities for forest, community, and human resource development with environmental NPOs in Japan and other countries 	<p>The giving of opinions/advice on business related to the solving of social issues based on the spirit of three-way benefits (the buyer, seller, and society as a whole)</p> <p>The giving of opinions from a nature-positive perspective</p>
Takehisa Kabeya	Sustainable Management Promotion Organization (SuMPO), Senior Managing Director	<ul style="list-style-type: none"> • Experience as a government official at Japan's Ministry of Economy, Trade and Industry • Promotes social change activities through environmental values, such as LCAs and support for regional revitalization 	The giving of opinions from a life cycle perspective, the giving of opinions/advice based on regulations regarding environmental value and global trends
Minako Oishi	Nippon Association of Consumer Specialists (public corporation), Representative Director, Nippon Association of Consumer Specialist	<ul style="list-style-type: none"> • Knowledge and experience concerning consumers and their demands • Promotes activities that connect consumers, businesses, and government 	From the standpoint of using products, the giving of opinions/advice based on requests, expectations, and matters of concern

Name	Affiliated Institution and Position	Specialist Areas	Anticipated Role(s)
<p>Shoichi Saito</p>	<p>Nikkei Business Publications, Inc., Executive Director, ESG Management Forum</p>	<ul style="list-style-type: none"> • Media experience • Ascertains and disseminates global trends in all areas of sustainability 	<p>From a comprehensive perspective, the giving of opinions on future trends with regard to risks and opportunities in ESG management</p>
<p>Mari Yoshitaka</p>	<p>Mitsubishi UFJ Research and Consulting Co., Ltd., Principal Sustainability Strategist, Management Planning Department Virtue Design Representative Director</p>	<ul style="list-style-type: none"> • Experience with regard to ESG investment in financial institutions • Leading figure in SDGs, green business, and climate change finance 	<p>Seen from a financial standpoint, the giving of opinions/advice on risks and opportunities in terms of corporate value and ESG management/green business</p>

Note: Internal certification screening committee

The committee is chaired by the supervisor of the ESG Management Department and comprised of supervisors in charge of technology and business at the Company's headquarters and divisional companies. The committee meets to deliberate on issues related to the certification of products to enhance sustainability. Meetings are held regularly twice per year. The number of committee meetings depends on the number of applications.

■ Negative Checks for Environmental Issues Outside of Registration Criteria

Steps are being taken to strengthen and review the Products to Enhance Sustainability System's operations and criteria to ensure that the product portfolio continues to evolve in line with business strategies that account for social needs and business conditions.

In fiscal 2022, we discussed the possibility of conducting negative checks on all environmental issues at the time of product registration.

Based on social demands such as the EU Taxonomy and COP15, this move aims to avoid any negative impacts in addition to having a positive impact on each environmental issue, in other words it aims to improve the quality of solutions to environmental issues. Beginning in fiscal 2023, we will implement procedures that confirm negative checks at the time of product registration.

■ Visualization of the Degree of Contribution to Solving Social Issues

To clarify the amount of return to natural capital up to fiscal 2019, SEKISUI CHEMICAL Group worked to visualize the degree to which each Environment-Contributing Product contributed to solving social issues. We calculated and quantified into a single indicator (damage costs) the various contribution vectors in the life cycle of Environment-Contributing Products. We multiplied the market impact, based on sales, by the environment contribution of each product to arrive at a quantifiable contribution by product, reflected in the Sekisui Environment Sustainability Index.

In calculating the impact on the environment for each Environment-Contributing Product until fiscal 2016, we broadly classified environmental issues into three areas that should be resolved in our aim to help realize an earth with maintained biodiversity. However, since broadening the scope of Environment-Contributing Products from fiscal 2017, we have since taken steps to integrate contributions across four areas adding the area of human health/social assets.

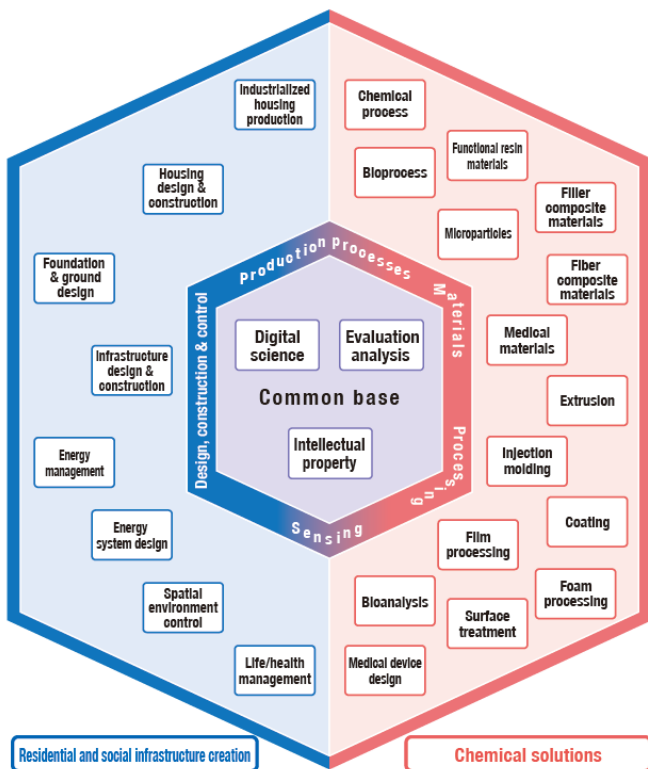
We began conducting environmental impact assessments based on the contribution to solving issues in the natural and social environments of products to enhance sustainability throughout their respective life cycles from fiscal 2020. These contributions to natural and social capital are reflected in the Sekisui Environment Sustainability Index. In particular, we started to explore the possibility of evaluating the social value of our products based on impact-weighted accounting.

Starting in fiscal 2023, we will use the updated IDEA LCA database to calculate the Sekisui Environment Sustainability Index. The MiLCAver 3.1 LCA calculation system incorporates IDEA database ver. 3.1 and reflects further findings on the impact on biodiversity. Using this system to set new benchmarks will enable us to accurately gauge the impact on biodiversity in order to pursue activities that decrease negative impact and increase positive impact.

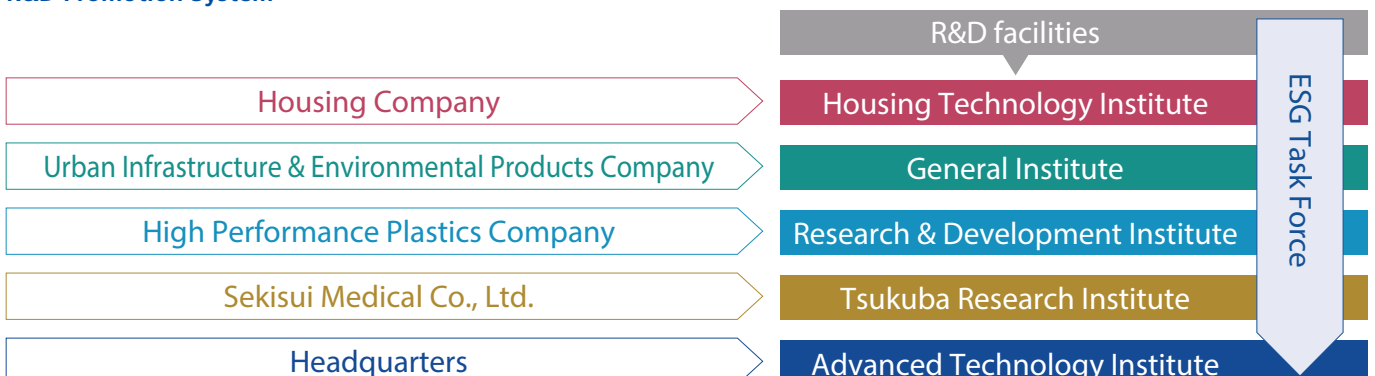
Major Initiatives

Revitalizing Liaison Meetings and Workshops to Create Products to Enhance Sustainability through Internal Fusion

Under the belief that fusing our 26 technological platforms within the Group will enable faster resolution of environmental and other social issues, SEKISUI CHEMICAL Group encourages forums to fuse these technological platforms. Currently, we are searching for startups along with holding workshops on new technologies and prior cases for each issue aimed at technologies, development, and market transformations necessary to achieve long-term goals related to carbon neutrality and the circular economy. In addition, we are offering forums to discuss matters that require initiatives that transcend organizational boundaries, particularly in development and strategic management organizations. Likewise, we are arranging these into task forces to promote activities regarding promising themes.



R&D Promotion System



Encouraging Development through the Use of ESG Investment and Measures to Support Expansion of Products to Enhance Sustainability

Under the current Medium-term Management Plan, SEKISUI CHEMICAL Group has established measures to support the expansion of products to enhance sustainability within its established limit for ESG investment. These measures are designed to encourage the creation of products to enhance sustainability, as well as to spur planning and proposals intended to expand their markets. This approach serves as a mechanism for incentivizing the fusion of technologies and knowledge in a way that transcends organizational boundaries.

These measures provide a financial incentive under the condition that the initiative for solving a particular social issue is highly urgent or long-term, and that the theme intends for internal fusion at the planning and testing stages.

After the leader planning the theme submits an application, a screening committee makes a decision on whether or not to invest. The screening committee also evaluates the importance attached to solving a particular social issue and verifies that the theme contributes to enhancing sustainable corporate value. Moreover, deliberations encompass how the promotion of a theme can be accelerated through internal fusion, the outcomes of fusion, and how the theme can help to increase corporate value.

In fiscal 2022, support measures were approved and implemented for three new creation or market expansion themes. The progress of each approved project is confirmed on an interim and fiscal year-end basis.

Past approved project examples:

- Introducing high-performance analysis equipment to obtain the base data necessary for material informatics (MI), which promotes the development of plastics material technology
- Visualizing rainwater storage conditions in a rainwater storage system for use in disaster forecasting technology

Environment-Contributing Products PR

SEKISUI CHEMICAL Group supports the basis of LIFE and solves social issues by delivering value to society including peace of mind for the future through its products and businesses. In fiscal 2022, we introduced products at the following venues, provided education on the means to solve issues, and promoted the importance of finding solutions.

[Promoting efforts to mitigate climate change through products]

February Sponsored by SB Forum Japan: Sustainable Brand International Conference 2023 Tokyo Marunouchi Breakout Session

Green Transformation (GX) Strategy toward 2030

SEKISUI CHEMICAL Group Green Transformation (GX) toward 2030

[Promoting efforts to adapt to climate change through products]

- July Science Council of Japan “How to Ensure Resilience to Overcome National Disasters”
Transformative Capacity: Solve Social Problems through Main Businesses
- November COP27 Japan Pavilion Seminar sponsored by Japan’s Ministry of the Environment: The Role of the Private Sector in Achieving the Global Goal on Adaptation (GGA): - Japan’s Technologies, Services and Experiences Contributing to Achieving a Climate Resilient Economy and Society Worldwide
[Responding to Physical Risks Caused by Climate Change through Businesses
-Resilient Community Development-]
- February Sponsored by SB Forum Japan: Sustainable Brand International Conference 2023 Tokyo Marunouchi Breakout Session
Circular Economy Beyond 3R Toward the Realization of a Circular Economy
Sekisui Chemical's Aim for Circular Economy

| Enhancing Product Environmental Value

Taking into consideration the needs of society and customers, we strive to stay one step ahead of the curve by promoting the value of low-carbon, decarbonized products that help mitigate climate change.

In order to convey the value of low-carbon, decarbonized products to customers, the Group calculates each product’s carbon footprint through a carbon life cycle assessment (C-LCA).

Boundaries are set and calculations made according to the purpose and product. At this stage, calculations for raw materials utilize a database (IDEA) that applies publicly available average GHG emission coefficients. We believe that through the activities of raw material manufacturers and via collaboration along the supply chain, the efforts of each company will enable us to harness the value of low-carbon products.

The volume of raw materials used and energy consumed at the time of production are calculated using actual measurement data at production plants.

In order to understand and better appreciate the significance of the calculation methods for life cycle assessments (LCAs), which will become increasingly important in the future as an indicator of low carbon value, SEKISUI CHEMICAL Group actively participates in the LCA Utilization Promotion Forum, the LCA Forum, and the Institute of Life Cycle Assessment, among others. In addition to brushing up on knowledge for handling each method and solution, we encourage employees to take external training courses and conduct in-house LCA training.

The following illustrates the activities taken by the Group and the industry in fiscal 2022 to encourage transformation intended to achieve a decarbonized society.

1. Sales activities promoting the low-carbon value of products using Carbon Footprint of Products (CFP)
The UIEP Company, which handles a large number of infrastructure products made from resin, provides training for sales staff, and prepares and distributes materials that help explain the calculated value to customers, with a focus on resin pipes and other products. The Company has trained more than 500 employees who have continuously engaged in sales activities that promote the value of low-carbon products since fiscal 2021.
2. Activities for enhancing the reliability of product CFP calculations
In fiscal 2022 we formulated a PCR (Product Category Rule) and made every effort to acquire CFP certification as activities to boost the reliability of product CFP. SEKISUI CHEMICAL Group registered ESLON Heat-resistant Plastic AD Joint HG as an Approved CFP Product.

3. Activities promoting greater recognition of LCA and low-carbon value within the industry

As part of the 2022 International Conference on EcoBalance organized by the Institute of Life Cycle Assessment, Japan, we planned and held a session titled “Chemical industries' challenge and contribution for carbon neutral and circular society with life cycle thinking” along with four chemical companies leading progress in the shift to low-carbon products, including the Japan Chemical Industry Association.

By communicating the status of approaches taken by each company to promote LCA initiatives, we discussed the format and future of initiatives intended to help the chemical industry fulfill its role in achieving carbon neutrality.

4. Participation in a study group investigating environmental evaluation calculation methods for resource circulation

We participated in a study group (Chairperson: Associate Professor Jun Nakatani of The University of Tokyo) called Considering Plastic Recycling administered by the Life Cycle Assessment Society of Japan (JLCA). The study group organized the issues involved in using LCA to evaluate the CO₂ emission reducing effects of plastic resource circulation in a broad sense of the term, including the introduction of recycling and biomass materials. The group also investigated various responses to these issues. In June, we introduced case studies as a participating company during the JLCA General Assembly Commemorative Seminar.

5. Participation in the UTOKYO LCA Center for Future Strategy

In fiscal 2022, we participated in UTOKYO LCA Center for Future Strategy organized by Professor Ichiro Daigo of The University of Tokyo. As part of this effort, we embarked on an investigation into a preemptive LCA that will go beyond evaluating the present to serve as the groundwork for the future.

A preemptive LCA quantitatively evaluates the benefits of advanced scientific technologies for the environment, economy, and society at the development stage, and serves as an evaluation method for suggesting real-world implementation. Suggesting strategies for real-world implementation based on evidence will also contribute to achieving the SDGs.

Recognizing that the growth of low-carbon values varies from industry to industry, we are first approaching business fields where value growth is slow. We believe this is helping to distinguish the Company's efforts in each business and transforming risks into opportunities. In order to proactively meet the requirements on low-carbon and decarbonized products, we will continue to work with the supply chain as we advance reforms in raw material selection and production processes, energy conversion, and studies that contribute to resource recycling, with the aim of expanding low-carbon and decarbonized products.

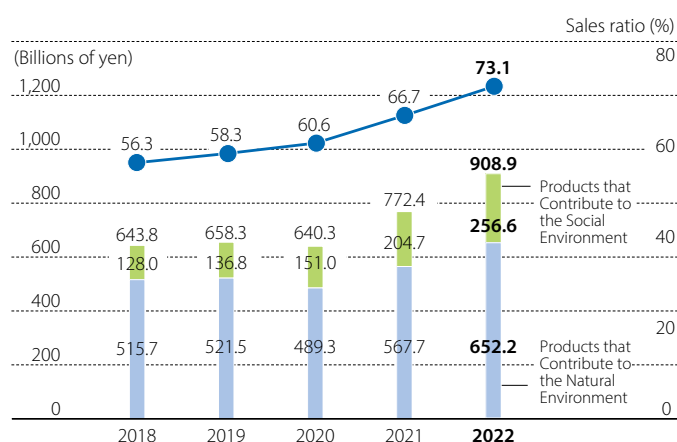
Performance Data 

Note 1: From fiscal 2019, Medical Business results have been separated from the HPP Company and presented as a total of the Other Business following its separation from the HPP Company as an independent entity.

Note 2: From fiscal 2020, the product system has evolved and renamed Products to Enhance Sustainability.

Note 3: In line with a change in the control of certain businesses in the UIEP and HPP companies implemented from October 2022, net sales for fiscal 2022 of both companies are collated as if the change in control had been initiated from the beginning of fiscal 2022.

Net Sales / Proportion of Products to Enhance Sustainability



Trends in Net Sales of Products to Enhance Sustainability

(Unit: Billions of yen)

	FY2018	FY2019	FY2020	FY2021	FY2022
Housing Company	364.3	374.0	352.9	393.8	448.6
Urban Infrastructure & Environmental Products Company	97.7	101.5	93.2	101.3	152.1
High Performance Plastics Company	178.9	110.0	121.9	186.9	218.5
Medical, Other*	2.8	72.7	72.2	90.4	89.6
Company-wide total	643.8	658.3	640.3	772.4	908.9

* Manufacture, sale, and servicing of film-type lithium-ion batteries and other products outside of our four main businesses (Housing Company, UIEP Company, HPP Company and Medical Business)

Index	Calculation Method
Net Sales of Products to Enhance Sustainability	<ul style="list-style-type: none"> Net sales of products to enhance sustainability = Consolidated SEKISUI CHEMICAL Group sales of products internally certified as products to enhance sustainability All businesses of the Group in and outside Japan are subject to assessment Note: See pages p. 24-28 of Sustainability Report 2023 for a definition of and approach toward products to enhance sustainability.
Proportion of Products to Enhance Sustainability to net sales	<ul style="list-style-type: none"> Proportion of products to enhance sustainability to net sales = Net sales of products to enhance sustainability / Consolidated sales All businesses of the Group in and outside Japan are subject to assessment Note: See pages p. 24-28 of Sustainability Report 2023 for a definition of and approach toward products to enhance sustainability.

Number of Products to Enhance Sustainability Newly Registered

FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	Number of registrations as of the end of March 2023
24	18	5	12	28	18	198