

TORAY GROUP CSR REPORT 2024



Materials change our lives

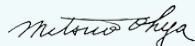
CONTENTS

Message from the President	03
Toray Group Corporate Social Responsibility	05
Toray Philosophy and CSR	07
Management Strategies and CSR	13
Long-Term Corporate Vision	15
Medium-Term Management Program	18
Toray Group Corporate Social Responsibility Initiatives	22
Materiality	25
CSR Roadmap 2025 (Fiscal 2023 – Fiscal 2025)	49
External Evaluation	66
Toray Group Sustainability Vision	69
History	71
Four Perspectives of the World as Envisioned by the Toray Group in 2050	82
CSR Activity Report (CSR Guideline Activity Reports)	91
Corporate Governance	103
Ethics and Compliance	111
Safety, Accident Prevention, and Environmental Preservation	133
Third-Party Assurance	209
Product Quality and Safety	214
Risk Management	228
Communication	243
Contributing Solutions to Social Issues through Business Activities	265
Human Rights Promotion and Human Resources Development	287
Establishing Sustainable Supply Chain	327
Social Contribution Activities as a Good Corporate Citizen	365
Toray Group's Approach to Climate Change	403
Comments from Thought Leaders	411
CSR-Related Policies and Guidelines	415
ESG Data	417
Comparative Tables with GRI Standards, SASB Standards, ISO 26000 Subjects, and ESG Topics	427
Comparative Table with GRI Standards	427
Comparative Table with SASB Standards	436
Comparative Table with ISO 26000 Subjects	440
Comparative Table with ESG Topics	448
Editorial Policy	453

Message from the President

Contributing to society through the creation of new value with innovative ideas, technologies and products.

President, Toray Industries, Inc.



Since its founding in 1926, Toray Group has consistently voiced its strong belief in contributing to society through its businesses. From our original location on the shores of Lake Biwa in Shiga Prefecture, we gained and have maintained an exceptional focus on water resource management. Rooted in a deep awareness of chemistry-based manufacturing, we have nurtured the style of management that we inherited from our predecessors. This management style, which entails developing human resources and taking all possible measures to protect the environment, is the very essence of sustainability itself. These management principles and values are reflected in our corporate philosophy, established in 1986: “contributing to society through the creation of new value with innovative ideas, technologies and products.”

Today the world faces many challenges that must be overcome to achieve a sustainable world. These include climate change, resource and energy issues, food and water shortages due to population growth, destruction of the natural environment, and concerns over health and safety. Despite the need to navigate a drastically changing business environment in moving toward a sustainable world, our dedication to pursuing the innovation of the world, while providing fundamental solutions to these challenges with our innovative technologies and advanced materials, is as strong as it has always been and will never change. Together with our employees, we continue to share Toray's mission since its founding to nurture people while contributing to society through our business activities, which in turn will drive corporate and human development. We will do our utmost to become a truly sustainable company.

Based on this approach, we are accelerating our efforts to realize the following four perspectives of the world envisioned by the Toray Group in 2050 as outlined in the Toray Group Sustainability Vision.

1. A net zero emissions world, where greenhouse gas emissions are completely offset by absorption—in other words, a carbon-neutral world
2. A world where resources are sustainably managed
3. A world with a restored natural environment, with clean water and air for everyone
4. A world where everyone enjoys good health and hygiene

In fiscal 2023, we launched our Medium-Term Management Program, Project AP-G 2025, entitled Innovation and Resilience Management—Value Creation for New Momentum. This program aims to achieve sound, sustainable growth by helping to solve global scale issues outlined in the Toray Group Sustainability Vision. With regard to corporate social responsibility (CSR), which is positioned at the highest tier of the Toray management priorities, we also formulated our CSR Roadmap 2025. This roadmap guides our systematic implementation of organization-wide CSR activities over the medium-term, focusing activities on such themes as ethics and compliance; safety, accident prevention, and environmental preservation; human rights promotion and human resources development; and establishing a sustainable supply chain. Toray Group will continue to contribute to society, implementing management strategies and CSR initiatives in an integrated manner.

September 2024

Toray Group Corporate Social Responsibility

Toray Group strategically practices social responsibility guided by its three-year CSR Roadmap, aiming to achieve sustainable growth while helping to build a more sustainable world.



Report from the Chief CSR Officer

As Chief CSR Officer, I will make every effort to further CSR initiatives and assure appropriate information disclosure, aiming to ensure the sustainable development of Toray Group and society as a whole.

Toray Group has from its founding in 1926 lived up to the management principle of contributing to society through business operations. The Group positions CSR efforts as one of its highest management priorities and implements its management strategies and CSR initiatives in an integrated manner, striving both to ensure the sustainable development of the Group and to help build a sustainable world.

Toray Group's CSR Guidelines, our guiding principles for delivering on our social responsibilities, lay out such broad themes as: ethics and compliance; safety, accident prevention, and environmental preservation; human rights promotion and human resources development; and establishing a sustainable supply chain. Moreover, to promote CSR in a planned way, we have established a three-year medium-term CSR Roadmap. This lays out specific goals and main initiatives, as well as KPIs to measure progress for each individual guideline, taking into account the Group's CSR material issues. Currently, we are working together as a united group to implement initiatives under the CSR Roadmap 2025 (Fiscal 2023-Fiscal 2025).



Shigeki Taniguchi
Senior Vice President,
Chief CSR Officer,
Toray Industries, Inc.

We compile and annually disclose information on CSR activities in accordance with each theme of the CSR Guidelines, complying with relevant international standards, such as those of the Global Reporting Initiative (GRI) and the Sustainability Accounting Standards Board (SASB). Additionally, in accordance with the recommendations of the Task Force on Climate-Related Financial Disclosures (TCFD), we have issued the Toray Group TCFD Report Ver. 2.1, which quantitatively analyzes the opportunities and risks related to climate change. The Group also endorses the recommendations of the Taskforce on Nature-related Financial Disclosures (TNFD) and is recognized as a TNFD Early Adopter. We are making efforts to disclose information in accordance with the TNFD recommendations.

We will continue to actively promote these initiatives and do our utmost for the sustainable development of both Toray Group and society as a whole.

Toray Group Corporate Social Responsibility

Toray Philosophy and CSR

Under a corporate philosophy of “contributing to society through the creation of new value with innovative ideas, technologies and products,” Toray Group has from the beginning pledged to have a positive impact on society through its business. The Group’s CSR activities embody the corporate philosophy positioned at the highest tier of the Toray Philosophy.

Related Information

> [Toray Philosophy](#)

Toray Philosophy

The Toray Group was established in 1926, based on the principle of “realizing that corporations are public institutions of society and contributing to society through our business.” Ever since, the Toray Group has aimed to be a corporate entity respected by society.

In 1955, Toray clearly established this commitment as a Company Principle. Then, in 1986, the 60th anniversary of our founding, the company’s Management Philosophy framework was formalized with the Corporate Philosophy as its paramount concept. Since then, the Management Philosophy has been passed down, with some revisions. Accompanying the May 2020 announcement of the Long-Term Corporate Vision, TORAY VISION 2030, the Toray Group organized the principles it has followed since the beginning in the form of the Toray Philosophy.

In addition to our traditional Management Philosophy (which includes the Corporate Philosophy, Corporate Missions, Corporate Guiding Principles), the Toray Philosophy includes the Corporate Slogan (which simply expresses Toray’s stance on embodying the Corporate Philosophy), the Vision (which represents the direction the Group is headed), the Corporate Culture (which includes values and management perspectives that have been maintained since the company’s founding), and the President’s Principles.



Corporate Philosophy

**Contributing to society through the creation
of new value with innovative ideas, technologies
and products**

Corporate Missions

For our customers

To provide new value to our customers through high-quality products and superior services

For our employees

To provide meaningful work and fair opportunities

For our shareholders

To practice sincere and trustworthy management

For society

To establish ties and develop mutual trust as a responsible corporate citizen

Corporate Guiding Principles

Safety and Environment

Placing top priority on safety, accident prevention and environmental preservation in order to protect the safety and health of employees, customers and local communities and contribute to building a sustainable society

Ethics and Fairness

Acting with fairness, high ethical standards and a strong sense of responsibility while complying with laws, regulations and social norms to earn trust and meet social expectations

Customer-Focus

Providing solutions of high value to customers, and pursuing customer satisfaction and the world's highest level of quality

Innovation

Achieving continuous innovation in all corporate activities, and aiming for dynamic evolution and growth

Strong *Genba-Ryoku* (Workplace Competency)

Learning from one another and making self-driven efforts to leverage technologies and expertise in order to strengthen workplace competency, which is the foundation of our corporate activities

Cooperation and Co-creation

Forming integrated internal linkages and strategic alliances with external partners, and evolving together with society by creating new value

Emphasis on Human Resources

Providing motivating work environments where employees can demonstrate their abilities, and building a vibrant corporate culture

Information Disclosure

Appropriately disclosing corporate information and enhancing communication with stakeholders in order to maintain management transparency

Respect for Human Rights

Fulfilling our responsibility to respect human rights as a good corporate citizen

Corporate Slogan

Innovation by Chemistry

Innovation is how the Toray Group delivers on its corporate philosophy of “Contributing to society through the creation of new value with innovative ideas, technologies and products.” When we say “innovation”, we mean not only development of radically new technologies but also innovation across every other facet of our corporate activity.

We use the word “Chemistry” with two meanings. The first is the science that forms the basis for the advanced materials which we supply. This allows us to create new value and support the development of a sustainable world while maintaining good relationships with everyone who encounters the Toray Group, including customers, employees, shareholders, suppliers, consumers, and local communities. “Chemistry” also means collaboration and rapport. In this spirit, Toray Group companies and business sites around the world work together as-one to deliver innovation.

Toray Group Sustainability Vision

The Toray Group Sustainability Vision outlines the world as envisioned by the Toray Group in 2050, as well as the challenges that must be undertaken to achieve that goal. It also includes KPIs to be achieved by fiscal 2030 as important milestones.

The vision indicates that the Toray Group's mission is to deliver innovative technologies and advanced materials that provide real solutions to the challenges the world faces with balancing development and sustainability. These challenges include population growth, aging demographics, climate change, water scarcity, and resource depletion.

“We are convinced that the Toray Group can continue to grow without negatively impacting global sustainability. We will do our utmost to address global issues, including the goals of the Paris Agreement and the United Nations Sustainable Development Goals (SDGs), while working closely with our business partners worldwide”—this declaration forms the foundation for TORAY VISION 2030 and indicates the future direction of the Group.

Toray Group Sustainability Vision

Corporate Culture

Contributing to society through business activities

The Toray Group has grown through tireless effort, based on a sound understanding of its social responsibilities. Our management foundation has always been rooted in a spirit of public service. This aspiration is reflected in our corporate philosophy of “Contributing to society through the creation of new value with innovative ideas, technologies and products.” We are committed to creating innovative materials and new value that help to solve the challenges the world faces, such as global environmental issues, resource and energy issues, and contributing to a world where people everywhere can live long, healthy lives.

People-centric management

Since the beginning, the Toray Group has been striving to foster a good sense of social responsibility and high motivation among employees by building a vibrant workplace. The Toray Group holds to the philosophy that the success or failure of a company is decided by its people, and that employees shape its destiny. This approach is widely shared at Toray Group sites worldwide, and the Toray Philosophy is being practiced globally, while respecting regional differences in customs and social concepts.

Management from a long-term perspective

Over the decades, the Toray Group has passed down the key phrase, “The deeper, the newer,” and it has become a core part of our heritage. It expresses our determination to dig deep into things and pursue them to their ultimate limit, and our conviction that this always results in new discoveries and inventions. While taking a long-term perspective, Toray ascertains major social issues based on current public needs, and then pursues R&D to create innovative technologies and advanced materials that help solve those issues, while developing and growing its businesses.

Pioneering spirit

The Toray Group has always placed great emphasis on R&D as a driving force for corporate growth. By tirelessly pursuing R&D and improving production technology, we have turned superior technology and advanced science into ways to better people’s lives. In addition, the Toray Group has boldly taken on challenges in other areas. Each person at the Toray Group approaches their work with a pioneering spirit. We work together while respecting one another’s individuality and independence, and this collective strength leads to great results.

Toray Group Corporate Social Responsibility

Management Strategies and CSR

In order to achieve sustainable growth, corporations must do business in a way that earns the broad trust of stakeholders. Toray Group implements its management strategies and CSR initiatives in an integrated manner, striving to live up to its corporate philosophy, which outlines the principles and values the Group has upheld since the beginning, as well as its reason for being. The Group also seeks to achieve the world envisioned by Toray Group in 2050, which is outlined in the Toray Group Sustainability Vision, ensuring the sustainable development of Toray Group and society as a whole.



Toray Group will strive to accurately ascertain changes in industrial trends over the next decade or so. In May 2020, the Group announced the Long-Term Corporate Vision, TORAY VISION 2030—Achieving sound, sustainable growth and creating social value. The vision will serve as a group-wide compass for achieving sound, sustainable growth, while pursuing business model transformation.

The Medium-Term Management Program, Project AP-G 2025, entitled Innovation and Resilience Management—Value Creation for New Momentum, covers the three-year period from fiscal 2023 to fiscal 2025. It takes the Toray Philosophy as its starting point and is designed to ensure the Toray Group achieves sound, sustainable growth by helping to solve global issues arising from the need to balance development and sustainability, as indicated in the Toray Group Sustainability Vision.

With each Medium-Term Management Program, Toray Group also draws up a CSR roadmap. A three-year plan for the Group's efforts on CSR, this roadmap lays out specific initiatives and KPIs. In June 2023, the Group announced the new CSR Roadmap 2025. Under the roadmap, the Group is now facilitating systematic, organization-wide CSR initiatives.

By taking an integrated approach to social responsibility and business growth, Toray Group has positioned itself to make important contributions by helping to solve social issues. The goal is to remain a corporate group of high value to all stakeholders.

Related Information

[Toray Group Sustainability Vision](#) [PDF](#)

- > [Toray Philosophy](#)
- > [Long-Term Corporate Vision](#)
- > [Medium-Term Management Program](#)
- > [CSR Roadmap 2025 \(Fiscal 2023 – Fiscal 2025\)](#)

Long-Term Corporate Vision

TORAY VISION 2030

—Achieving sound, sustainable growth and creating social value

Since its foundation, the Toray Group has been driven by its core values of contributing to society through business activities, people-centric management, and management from a long-term perspective. Based on these values, the Toray Group has established the Long-Term Corporate Vision, TORAY VISION 2030 (VISION 2030) with the aim of providing new value to society by focusing on the four perspectives to build the world envisioned by the Toray Group set out in the Toray Group Sustainability Vision. KPIs for fiscal 2030 are milestones for realization of the world as envisioned by the Toray Group in 2050. VISION 2030 will be achieved by pursuing co-creation with the customers and business partners that make up the supply chain, all with a materials-oriented approach. The Toray Group will strive to accurately ascertain changes in industrial trends and to achieve sound, sustainable growth while pursuing business model transformation.

Growth Strategies Based on the Toray Group Sustainability Vision

The Toray Group's mission is to deliver innovative technologies and advanced materials that provide real solutions to the challenges the world faces in balancing development and sustainability. This is why the Group is expanding its Sustainability Innovation (SI) Business. Through this business, the Group helps solve global environmental, resource and energy issues and helps build a world where people everywhere can enjoy better medical care and hygiene and live long, healthy lives. The Group will expand its business by not only capturing increasing demand but also creating new demand in all segments with a focus on the SI Business.

In creating and expanding into new businesses, the Toray Group aims to generate one trillion yen in sales from all new businesses by 2030 by focusing resources, with an emphasis on both quality and quantity, on large-scale themes that can be expected to form individual business domains in the 2020s and accelerating development and business model construction under the Future TORAY-2020s Project (FT Project).

Toray Group's Long-Term Strategies

The Toray Group will strive to accurately ascertain changes in industrial trends impacted by aging populations, environmental issues, and technological innovation, and to achieve sound, sustainable growth while pursuing business model transformation.

"Sound, sustainable growth" means facilitating our basic strategy of business expansion by carrying out active investment and maximizing the value we create over the medium to long term across the Toray Group. The key to this is strengthening competitiveness by pursuing continuous business model innovation and total cost reduction and strengthening the management foundation to enable investment in growth driven by efficiently invested capital and financial strength.

Long-term strategies to achieve “sound, sustainable growth”

1. Global expansion in growth business fields

- Expand the SI Business, which helps solve global environmental, resource and energy issues and helps build a world where people everywhere can enjoy better medical care and hygiene and live long, healthy lives

2. Strengthening competitiveness

- Create new value through business advancement and high added value creation, thereby providing solutions with a materials-oriented approach to customers and society
- Pursue dramatic cost reductions by setting challenging targets as well as strive to reduce environmental impact

3. Strengthening the management foundation

- Improve cash flow and capital efficiency, and balance financial soundness and growth investment
- Reform and revitalize the business and organizational structures of low-growth and low-profitability businesses

KPIs for Fiscal 2030

		FY 2013 Actual (Baseline) (J-GAAP)	FY 2030 Target (compared to FY 2013) (IFRS)
Supply of Sustainability Innovation products ¹		562.4 billion yen	4.5-fold
CO ₂ emissions avoided in value chain ²		38 million tons	25-fold
Water filtration throughput contribution by Toray's water treatment membranes ³		27.23 million tons/day	3.5-fold
Greenhouse gas emissions in production activities ⁴	Per unit of revenue ⁶ across the Toray Group	337 tons/100 million yen	50% or more reduction
	Greenhouse gas emissions of Toray Group in Japan ⁵	2.45 million tons	40% or more reduction
Water usage in production activities	Per unit of revenue ⁶ across the Toray Group	15,200 tons/100 million yen	50% or more reduction

1. (1) Products that accelerate measures to counter climate change; (2) products that facilitate sustainable, recycling-based use of resources and production; (3) products that help provide clean water and air and reduce environmental impact; and (4) products that help deliver better medical care and hygiene for people worldwide
2. Toray calculates the CO₂ emissions reduced throughout the value chain of products in accordance with the chemical sector guidelines of the Japan Chemical Industry Association, the International Council of Chemical Associations (ICCA), and the World Business Council for Sustainable Development (WBCSD).
3. Water treated annually with Toray water treatment membranes. It is calculated by multiplying the amount of fresh water that the Toray membranes can produce per day, including reverse osmosis (RO), ultrafiltration (UF) and membrane separation bioreactors (MBR), by the number of membrane elements sold.
4. With the use of renewable energies and other zero emission power sources rising worldwide, the Toray Group aims to employ zero-emission power sources at a rate equivalent to or better than the targets in each country by fiscal 2030.
5. In Japan, Toray works to surpass the reduction target set for the industrial sector by the Japanese government (absolute emissions reduced by 38%) in its comprehensive plan (Cabinet decision on October 22, 2021) based on Japan's Act on Promotion of Global Warming Countermeasures.
6. FY2013 results are based on net sales (J-GAAP)

Medium-Term Management Program

Project AP-G 2025

Innovation and Resilience Management — Value Creation for New Momentum

The new Medium-Term Management Program, Project AP-G 2025 (AP-G 2025) covers the three-year period from fiscal 2023 to fiscal 2025. It takes the Toray Philosophy as its starting point and is designed to ensure the Toray Group achieves sound, sustainable growth by helping to solve global issues arising from the need to balance development and sustainability, as indicated in the Toray Group Sustainability Vision. Under AP-G 2025, we will focus on creating value to fuel this growth strategy and enhance our human resource base to support it. We will strengthen our management foundation to enable investment in growth driven by efficiently invested capital, financial strength, and human resources.

Under AP-G 2025, our five basic strategies are: sustainable growth; ultimate value creation; product and operational excellence; enhancement of people-centric management; and risk management and governance. We will work to expand our growth fields of Sustainability Innovation (SI) Business and Digital Innovation (DI) Business, while pursuing business advancement and high-added-value creation as well as enhancing quality strength and cost competitiveness. At the same time, in order to maintain financial soundness, we will focus across our business operations on balancing profit, cash flow, and asset efficiency. Furthermore, in order to create a new growth trajectory, we will expand high-growth, high-profitability businesses while implementing structural reforms in low-growth, low-profitability businesses.

Long-Term Corporate Vision, TORAY VISION 2030

Medium-Term Management Program, Project AP-G 2025

Basic Strategies	Specific Initiatives
1. Sustainable Growth	(1) Business expansion in growth fields based on the Toray Group Sustainability Vision (2) Contributing to the building of a carbon-neutral world (3) Contributing to the building of a circular economy
2. Ultimate Value Creation	(1) Business advancement and high-added-value creation (2) New business creation
3. Product and Operational Excellence	(1) Quality strength enhancement (2) Total cost reductions (3) Advancing management leveraging digital technology
4. Enhancement of People-Centric Management	(1) Strengthening human resource development (2) Developing and appointing management personnel (3) Enhancing communication and dialogue to better practice the Toray Philosophy
5. Risk Management and Governance	(1) Improving risk management (2) Strengthening workplace competency through collaboration between those who manage operations in the functional and regional dimensions (3) Streamlining and advancing global business management

KPIs for Fiscal 2025

1. Financial Targets

	FY 2022 Actual	FY 2025 Target
Revenue	2,489.3 billion yen	2,800.0 billion yen
Core operating income	96.0 billion yen	180.0 billion yen
Core operating margin	3.9%	6%
ROIC* ¹	2.7%	About 5%
ROE* ²	5.0%	About 8%
Free cash flow	237.3 billion yen (3-year cumulative total)	Positive (3-year cumulative total)
D/E ratio	0.62	0.7 or lower (guideline)

Exchange rate assumption for AP-G 2025: 125 yen per US dollar

*1. ROIC = Core operating income after tax / Invested capital (average of the balances at beginning and end of the period)

*2. ROE = Net profit attributable to owners of parent / Average equity attributable to owners of parent

2. Sustainability Targets

	FY 2013 Actual (Baseline) (J-GAAP)	FY 2022 Actual (IFRS)	FY 2025 Target (IFRS)
Revenue from Sustainability Innovation (SI) Business	562.4 billion yen	1,282.8 billion yen (2.3-fold)	1,600.0 billion yen (2.8-fold)
CO ₂ emissions avoided in value chain	38 million tons	9.5-fold	15.0-fold
Water filtration throughput contribution by Toray's water treatment membranes	27.23 million tons/day	2.5-fold	2.9-fold
Greenhouse gas emissions per unit of revenue in production activities	337 tons/100 million yen	35% reduction ^{*1}	40% reduction
Greenhouse gas emissions of Toray Group in Japan	2.45 million tons	21% reduction ^{*1}	20% reduction
Water usage per unit of revenue in production activities	15,200 tons/100 million yen	32% reduction ^{*1}	40% reduction

^{*1}. The calculation of the figure for the baseline of FY 2013 includes data for companies that joined the Toray Group in FY 2014 or later.

› **Medium-Term Management Program, Project AP-G 2025**
(IR Seminar Materials)

Toray Group Corporate Social Responsibility

Toray Group Corporate Social Responsibility Initiatives

CSR Guidelines

Toray Group has established CSR Guidelines to govern its CSR initiatives. Intended to be comprehensive, they cover aspects from corporate governance to social contribution. The CSR Guidelines consist of ten themes, each of which is assigned an implementation leader.

CSR Guidelines Revised June 2023

1. Corporate Governance

Continually revise management systems, strengthen internal controls as part of efforts to fulfill the company's social responsibilities.

2. Ethics and Compliance

Ensure all executives and employees uphold a sense of responsibility, fairness and high ethical standards, and act with a keen sense of compliance to maintain the trust of society.

3. Safety, Accident Prevention, and Environmental Preservation

Ensure the safety and health of society and employees, and protect the environment in all business processes, from procuring raw materials and manufacturing to the supply and disposal of products.

4. Product Quality and Safety

Provide safe, highly reliable products by striving to enhance management systems for product quality assurance and safety, and disclose appropriate information.

5. Risk Management

Under normal conditions, assess and analyze risks, and strive to mitigate and prevent them from materializing; and in the event of a crisis that could have a significant impact on management activities, strive to prevent damage from increasing, by bringing the situation quickly under control and normalizing conditions with a prompt and appropriate response.

6. Communication

Disclose corporate information in an active, fair and straightforward manner to maintain management transparency; and disclose information appropriately to encourage dialogue and cooperation with stakeholders including customers, employees, stockholders, business partners, consumers, mass media, and other parties.

7. Contributing Solutions to Social Issues through Business Activities

Leverage innovation to provide solutions to various social issues such as climate change, resource and energy use, water resource and natural environment conservation, improvement of medical care, and promotion of public health, thereby contributing to sustainable development for society.

8. Human Rights Promotion and Human Resources Development

Respect human rights, provide safe and healthy workplaces for employees, secure and train personnel, and diversify while striving to protect employment.

9. Establishing Sustainable Supply Chain

To establish a sustainable supply chain, work closely with suppliers, processing vendors, subcontractors, customers and distribution companies to implement socially responsible procurement throughout the supply chain in order to ensure responsible practices with respect to environmental preservation and human rights.

10. Social Contribution Activities as a Good Corporate Citizen

Proactively participate in local communities and the larger society in order to contribute to development in a way betting a good corporate citizen.

CSR Roadmap

Every three years Toray Group draws up a CSR roadmap, which is based on its CSR Guidelines and incorporates key material issues. The CSR Roadmap serves as the Group's medium-term plan for the systematic and organization-wide implementation of CSR initiatives.

Under this roadmap, action goals, main initiatives, and key performance indicators (KPIs) are set for each of the 10 CSR Guidelines to quantitatively monitor yearly progress.

Related Information

> [CSR Roadmap 2025 \(Fiscal2023 – Fiscal2025\)](#)

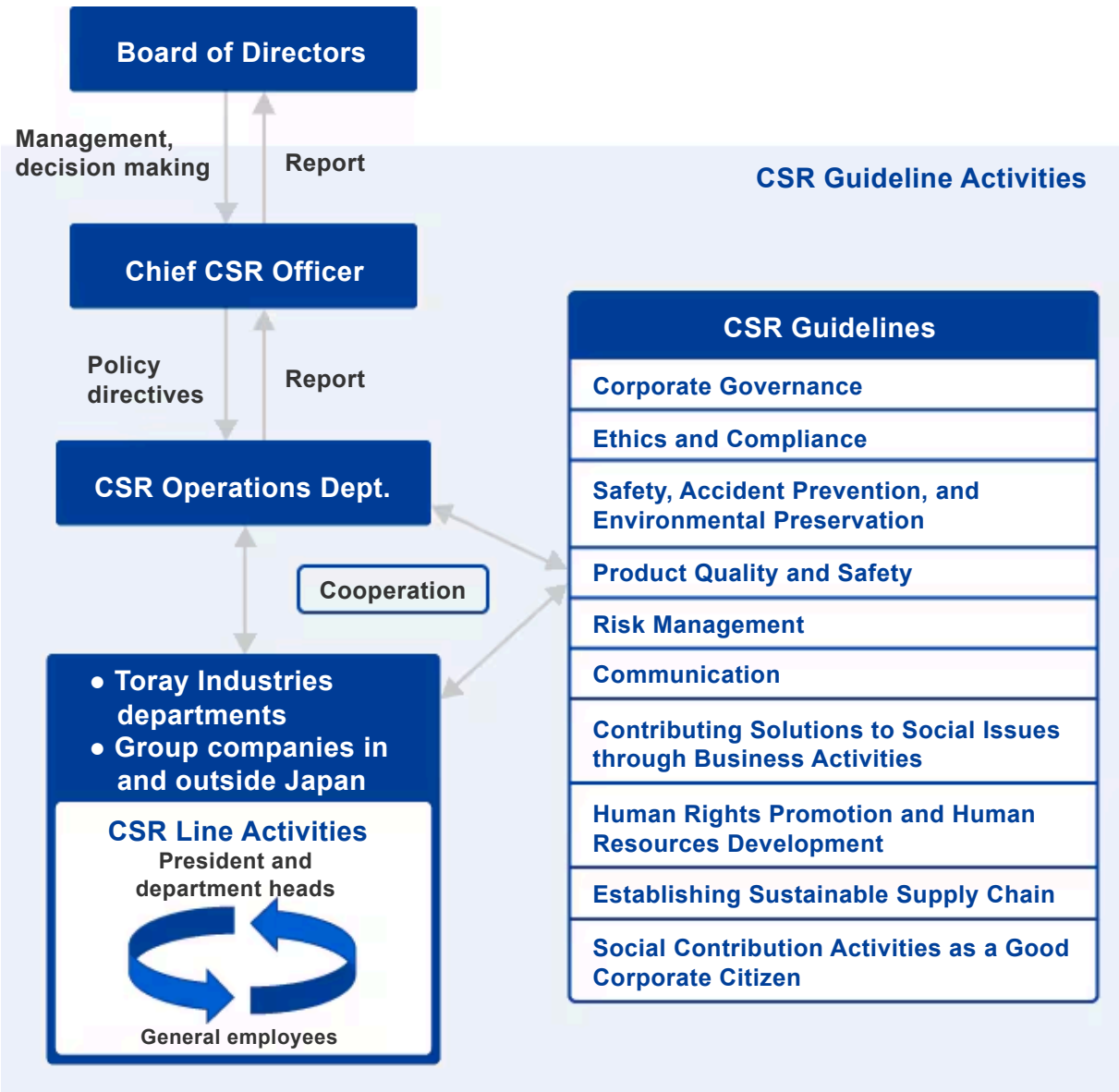
> [Materiality](#)

“CSR Guideline Activities” and “CSR Line Activities”

Toray Group implements CSR Guideline activities and CSR line activities in parallel. The first type of activities are organized according to the CSR Guidelines and involve setting specific activity goals and key performance indicators (KPIs) to quantitatively manage progress each year. Meanwhile, CSR line activities aim to address CSR challenges and foster a CSR perspective in workplaces at Toray Industries and its group companies worldwide. These line activities are driven by key executives, including the presidents of group companies and department heads at Toray Industries.

The CSR Operations Department at Toray Industries plays a central role in the CSR promotion system. The department effectively collaborates with departments involved in CSR Guideline implementation, as well as other departments and group companies worldwide, to establish a comprehensive framework for promoting efforts across the entire Group through both CSR Guideline activities and CSR line activities.

Toray Group CSR Promotion System



Related Information

Click [here](#) to access CSR activity reports for each of the CSR Guidelines.

The following page reports on the prevalence of CSR activities at Toray Group.

> [Communication with Employees](#)

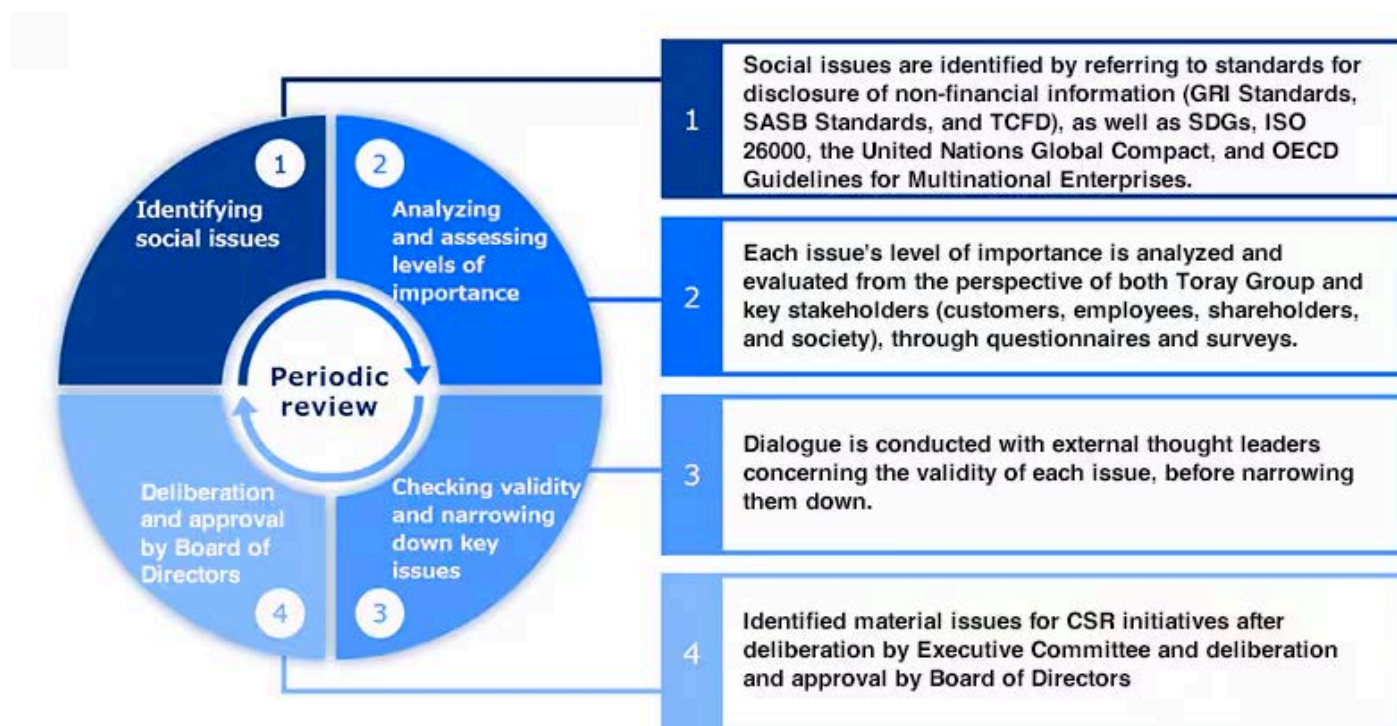
Toray Group Corporate Social Responsibility

Materiality

Toray Group established its CSR material issues in 2015 and revised them in 2017. In June 2023, the Group reevaluated these issues in response to changes in the business environment and developments affecting the global community. Discussions on the need for material issue revision are held annually, considering both internal and external changes.

Materiality Assessment Process

Toray Group has identified CSR material issues based on the concept of double materiality, conducting research and analysis from both the perspective of importance to stakeholders (impact on stakeholders) and importance to Toray Group (impact on Toray Group) and incorporating advice from external thought leaders.



Materiality Review Process from 2022 to 2023

In order to realize the Toray Philosophy and vision, the Group has identified important issues that need to be prioritized and focused on over the next three to five years, as part of its Medium-Term Management Program.

① Identifying social issues

The Group selected 35 relevant social issues by referring to range of guidelines including non-financial information disclosure standards (GRI Standards, SASB, and TCFD, etc.), the SDGs, ISO 26000, the United Nations Global Compact, and the OECD Guidelines for Multinational Enterprises.

② Analyzing and assessing levels of importance

To assess the importance of identified social issues to stakeholders and measure their impact on society, Toray Industries conducted questionnaires, interviews, and desk research targeting major stakeholders, including customers, employees, stockholders, and investors. Internal surveys were also carried out to confirm the significance of these social issues to Toray Group. The results from both assessments were then analyzed and evaluated.

Survey and Evaluation Methods

Toray Group

Survey/Research Name	Target	Survey/Evaluation Method
Executive Survey on Materiality	Toray Industries executives	Quantitatively evaluated results of survey of all executive officers at the level of vice president or higher, corporate auditors, and CSR Committee members
Survey on Risk Management	Toray Industries department heads and group company presidents	Utilized and quantitatively evaluated existing data from survey that identified priority risks for Toray Group
Survey on Long-Term Corporate Vision and Medium-Term Management Program	Long-term Corporate Vision and Medium-Term Management Program materials	Qualitatively evaluated content of the Long-Term Corporate Vision "TORAY VISION 2030" and Medium-Term Management Program "Project AP-G 2025" for alignment with business strategy

Stakeholders

Survey/Research Name	Target	Survey/Evaluation Method
Employee Survey on Materiality	Toray Industries Employees	Quantitatively evaluated results of a survey of department managers and mid-level employees at Toray Industries
Analysis of CSR Procurement Surveys / Customer Interviews	Customers	Qualitatively evaluated content of CSR procurement surveys received from client companies during 2022. Interviews conducted with several key customers
Analysis of Engagement with Stockholders and Investors	Stockholders and Investors	Qualitatively evaluated opinions of stockholders and investors, collected through dialogue sessions held in 2022 by the Toray Industries Senior Vice President in charge of IR
Survey on Global Risks	International Community	Qualitatively evaluated Global Risks Report 2022 from the World Economic Forum
Survey on Corporate ESG Activities	General Public	Qualitatively evaluated report on a representative survey of the general public regarding corporate ESG activities

③ Checking validity and narrowing down key issues

A conversation was held with outside thought leaders through web conferencing, and opinions were exchanged regarding the issues Toray Group should focus more attention on. The thought leaders also provided their opinions regarding the appropriateness of the issue selection process, as well as their expectations for Toray Group.



Date	November 24, 2022
Participants	Thought Leaders Shunsuke Managi Distinguished Professor Kyushu University Sachiko Kishimoto Representative Director and Managing Director Public Resources Foundation Ryusuke Tanaka Programme Officer ILO Office for Japan Toray Industries, Inc. Shigeki Matsui General Manager, CSR Operation Dept. Sadao Kato Assistant General Manager, CSR Operation Dept. Noriko Osada Senior Staff, CSR Operation Dept. * Organization names and positions as of the date above

Main Opinions from Outside Thought Leaders



Shunsuke Managi

I think Toray's keywords going forward should be supply chain and global. Furthermore, the importance of biodiversity conservation and nature positivity is increasing. There are many areas in which Toray Group can contribute through new technologies and products. So the Group should consider the kinds of risks inherent in its supply chain, which risks can be minimized, and which opportunities can be increased through new product development. In addition, it will become increasingly important to consider trade-offs between the key issues.

Next, I think the Group's current materiality selection process is excellent, including the fact that it uses weighting based on levels of importance. It was a good idea to group together the items selected for analysis and evaluation, and then narrow them down. It will also be important to provide feedback within the company about the differences between the internal and external perspectives.



Sachiko Kishimoto

I believe that the broad perspectives provided by diverse human resources, including those with various gender identities, nationalities, physical characteristics, and disabilities, will lead to greater corporate growth and respect for human rights. I see this as an important theme along with global environmental conservation.

I also think that the aging and shrinking population is Japan's biggest social issue, while healthy longevity is a global issue. As a leading country facing these problems, Japan is in a position to help solve them.

When it comes to conveying material issues, it is important to use frame these issues in a way that shows Toray Group's awareness of the issues and what it can do to help solve them. I also believe it is important that the term "human rights" be used prominently to express the company's stance. In addition, the process for selecting issues seems to be appropriately transparent and objective. It would also be a good idea to summarize material issues and include detailed information in the explanation.

Next time, the Group might host a conversation that includes representatives of international organizations, NGOs, and consumer groups.



Ryusuke Tanaka

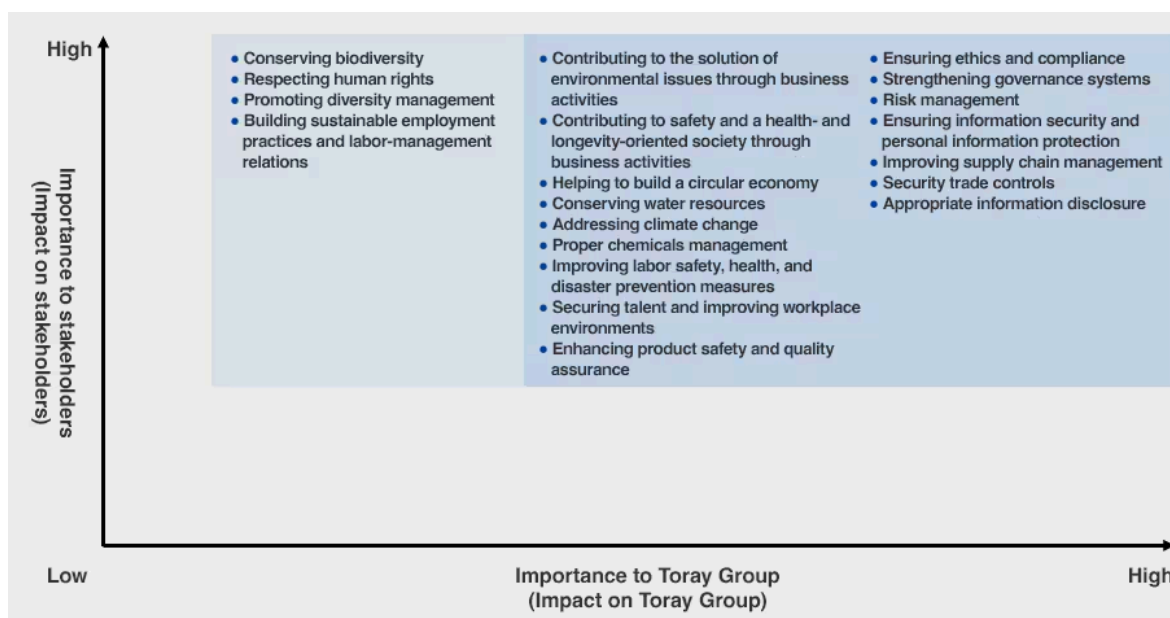
Given the current trend, companies will soon be required to ensure that all workers' human rights are legally protected. This is based on the growing expectations of the international community for responsible corporate behavior. In order for Toray Group's business to remain sustainable, respect for human rights must be viewed as a pertinent matter and included in material issues. To achieve internationally recognized human rights protection, the Group needs to consider the human rights of those working in all positions wherever the company has influence, including the supply chain. This also includes other workplace aspects such as diversity promotion, working environment improvement, and occupational health and safety.

Therefore, I think it is important to clearly explain and provide visuals illustrating how Toray Group manufactures products across its supply chain, and how it identifies and protects vulnerable workers.

I believe that the Group's selection process was highly objective. Next time, I think it is important to obtain the opinions of government representatives and industry groups to better understand social expectations, and as a global company, to get more input from relevant stakeholders outside Japan.

Based on the opinions and comments received from thought leaders, 35 social issues were mapped from two perspectives: importance to stakeholders and importance to the Toray Group. Next, these were narrowed down to the 20 candidate material issues shown in the table below.

Finally, considering priorities such as the Toray Philosophy, the results were further consolidated into 11 key issues.



④ Deliberation and approval by Board of Directors

The material issues were selected based on discussion by the Executive Committee, which is a deliberative body of the Board of Directors. The issues were then approved by the Board of Directors.

Toray Group Material CSR Issues

Toray Group has selected a total of 11 material issues for its CSR activities, including five issues relating to the Group's Corporate Philosophy of contributing to society through the creation of new value. The other six issues represent key management foundation points that are consistently necessary to address as important issues.

Material issues for Toray Group's CSR Initiatives



Contribution to Society through the Creation of New Value

Accelerating Climate Change Mitigation Accelerate the shift to carbon neutrality by contributing to reduction of global greenhouse gas emissions through innovative technologies and advanced materials and by pursuing emissions reduction across the Toray Group.
Promoting a Circular Economy Promote sustainable, circular resource use and production by increasing recycling, using biomass-based raw materials, and converting CO ₂ into resources.
Taking a Nature-Positive Approach Contribute to restoration of the natural environment by offering products that help provide clean water and air, reduce environmental impact, and otherwise benefit the environment and by working to preserve green spaces and properly manage chemical substances.
Committed to Healthier Lives Contribute to healthy, hygienic lifestyles by providing advanced materials that promote health and longevity, reduce the burden on nursing care and healthcare providers, improve the quality of medical care, and contribute to human safety.

Developing in Collaboration with Stakeholders

Focus on sustainable development for both the Group and society by pursuing co-creation with stakeholders and contributing solutions to social issues. Appropriately disclose information and promote dialogue with stakeholders.

Management Foundation**Ensuring Safety and Fire Accident Prevention**

Protect public safety and the personal safety of employees by pursuing zero accidents, thoroughly practicing disaster and fire prevention, and ensuring safe work environments.

Ensuring Ethics and Compliance

Act with fairness, high ethical standards and a strong sense of responsibility while complying with laws, regulations and social norms to earn trust and meet social expectations.

Enhancing Product Quality and Safety

Provide safe, high-quality products by further strengthening quality control, quality assurance, and product safety management.

Strengthening Corporate Governance

Maintain sound management across the Toray Group by reviewing management systems and programs, strengthening internal controls, and implementing risk management (managing risks related to business activities such as economic security, security trade, and information security).

Establishing Sustainable Supply Chain

Focus on building a stable, sustainable supply chain by promoting environmental conservation and respect for human rights throughout the supply chain.

Respecting Human Rights and Promoting Human Resource Diversity

Respect internationally recognized human rights and create work environments that allow a diverse pool of human resources to demonstrate their creativity.

Approach to Materiality

Material Issues and Impact on Toray Group's Businesses (Examples)

Materiality	Impact on Business
Accelerating Climate Change Mitigation	<Opportunities> Market expansion in the following areas: • Renewable energy-related business • Energy conservation-related business • Hydrogen-related business • Materials business for electric mobility <Risks> Carbon tax and other burdens Soaring energy costs
Promoting a Circular Economy	<Opportunities> Market expansion in the following areas: • Biomaterials business • Recycled materials business • Businesses that contribute to waste reduction <Risks> Increased waste disposal costs Lost opportunities due to delayed response to circular economy
Taking a Nature-Positive Approach	<Opportunities> Market expansion in the following areas: • Water treatment business • Low environmental impact materials and other businesses <Risks> Increased costs for further efforts to reduce waste Increased costs for further efforts to reduce industrial water usage
Committed to Healthier Lives	<Opportunities> Market expansion in the following areas: • Businesses that help improve healthcare quality and alleviate burden on healthcare settings • Businesses that contribute to health management, disease prevention, pre-disease management, and wellness • Businesses that help protect against natural disasters, extreme weather, accidents, and infectious diseases, etc.

For quantitative analysis results concerning the impact of climate change on Toray Group's businesses, please refer to [Toray Group TCFD Report Ver. 2.1](#).

Risks related to adopted material issues are comprehensively managed as part of group-wide risk management efforts.

> [Risk Management](#)

* For more information on Toray Group's initiatives related to materiality, please see the [Materiality View of CSR Roadmap 2025](#).

CSR Roadmap

In order to promote CSR systematically, Toray Group creates three-year medium-term CSR plans that incorporates materiality.

The 8th medium-term plan, CSR Roadmap 2025, was released in June 2023, based on a resolution of the Board of Directors.

CSR Roadmap 2025 defines activity goals, main initiatives, and key performance indicators (KPIs) for each of the ten CSR guidelines.

> CSR Roadmap 2025 (Fiscal 2023-Fiscal 2025)

Materiality View of the CSR Roadmap

The relationships between materiality, associated CSR Roadmap 2025 main initiatives, KPIs are described in this table.

Materiality View of CSR Roadmap 2025

Material Issues	Wide Initiatives of CSR Roadmap 2025	KPIs of CSR Roadmap 2025	Fiscal 2023	Fiscal 2024	Fiscal 2025	Results	Degree of achievement	Related initiatives	Related CSR Guidelines	Related SDGs
Accelerating Climate Change Mitigation	Reduce greenhouse gas emissions per unit of revenue	● Reduction of greenhouse gas emissions per unit of revenue (%)	At least 40% lower than Fiscal 2013 (Fiscal 2025)			36.8%*	→	Greenhouse Gas Emissions Reduction	3 Safety, Accident Prevention, and Environmental Protection	
		● Increase in solar power generation capacity (%)	At least 50% higher than Fiscal 2022 (Fiscal 2025)			55.0%	→	Solar Power Generation Promotion		
	Reduce water consumption per unit of revenue	● Reduction of water usage per unit of revenue (%)	At least 40% lower than Fiscal 2013 (Fiscal 2025)			39.3%	→	Water Usage Reduction		
	Pay for a high waste recycling rate	● Waste recycling rate (%)	At least 80% (Fiscal 2023)	At least 81% (Fiscal 2024)	At least 82% (Fiscal 2025)	81.0%	→	Waste Recycling Promotion		
	Pursue the growing of each site in consideration of the regulations of each country and region and business with the surrounding environment	● Greenhouse gas emissions (tCO2e)				1,000 tCO2e	→	Greenhouse Gas Emissions Reduction		
	Expand revenues from Sustainability Innovation Business	● Revenues from Sustainability Innovation Business (billion yen)				5,013.8 billion yen	→	Sustainability Innovation Business Expansion		
	Expand contribution to CO2 reduction in the value chain	● Contribution to CO2 reduction in value chain (times)	15 times compared to Fiscal 2013 (Fiscal 2025)			16.3 times	→	Supply Chain CO2 Reduction		
	Expand water filtration throughput contribution by Toray's water treatment membranes	● Contribution to water filtration throughput (times)	2.5 times compared to Fiscal 2013 (Fiscal 2025)			3.7 times	→	Water Filtration Throughput Expansion		
	Conduct a wide variety of product research and technology development to help build a low-carbon, circular economy	● Contribution to Toray's water treatment products					→	Water Treatment Products Development		
	Contribute to the utilization of biomass in and recycling of plastic products, the spread of renewable energy and hydrogen, and the reuse of water resources						→	Biomass Utilization and Recycling		
Protecting a Circular Economy	Reduce greenhouse gas emissions per unit of revenue	● Reduction of greenhouse gas emissions per unit of revenue (%)	At least 40% lower than Fiscal 2013 (Fiscal 2025)			36.8%	→	Greenhouse Gas Emissions Reduction	3 Safety, Accident Prevention, and Environmental Protection	
		● Increase in solar power generation capacity (%)	At least 50% higher than Fiscal 2022 (Fiscal 2025)			55.0%	→	Solar Power Generation Promotion		
	Reduce water consumption per unit of revenue	● Reduction of water usage per unit of revenue (%)	At least 40% lower than Fiscal 2013 (Fiscal 2025)			39.3%	→	Water Usage Reduction		
	Pay for a high waste recycling rate	● Waste recycling rate (%)	At least 80% (Fiscal 2023)	At least 81% (Fiscal 2024)	At least 82% (Fiscal 2025)	81.0%	→	Waste Recycling Promotion		
	Pursue the growing of each site in consideration of the regulations of each country and region and business with the surrounding environment	● Greenhouse gas emissions (tCO2e)				1,000 tCO2e	→	Greenhouse Gas Emissions Reduction		
	Expand revenues from Sustainability Innovation Business	● Revenues from Sustainability Innovation Business (billion yen)				5,013.8 billion yen	→	Sustainability Innovation Business Expansion		
	Expand contribution to CO2 reduction in the value chain	● Contribution to CO2 reduction in value chain (times)	15 times compared to Fiscal 2013 (Fiscal 2025)			16.3 times	→	Supply Chain CO2 Reduction		
	Expand water filtration throughput contribution by Toray's water treatment membranes	● Contribution to water filtration throughput (times)	2.5 times compared to Fiscal 2013 (Fiscal 2025)			3.7 times	→	Water Filtration Throughput Expansion		
	Conduct a wide variety of product research and technology development to help build a low-carbon, circular economy	● Contribution to Toray's water treatment products					→	Water Treatment Products Development		
	Contribute to the utilization of biomass in and recycling of plastic products, the spread of renewable energy and hydrogen, and the reuse of water resources						→	Biomass Utilization and Recycling		

(PDF:465KB) PDF

Materiality View of CSR Roadmap 2025

Material Issues	Main Initiatives of CSR Roadmap 2025	KPIs of CSR Roadmap 2025
Accelerating Climate Change Mitigation	Reduce greenhouse gas emissions per unit of revenue	3-⑤ Reduction of greenhouse gas emissions per unit of revenue (%)
		3-⑥ Increase in solar power generation capacity (%)
	Reduce water consumption per unit of revenue	3-⑦ Reduction of water usage per unit of revenue (%)
	Aim for a high waste recycling rate	3-⑧ Waste recycling rate (%)
	Pursue the greening of each site in consideration of the regulations of each country and region and harmony with the surrounding environment	(See footnote 4 below.)
	Expand revenues from Sustainability Innovation Business ⁵	7-① Revenues from Sustainability Innovation Business
	Expand contribution to CO ₂ reduction in the value chain ⁶	7-② Contribution to CO ₂ reduction in value chain
	Expand water filtration throughput contribution by Toray's water treatment membranes ⁷	7-③ Contribution of Toray water treatment products
	Conduct a wide variety of product research and technology development to help build a low-carbon, circular economy	
	Contribute to the utilization of biomass in and recycling of plastic products, the spread of renewable energy and hydrogen, and the reuse of water resources	
Promoting a Circular Economy	Reduce greenhouse gas emissions per unit of revenue	3-⑤ Reduction of greenhouse gas emissions per unit of revenue (%)
		3-⑥ Increase in solar power generation capacity (%)
	Reduce water consumption per unit of revenue	3-⑦ Reduction of water usage per unit of revenue (%)
	Aim for a high waste recycling rate	3-⑧ Waste recycling rate (%)
	Expand revenues from Sustainability Innovation Business	7-① Revenues from Sustainability Innovation Business
	Expand contribution to CO ₂ reduction in the value chain	7-② Contribution to CO ₂ reduction in value chain
	Expand water filtration throughput contribution by Toray's water treatment membranes	7-③ Contribution of Toray water treatment products
	Conduct a wide variety of product research and technology development to help build a low-carbon, circular economy	
	Contribute to the utilization of biomass in and recycling of plastic products, the spread of renewable energy and hydrogen, and the reuse of water resources	

	Fiscal 2023	Fiscal 2024	Fiscal 2025	Activities of Fiscal 2023			Related CSR Guidelines	Related SDGs
	Targets			Results	Degree of success ¹	Related initiatives		
	At least 40% lower than fiscal 2013 (Fiscal 2025)			36.0% ^{2&3}	—	Conserving Energy and Reducing Greenhouse Gas Emissions	3 Safety, Accident Prevention, and Environmental Preservation	
	At least 10% higher than fiscal 2022 (Fiscal 2025)			101%	—	Conserving Energy and Reducing Greenhouse Gas Emissions		
	At least 40% lower than fiscal 2013 (Fiscal 2025)			35.3% ²	—	Initiatives for Managing Water Resources		
	At least 86%	At least 87%	At least 87%	87.0%	○	Initiatives to Reduce Waste		
						Biodiversity Initiatives		7 AFFORDABLE AND CLEAN ENERGY 9 INDUSTRY, INNOVATION AND INFRASTRUCTURE 13 CLIMATE ACTION
	1,600 billion yen (Fiscal 2025)			1,311.5 billion yen	—	Sustainability Innovation Business Expansion Project	7 Contributing Solutions to Social Issues through Business Activities	
	15 times compared to fiscal 2013 (Fiscal 2025)			10.3 times	—	Sustainability Innovation Business Expansion Project		
	2.9 times compared to fiscal 2013 (Fiscal 2025)			2.7 times	—	Sustainability Innovation Business Expansion Project		
						Realizing a Circular Economy		
						Realizing a Circular Economy		
	At least 40% lower than fiscal 2013 (Fiscal 2025)			36.0%	—	Conserving Energy and Reducing Greenhouse Gas Emissions	3 Safety, Accident Prevention, and Environmental Preservation	
	At least 10% higher than fiscal 2022 (Fiscal 2025)			101%	—	Conserving Energy and Reducing Greenhouse Gas Emissions		
	At least 40% lower than fiscal 2013 (Fiscal 2025)			35.3%	—	Initiatives for Managing Water Resources		
	At least 86%	At least 87%	At least 87%	87.0%	○	Initiatives to Reduce Waste		
	1,600 billion yen (Fiscal 2025)			1,311.5 billion yen	—	Sustainability Innovation Business Expansion Project	7 Contributing Solutions to Social Issues through Business Activities	9 INDUSTRY, INNOVATION AND INFRASTRUCTURE 12 RESPONSIBLE CONSUMPTION AND PRODUCTION 14 LIFE-BELOW WATER
	15 times compared to fiscal 2013 (Fiscal 2025)			10.3 times	—	Sustainability Innovation Business Expansion Project		
	2.9 times compared to fiscal 2013 (Fiscal 2025)			2.7 times	—	Sustainability Innovation Business Expansion Project		
						Realizing a Circular Economy		
						Realizing a Circular Economy		

Notes : 1 : The degree of success is defined as follows: ○ means the target was fully met; △ means the target was 50% met or better; × means the target was less than 50% met.

"N.A." means no targets were specified for the fiscal year under review.

2 : The calculation of the figure for the baseline of fiscal 2013 includes data for companies that joined the Toray Group in fiscal 2014 or later.

3 : Until fiscal 2022, this was calculated by multiplying the GHG emissions and revenue of individual subsidiaries worldwide by the applicable Toray Industries' equity share. In fiscal 2023 however, the calculation method changed, and the degree of financial control Toray Industries has over the individual subsidiary (not the equity share) is now used, in accordance with the GHG Protocol, the international standard.

4 :  : No KPI set in CSR Roadmap 2025

5 : Business areas and product lines that can help realize the Toray Group Sustainability Vision

6 : Toray calculates the CO₂ emissions reduced throughout the value chain of products in accordance with the guidelines of the Japan Chemical Industry Association and the International Council of Chemical Associations (ICCA).

7 : Water treated annually with Toray water treatment membranes. It is calculated by multiplying the amount of fresh water that the Toray membranes can produce per day, including reverse osmosis (RO), ultrafiltration (UF) and membrane separation bioreactors (MBR), by the number of membrane elements sold.

8 : Volatile organic compounds

9 : Since efforts to achieve the fiscal 2024 target began recently, there are no figures to report for fiscal 2023. During this year, measures were taken to determine the anticipated high-risk issues, countries, regions, and industries, and preparations were made to identify and investigate the relevant suppliers.

10 : Since efforts to achieve the fiscal 2024 target began recently, there are no figures to report for fiscal 2023. The plan is to survey the Company's major suppliers of lubricants containing palm oil by investigating those that account for 90% or more of the Company's palm oil-related purchasing amount in fiscal 2023.

11 : A movement aimed at ensuring stable logistics function necessary for people's lives and for industrial activities while also contributing to economic growth in response to the shortage of truck drivers

12 : Toray Group Business Strategy Discussions are opportunities to check the progress made on medium-term management issues, including initiatives for sustainability, and the direction of business operations.

Materiality View of CSR Roadmap 2025

Material Issues	Main Initiatives of CSR Roadmap 2025	KPIs of CSR Roadmap 2025
Taking a Nature-Positive Approach	Reduce greenhouse gas emissions per unit of revenue	3- 5 Reduction of greenhouse gas emissions per unit of revenue (%)
		3- 6 Increase in solar power generation capacity (%)
	Reduce water consumption per unit of revenue	3- 7 Reduction of water usage per unit of revenue (%)
	Aim for a high waste recycling rate	3- 8 Waste recycling rate (%)
	Reduce atmospheric VOC ⁸ emissions	3- 9 Reduction of atmospheric VOC emissions (%)
	Pursue the greening of each site in consideration of the regulations of each country and region and harmony with the surrounding environment	
	Expand revenues from Sustainability Innovation Business	7- 1 Revenues from Sustainability Innovation Business
	Expand contribution to CO ₂ reduction in the value chain	7- 2 Contribution to CO ₂ reduction in value chain
	Expand water filtration throughput contribution by Toray's water treatment membranes	7- 3 Contribution of Toray water treatment products
	Conduct a wide variety of product research and technology development to help build a low-carbon, circular economy	
	Contribute to the utilization of biomass in and recycling of plastic products, the spread of renewable energy and hydrogen, and the reuse of water resources	
Committed to Healthier Lives	Contribute to countermeasures to public health risks, including infectious diseases, by developing and upgrading materials and products for personal protective equipment, as well as materials to protect environmental hygiene including of air and water	
	Expand revenues from Sustainability Innovation Business	7- 1 Revenues from Sustainability Innovation Business
	Contribute to countermeasures to public health risks, including infectious diseases, by developing and upgrading materials and products for personal protective equipment, as well as materials to protect environmental hygiene including of air and water	
	Create workplace environments in which women will feel comfortable performing their duties	
	Reduce overtime work exceeding standard hours	8- 6 Reduction in employees who exceed 45 hours/month of non-statutory working hours
	Encourage the use of annual paid leave by labor union members	8- 7 Available annual paid leave used by labor union members (%)

	Fiscal 2023	Fiscal 2024	Fiscal 2025	Activities of Fiscal 2023			Related CSR Guidelines	Related SDGs
	Targets			Results	Degree of success ¹	Related initiatives		
	At least 40% lower than fiscal 2013 (Fiscal 2025)			36.0%	—	Conserving Energy and Reducing Greenhouse Gas Emissions	3 Safety, Accident Prevention, and Environmental Preservation	  
	At least 10% higher than fiscal 2022 (Fiscal 2025)			101%	—	Conserving Energy and Reducing Greenhouse Gas Emissions		
	At least 40% lower than fiscal 2013 (Fiscal 2025)			35.3%	—	Initiatives for Managing Water Resources		
	At least 86%	At least 87%	At least 87%	87.0%	○	Initiatives to Reduce Waste		
	At least 70% lower than fiscal 2000	At least 72% lower than fiscal 2000	At least 72% lower than fiscal 2000	72.5%	○	Initiatives to Prevent Air and Water Pollution		
						Biodiversity Initiatives	7 Contributing Solutions to Social Issues through Business Activities	  
	1,600 billion yen (Fiscal 2025)			1,311.5 billion yen	—	Sustainability Innovation Business Expansion Project		
	15 times compared to fiscal 2013 (Fiscal 2025)			10.3 times	—	Sustainability Innovation Business Expansion Project		
	2.9 times compared to fiscal 2013 (Fiscal 2025)			2.7 times	—	Sustainability Innovation Business Expansion Project		
						Realizing a Circular Economy		
						Realizing a Circular Economy	7 Contributing Solutions to Social Issues through Business Activities	
						Sustainability Innovation Business Expansion Project		
	1,600 billion yen (Fiscal 2025)			1,311.5 billion yen	—	Sustainability Innovation Business Expansion Project		
						Sustainability Innovation Business Expansion Project		
						Promoting Diversity		
	Year-on-year reduction	Year-on-year reduction	Year-on-year reduction	Year-on-year reduction 81.1%	○	Creating a Positive Workplace for Employees	8 Human Rights Promotion and Human Resources Development	 
	90%	90%	90%	95.7%	○	Creating a Positive Workplace for Employees		

Notes : 1 : The degree of success is defined as follows: ○ means the target was fully met; △ means the target was 50% met or better; × means the target was less than 50% met.

"N.A." means no targets were specified for the fiscal year under review.

2 : The calculation of the figure for the baseline of fiscal 2013 includes data for companies that joined the Toray Group in fiscal 2014 or later.

3 : Until fiscal 2022, this was calculated by multiplying the GHG emissions and revenue of individual subsidiaries worldwide by the applicable Toray Industries' equity share. In fiscal 2023 however, the calculation method changed, and the degree of financial control Toray Industries has over the individual subsidiary (not the equity share) is now used, in accordance with the GHG Protocol, the international standard.

4 :  : No KPI set in CSR Roadmap 2025

5 : Business areas and product lines that can help realize the Toray Group Sustainability Vision

6 : Toray calculates the CO₂ emissions reduced throughout the value chain of products in accordance with the guidelines of the Japan Chemical Industry Association and the International Council of Chemical Associations (ICCA).

7 : Water treated annually with Toray water treatment membranes. It is calculated by multiplying the amount of fresh water that the Toray membranes can produce per day, including reverse osmosis (RO), ultrafiltration (UF) and membrane separation bioreactors (MBR), by the number of membrane elements sold.

8 : Volatile organic compounds

9 : Since efforts to achieve the fiscal 2024 target began recently, there are no figures to report for fiscal 2023. During this year, measures were taken to determine the anticipated high-risk issues, countries, regions, and industries, and preparations were made to identify and investigate the relevant suppliers.

10 : Since efforts to achieve the fiscal 2024 target began recently, there are no figures to report for fiscal 2023. The plan is to survey the Company's major suppliers of lubricants containing palm oil by investigating those that account for 90% or more of the Company's palm oil-related purchasing amount in fiscal 2023.

11 : A movement aimed at ensuring stable logistics function necessary for people's lives and for industrial activities while also contributing to economic growth in response to the shortage of truck drivers

12 : Toray Group Business Strategy Discussions are opportunities to check the progress made on medium-term management issues, including initiatives for sustainability, and the direction of business operations.

Materiality View of CSR Roadmap 2025

Material Issues	Main Initiatives of CSR Roadmap 2025	KPIs of CSR Roadmap 2025
Developing in Collaboration with Stakeholders	Actively dispatch information on the Toray Philosophy and use education to ensure it is embraced throughout the Group	
	Enhance information dissemination utilizing owned media such as the Group's websites and social media accounts	6-① Number of corporate website page views (per month)
	Strive to ascertain customer needs and improve customer satisfaction	
	Facilitate exchange of opinions between management and employees, ascertain issues and problems, and reflect them in the Group's CSR initiatives	6-② Interviews conducted to exchange opinions within the company (rate of progress)
	Expand opportunities for management to disseminate information and promote communication with stockholders and investors	6-③ Interviews with key investors in which management participates (number)
	Enhance communication with the mass media	6-④ News releases (number)
	Expand revenues from Sustainability Innovation Business	7-① Revenues from Sustainability Innovation Business
	Expand contribution to CO ₂ reduction in the value chain	7-② Contribution to CO ₂ reduction in value chain
	Expand water filtration throughput contribution by Toray's water treatment membranes	7-③ Contribution of Toray water treatment products
	Conduct a wide variety of product research and technology development to help build a low-carbon, circular economy	
	Contribute to the utilization of biomass in and recycling of plastic products, the spread of renewable energy and hydrogen, and the reuse of water resources	
	Contribute to countermeasures to public health risks, including infectious diseases, by developing and upgrading materials and products for personal protective equipment, as well as materials to protect environmental hygiene including of air and water	

Fiscal 2023	Fiscal 2024	Fiscal 2025	Activities of Fiscal 2023			Related CSR Guidelines	Related SDGs
			Targets	Results	Degree of success ¹	Related initiatives	
						6 Communication	                
	1 million page views	1 million page views	1 million page views	1.12 million page views	○	Communication via Corporate Websites	
						Communication with Customers	
(First round) 100% completed	(Second round) 30%	(Second round) 60%	100%	○		Communication with Employees	
Cumulative total of 120	Cumulative total of 120	Cumulative total of 120	Cumulative total of 197	○		Communication with Stockholders and Investors	
200	200	200	178	△		Communication with the Media	
1,600 billion yen (Fiscal 2025)			1,311.5 billion yen	—		Sustainability Innovation Business Expansion Project	
15 times compared to fiscal 2013 (Fiscal 2025)			10.3 times	—		Sustainability Innovation Business Expansion Project	
2.9 times compared to fiscal 2013 (Fiscal 2025)			2.7 times	—		Sustainability Innovation Business Expansion Project	
						Realizing a Circular Economy	
						Realizing a Circular Economy	
						Sustainability Innovation Business Expansion Project	

Notes : 1 : The degree of success is defined as follows: ○ means the target was fully met; △ means the target was 50% met or better; × means the target was less than 50% met.

"N.A." means no targets were specified for the fiscal year under review.

2 : The calculation of the figure for the baseline of fiscal 2013 includes data for companies that joined the Toray Group in fiscal 2014 or later.

3 : Until fiscal 2022, this was calculated by multiplying the GHG emissions and revenue of individual subsidiaries worldwide by the applicable Toray Industries' equity share. In fiscal 2023 however, the calculation method changed, and the degree of financial control Toray Industries has over the individual subsidiary (not the equity share) is now used, in accordance with the GHG Protocol, the international standard.

4 :  : No KPI set in CSR Roadmap 2025

5 : Business areas and product lines that can help realize the Toray Group Sustainability Vision

6 : Toray calculates the CO₂ emissions reduced throughout the value chain of products in accordance with the guidelines of the Japan Chemical Industry Association and the International Council of Chemical Associations (ICCA).

7 : Water treated annually with Toray water treatment membranes. It is calculated by multiplying the amount of fresh water that the Toray membranes can produce per day, including reverse osmosis (RO), ultrafiltration (UF) and membrane separation bioreactors (MBR), by the number of membrane elements sold.

8 : Volatile organic compounds

9 : Since efforts to achieve the fiscal 2024 target began recently, there are no figures to report for fiscal 2023. During this year, measures were taken to determine the anticipated high-risk issues, countries, regions, and industries, and preparations were made to identify and investigate the relevant suppliers.

10 : Since efforts to achieve the fiscal 2024 target began recently, there are no figures to report for fiscal 2023. The plan is to survey the Company's major suppliers of lubricants containing palm oil by investigating those that account for 90% or more of the Company's palm oil-related purchasing amount in fiscal 2023.

11 : A movement aimed at ensuring stable logistics function necessary for people's lives and for industrial activities while also contributing to economic growth in response to the shortage of truck drivers

12 : Toray Group Business Strategy Discussions are opportunities to check the progress made on medium-term management issues, including initiatives for sustainability, and the direction of business operations.

Materiality View of CSR Roadmap 2025

Material Issues	Main Initiatives of CSR Roadmap 2025	KPIs of CSR Roadmap 2025
Developing in Collaboration with Stakeholders	Request suppliers to comply with the Toray Group CSR Procurement Guidelines, and strive to ascertain the status of each company's CSR initiatives	9-① Suppliers agreeing to the Toray Group CSR Procurement Guidelines (%)
	Identify high-risk areas that may have a negative impact on the environment and human rights, and promote supply chain due diligence to implement measures to prevent or mitigate the identified risks	9-② Implementation of supply chain due diligence (% of cases)
	Promote procurement of responsibly sourced materials such as non-conflict minerals and sustainable palm oil	9-③ Oil procurement needs met by palm oil sourced in a manner that is environmentally responsible and respectful of human rights (% of oil purchased, by value)
	Reduce CO ₂ emissions intensity from distribution activities	9-④ Reduction in CO ₂ emissions per unit of sales from distribution activities (year-on-year)
	Continually investigate and ascertain logistics risks related to natural disasters such as typhoons and heavy rains, and strive to reduce risks	9-⑤ Key external inventory sites that have been assessed for natural disaster risk and have implemented measures to mitigate serious risks (%)
	Continually work to reduce the environmental impact and improve the quality of distribution activities	
	In accordance with the Declaration of Voluntary Activities for the White Logistics Movement, ¹¹ contribute to sustainable logistics, for instance by selecting logistics companies that are engaged in working style reform, etc.	
	Implement social contribution activities at the appropriate scale	10-① Social contribution expenditure (% change from average expenditure over last six years)
	Actively engage in social contribution activities that are distinctive of Toray Group, focusing on science and technology promotion	
	Promote active planning and implementation of voluntary social contribution activities at each Group site, on an ongoing basis	10-② Social contribution activities (number)
	Implement a range of educational support activities that capture the interest and curiosity of youngsters through school visits and company tours focusing on areas such as science, the environment, and career opportunities, thereby helping to inspire upcoming generations	10-③ Beneficiaries of educational support activities such as science classes for schools and career education (number)
	Educate employees at Toray Group in order to instill the significance of social contribution	
	Support the improvement and development of science and technology and the promotion of science education through the activities of Toray science foundations in and outside Japan	
	Share information with internal and external stakeholders on Toray Group's social contribution activities via websites and other means	

	Fiscal 2023	Fiscal 2024	Fiscal 2025	Activities of Fiscal 2023			Related CSR Guidelines	Related SDGs
	Targets			Results	Degree of success¹	Related initiatives		
	At least 75%	At least 85%	At least 90%	76.8%	○	Socially Responsible Procurement Initiatives at Toray Group	9 Establishing Sustainable Supply Chain	1 NO POVERTY 2 ZERO HUNGER 3 GOOD HEALTH AND WELL-BEING 4 QUALITY EDUCATION 5 GENDER EQUALITY 6 CLEAN WATER AND SANITATION 7 AFFORDABLE AND CLEAN ENERGY 8 DECENT WORK AND ECONOMIC GROWTH 9 INDUSTRY, INNOVATION AND INFRASTRUCTURE 10 REDUCED INEQUALITIES 11 SUSTAINABLE CITIES AND COMMUNITIES 12 RESPONSIBLE CONSUMPTION AND PRODUCTION 13 CLIMATE ACTION 14 LIFE BELOW WATER 15 LIFE ON LAND 16 PEACE, JUSTICE AND STRONG INSTITUTIONS 17 PARTNERSHIPS FOR THE GOALS
	At least 60% (Fiscal 2024)		At least 90%	— ⁹	—	Socially Responsible Procurement Initiatives at Toray Group		
	At least 70% (Fiscal 2024)		At least 90%	— ¹⁰	—	Socially Responsible Procurement Initiatives at Toray Group		
	1%	1%	1%	11.5%	○	Toray Group Distribution Initiatives		
	At least 60%	At least 75%	At least 90%	59%	△	Toray Group Distribution Initiatives		
						Toray Group Distribution Initiatives		
						Toray Group Distribution Initiatives		
	100% or higher	100% or higher	100% or higher	124%	○	Social Contribution Activities as a Good Corporate Citizen Fiscal 2023 Results (Data edition)	10 Social Contribution Activities as a Good Corporate Citizen	
						Social Contribution Activities as a Good Corporate Citizen Activities Carried Out in Fiscal 2023		
	2,500 or more	2,500 or more	2,500 or more	2,173	△	Social Contribution Activities as a Good Corporate Citizen Fiscal 2023 Results (Data edition)		
	15,000 or more	15,000 or more	15,000 or more	18,816	○	Social Contribution Activities as a Good Corporate Citizen Fiscal 2023 Results (Data edition)		
						Social Contribution Activities as a Good Corporate Citizen Activities Carried Out in Fiscal 2023		
						Social Contribution Activities as a Good Corporate Citizen Activities Carried Out in Fiscal 2023		
						Social Contribution Activities as a Good Corporate Citizen Activities Carried Out in Fiscal 2023		

Notes : 1 : The degree of success is defined as follows: ○ means the target was fully met; △ means the target was 50% met or better; × means the target was less than 50% met.
"N.A." means no targets were specified for the fiscal year under review.

2 : The calculation of the figure for the baseline of fiscal 2013 includes data for companies that joined the Toray Group in fiscal 2014 or later.

3 : Until fiscal 2022, this was calculated by multiplying the GHG emissions and revenue of individual subsidiaries worldwide by the applicable Toray Industries' equity share. In fiscal 2023 however, the calculation method changed, and the degree of financial control Toray Industries has over the individual subsidiary (not the equity share) is now used, in accordance with the GHG Protocol, the international standard.

4 :  : No KPI set in CSR Roadmap 2025

5 : Business areas and product lines that can help realize the Toray Group Sustainability Vision

6 : Toray calculates the CO₂ emissions reduced throughout the value chain of products in accordance with the guidelines of the Japan Chemical Industry Association and the International Council of Chemical Associations (ICCA).

7 : Water treated annually with Toray water treatment membranes. It is calculated by multiplying the amount of fresh water that the Toray membranes can produce per day, including reverse osmosis (RO), ultrafiltration (UF) and membrane separation bioreactors (MBR), by the number of membrane elements sold.

8 : Volatile organic compounds

9 : Since efforts to achieve the fiscal 2024 target began recently, there are no figures to report for fiscal 2023. During this year, measures were taken to determine the anticipated high-risk issues, countries, regions, and industries, and preparations were made to identify and investigate the relevant suppliers.

10 : Since efforts to achieve the fiscal 2024 target began recently, there are no figures to report for fiscal 2023. The plan is to survey the Company's major suppliers of lubricants containing palm oil by investigating those that account for 90% or more of the Company's palm oil-related purchasing amount in fiscal 2023.

11 : A movement aimed at ensuring stable logistics function necessary for people's lives and for industrial activities while also contributing to economic growth in response to the shortage of truck drivers

12 : Toray Group Business Strategy Discussions are opportunities to check the progress made on medium-term management issues, including initiatives for sustainability, and the direction of business operations.

Materiality View of CSR Roadmap 2025

Material Issues	Main Initiatives of CSR Roadmap 2025	KPIs of CSR Roadmap 2025
Ensuring Safety and Fire Accident Prevention	Aim for zero major accidents	3-① Number of major accidents
	Achieve world's best standard for safety management	3-② Achievement for world's best standard for safety management (not exceeding 0.05 frequency rate for occupational accidents resulting in lost work time)
	Create a comfortable working environment to ensure the safety and health of employees and to raise the level of safety and health	
	Aim for zero fire and explosion accidents	3-③ Number of fire and explosion accidents
	Aim for zero environmental accidents	3-④ Number of environmental accidents
Ensuring Ethics and Compliance	Aim for no major cases of non-compliance with or violations of laws and regulations	2-① Number of major violations of laws or ordinances
	Practice appropriate transactions based on free, fair, and transparent market competition	
	Prohibit any association with organized criminal groups or other anti-social forces and take a firm stance against them	
	Conduct internal legal audits and improve problems found in the audits	2-② Group companies implementing internal legal audits (%)
	Appropriately operate a whistle-blowing system	
	Thoroughly disseminate the Ethics & Compliance Code of Conduct	
	Provide information and implement education on major laws and regulations and other compliance-related matters	2-③ Group companies providing information and implementing education on major laws and regulations and other compliance-related matters (%)
Enhancing Product Quality and Safety	Ensure that quality assurance compliance education is being fully implemented	4-① Quality assurance compliance education (% of people trained)
	Enhance the auditing function to ensure improvement and continuity of Toray Group's overall quality assurance framework, and conduct auditing to check its effectiveness	4-② Quality and product safety audit implementation rate (%)
	Expand the use of the quality-related data management system with fraud prevention features across the entire Group	
	Promote the construction of systems in each business to facilitate deliberation, approval, and management related to quality assurance activities	
	Aim for zero product accidents	4-③ Number of product accidents

	Fiscal 2023	Fiscal 2024	Fiscal 2025	Activities of Fiscal 2023			Related CSR Guidelines	Related SDGs
	Targets			Results	Degree of success ¹	Related initiatives		
	0	0	0	1	×	Occupational Safety and Accident Prevention Activities	3 Safety, Accident Prevention, and Environmental Preservation	      
	No more than 0.05	No more than 0.05	No more than 0.05	0.40	×	Occupational Safety and Accident Prevention Activities		
						Occupational Safety and Accident Prevention Activities		
	0	0	0	1	×	Occupational Safety and Accident Prevention Activities		
	0	0	0	4	×	Environmental Risk Management		
	0	0	0	0	○	Establishing a Corporate Culture of Total Respect for Ethics and Compliance	2 Ethics and Compliance	
						Establishing a Corporate Culture of Total Respect for Ethics and Compliance		
						Establishing a Corporate Culture of Total Respect for Ethics and Compliance		
	• Toray Industries, Inc.: 100% • Group companies in and outside Japan: Implemented focusing on high-risk companies			100%	○	Establishing a Corporate Culture of Total Respect for Ethics and Compliance		
						Establishing a Corporate Culture of Total Respect for Ethics and Compliance		
						Establishing a Corporate Culture of Total Respect for Ethics and Compliance		
	100%	100%	100%	100%	○	Establishing a Corporate Culture of Total Respect for Ethics and Compliance		
	100%	100%	100%	100%	○	Initiatives for Quality Assurance and Product Safety	4 Product Quality and Safety	
	100%	100%	100%	100%	○	Initiatives for Quality Assurance and Product Safety		
						Initiatives for Quality Assurance and Product Safety		
						Initiatives for Quality Assurance and Product Safety		
	0	0	0	1	×	Initiatives for Quality Assurance and Product Safety		

- Notes :**
- 1 : The degree of success is defined as follows: ○ means the target was fully met; △ means the target was 50% met or better; × means the target was less than 50% met. "N.A." means no targets were specified for the fiscal year under review.
 - 2 : The calculation of the figure for the baseline of fiscal 2013 includes data for companies that joined the Toray Group in fiscal 2014 or later.
 - 3 : Until fiscal 2022, this was calculated by multiplying the GHG emissions and revenue of individual subsidiaries worldwide by the applicable Toray Industries' equity share. In fiscal 2023 however, the calculation method changed, and the degree of financial control Toray Industries has over the individual subsidiary (not the equity share) is now used, in accordance with the GHG Protocol, the international standard.
 - 4 :  : No KPI set in CSR Roadmap 2025
 - 5 : Business areas and product lines that can help realize the Toray Group Sustainability Vision
 - 6 : Toray calculates the CO₂ emissions reduced throughout the value chain of products in accordance with the guidelines of the Japan Chemical Industry Association and the International Council of Chemical Associations (ICCA).
 - 7 : Water treated annually with Toray water treatment membranes. It is calculated by multiplying the amount of fresh water that the Toray membranes can produce per day, including reverse osmosis (RO), ultrafiltration (UF) and membrane separation bioreactors (MBR), by the number of membrane elements sold.
 - 8 : Volatile organic compounds
 - 9 : Since efforts to achieve the fiscal 2024 target began recently, there are no figures to report for fiscal 2023. During this year, measures were taken to determine the anticipated high-risk issues, countries, regions, and industries, and preparations were made to identify and investigate the relevant suppliers.
 - 10 : Since efforts to achieve the fiscal 2024 target began recently, there are no figures to report for fiscal 2023. The plan is to survey the Company's major suppliers of lubricants containing palm oil by investigating those that account for 90% or more of the Company's palm oil-related purchasing amount in fiscal 2023.
 - 11 : A movement aimed at ensuring stable logistics function necessary for people's lives and for industrial activities while also contributing to economic growth in response to the shortage of truck drivers
 - 12 : Toray Group Business Strategy Discussions are opportunities to check the progress made on medium-term management issues, including initiatives for sustainability, and the direction of business operations.

Materiality View of CSR Roadmap 2025

Material Issues	Main Initiatives of CSR Roadmap 2025	KPIs of CSR Roadmap 2025
Strengthening Corporate Governance	Regularly hold Toray Group Business Strategy Discussion ¹² sessions at Board of Directors meetings	1-① Toray Group Business Strategy Discussion sessions held at Board of Directors meetings (times)
	Consider the appropriate form of Toray head office involvement in the execution of business at each group company from the viewpoint of balancing the effectiveness of group-wide governance with the dynamic decision-making of subsidiaries	
	Expand opportunities for directors and corporate auditors to get the training they need to acquire the knowledge required to fulfill their responsibilities (excluding execution) and to fulfill their roles appropriately, including use of external programs	
	Operate an effective internal control system	1-② Board of Directors' positive assessment of the implementation of the Basic Policy for Internal Control Systems (%)
	Under normal conditions, manage risks by identifying and addressing two main types of risks: (1) Priority risks for Toray Group, which are established based on periodic assessments every three years (2) Specified risks, which are established based on constant monitoring, investigation and analysis of risk trends in and outside Japan	
	In the event of an emergency, respond appropriately in accordance with the Risk Management Regulations	
	Follow up on progress made to address Toray Group's priority risks	
	Follow up on the status of internal control implementation at each group company concerned	5-① Group companies implementing self-assessment and results follow-up using the internal control checklist (%)
	Enhance cooperation with crisis management committees at Group sites outside Japan concerning crisis management under normal conditions	
	Implement risk reduction across the Group for information security risks such as cyberattacks and information leaks	5-② Group companies implementing information security evaluation and risk reduction (%)
	Provide risk management education	

	Fiscal 2023	Fiscal 2024	Fiscal 2025	Activities of Fiscal 2023			Related CSR Guidelines	Related SDGs
	Targets			Results	Degree of success¹	Related initiatives		
	8	8	8	8	○	Ensuring Proper Business Conduct and Transparency	1 Corporate Governance	11 SUSTAINABLE CITIES AND COMMUNITIES 13 CLIMATE ACTION 16 PEACE, JUSTICE AND STRONG INSTITUTIONS
						Ensuring Proper Business Conduct and Transparency		
						Ensuring Proper Business Conduct and Transparency		
	90%	90%	90%	96%	○	Ensuring Proper Business Conduct and Transparency		
						Risk Management Initiatives	5 Risk Management	
						Risk Management Initiatives		
						Risk Management Initiatives		
	35%	70%	100%	35%	○	Risk Management Initiatives		
						Risk Management Initiatives		
	35%	70%	100%	35%	○	Addressing Information Security Risks		
						Risk Management Initiatives		

Notes : 1 : The degree of success is defined as follows: ○ means the target was fully met; △ means the target was 50% met or better; × means the target was less than 50% met.

"N.A." means no targets were specified for the fiscal year under review.

2 : The calculation of the figure for the baseline of fiscal 2013 includes data for companies that joined the Toray Group in fiscal 2014 or later.

3 : Until fiscal 2022, this was calculated by multiplying the GHG emissions and revenue of individual subsidiaries worldwide by the applicable Toray Industries' equity share. In fiscal 2023 however, the calculation method changed, and the degree of financial control Toray Industries has over the individual subsidiary (not the equity share) is now used, in accordance with the GHG Protocol, the international standard.

4 :  : No KPI set in CSR Roadmap 2025

5 : Business areas and product lines that can help realize the Toray Group Sustainability Vision

6 : Toray calculates the CO₂ emissions reduced throughout the value chain of products in accordance with the guidelines of the Japan Chemical Industry Association and the International Council of Chemical Associations (ICCA).

7 : Water treated annually with Toray water treatment membranes. It is calculated by multiplying the amount of fresh water that the Toray membranes can produce per day, including reverse osmosis (RO), ultrafiltration (UF) and membrane separation bioreactors (MBR), by the number of membrane elements sold.

8 : Volatile organic compounds

9 : Since efforts to achieve the fiscal 2024 target began recently, there are no figures to report for fiscal 2023. During this year, measures were taken to determine the anticipated high-risk issues, countries, regions, and industries, and preparations were made to identify and investigate the relevant suppliers.

10 : Since efforts to achieve the fiscal 2024 target began recently, there are no figures to report for fiscal 2023. The plan is to survey the Company's major suppliers of lubricants containing palm oil by investigating those that account for 90% or more of the Company's palm oil-related purchasing amount in fiscal 2023.

11 : A movement aimed at ensuring stable logistics function necessary for people's lives and for industrial activities while also contributing to economic growth in response to the shortage of truck drivers

12 : Toray Group Business Strategy Discussions are opportunities to check the progress made on medium-term management issues, including initiatives for sustainability, and the direction of business operations.

Materiality View of CSR Roadmap 2025

Material Issues	Main Initiatives of CSR Roadmap 2025	KPIs of CSR Roadmap 2025
Establishing Sustainable Supply Chain	Request suppliers to comply with the Toray Group CSR Procurement Guidelines, and strive to ascertain the status of each company's CSR initiatives	9-① Suppliers agreeing to the Toray Group CSR Procurement Guidelines (%)
	Identify high-risk areas that may have a negative impact on the environment and human rights, and promote supply chain due diligence to implement measures to prevent or mitigate the identified risks	9-② Implementation of supply chain due diligence (% of cases)
	Promote procurement of responsibly sourced materials such as non-conflict minerals and sustainable palm oil	9-③ Oil procurement needs met by palm oil sourced in a manner that is environmentally responsible and respectful of human rights (% of oil purchased, by value)
	Reduce CO ₂ emissions intensity from distribution activities	9-④ Reduction in CO ₂ emissions per unit of sales from distribution activities (year-on-year)
	Continually investigate and ascertain logistics risks related to natural disasters such as typhoons and heavy rains, and strive to reduce risks	9-⑤ Key external inventory sites that have been assessed for natural disaster risk and have implemented measures to mitigate serious risks (%)
	Continually work to reduce the environmental impact and improve the quality of distribution activities	
	In accordance with the Declaration of Voluntary Activities for the White Logistics Movement, contribute to sustainable logistics, for instance by selecting logistics companies that are engaged in working style reform, etc.	
Respecting Human Rights and Promoting Human Resource Diversity	Implement human rights education and training	8-① Group companies implementing human rights education and training (%)
	Achieve the legally mandated employment rate of persons with disabilities	8-② Group companies that have achieved legally mandated employment rate of persons with disabilities (%)
	Operate a whistle-blowing system and consultation service at each Toray Group company to promptly and appropriately respond to any problem reported in an effort to prevent or mitigate any negative impact on human rights	
	As part of career development initiatives for core staff, enhance the use of the career path worksheets included in the personnel information system	8-③ Career development initiatives for core staff using the personnel information system (use of career path worksheets) (% of employees)
	Systematically hire, develop, and appoint core staff outside Japan	
	Create workplace environments in which women will feel comfortable performing their duties	
	Promote the use and improve the operation of measures to support employee work-life balance	8-④ Employees returning to work from childcare leave (%) 8-⑤ Male employees taking childcare leave or other leave for the same reason (%)
	Reduce overtime work exceeding standard hours	8-⑥ Reduction in employees who exceed 45 hours/month of non-statutory working hours
	Encourage the use of annual paid leave by labor union members	8-⑦ Available annual paid leave used by labor union members (%)

	Fiscal 2023	Fiscal 2024	Fiscal 2025	Activities of Fiscal 2023			Related CSR Guidelines	Related SDGs
	Targets			Results	Degree of success ¹	Related initiatives		
	At least 75%	At least 85%	At least 90%	76.8%	○	Socially Responsible Procurement Initiatives at Toray Group	9 Establishing Sustainable Supply Chain	
	At least 60% (Fiscal 2024)		At least 90%	—	—	Socially Responsible Procurement Initiatives at Toray Group		
	At least 70% (Fiscal 2024)		At least 90%	—	—	Socially Responsible Procurement Initiatives at Toray Group		
	1%	1%	1%	11.5%	○	Toray Group Distribution Initiatives		
	At least 60%	At least 75%	At least 90%	59%	△	Toray Group Distribution Initiatives		
						Toray Group Distribution Initiatives		
						Toray Group Distribution Initiatives		
	100%	100%	100%	100%	○	Human Rights Activity Report	8 Human Rights Promotion and Human Resources Development	
	100%	100%	100%	59.4%	△	Promoting Diversity		
						Human Rights Activity Report		
	Year-on-year increase	Year-on-year increase	Year-on-year increase	Year-on-year 101%	○	Securing and Developing Human Resources to Create New Value		
						Securing and Developing Human Resources to Create New Value		
						Promoting Diversity		
	100%	100%	100%	99%	△	Creating a Positive Workplace for Employees		
	Year-on-year increase	Year-on-year increase	Year-on-year increase	Year-on-year 106%	○	Creating a Positive Workplace for Employees		
	Year-on-year reduction	Year-on-year reduction	Year-on-year reduction	Year-on-year 81.1%	○	Creating a Positive Workplace for Employees		
	90%	90%	90%	95.7%	○	Creating a Positive Workplace for Employees		

Notes : 1 : The degree of success is defined as follows: ○ means the target was fully met; △ means the target was 50% met or better; × means the target was less than 50% met.

"N.A." means no targets were specified for the fiscal year under review.

2 : The calculation of the figure for the baseline of fiscal 2013 includes data for companies that joined the Toray Group in fiscal 2014 or later.
3 : Until fiscal 2022, this was calculated by multiplying the GHG emissions and revenue of individual subsidiaries worldwide by the applicable Toray Industries' equity share. In fiscal 2023 however, the calculation method changed, and the degree of financial control Toray Industries has over the individual subsidiary (not the equity share) is now used, in accordance with the GHG Protocol, the international standard.

4 :  : No KPI set in CSR Roadmap 2025

5 : Business areas and product lines that can help realize the Toray Group Sustainability Vision

6 : Toray calculates the CO₂ emissions reduced throughout the value chain of products in accordance with the guidelines of the Japan Chemical Industry Association and the International Council of Chemical Associations (ICCA).

7 : Water treated annually with Toray water treatment membranes. It is calculated by multiplying the amount of fresh water that the Toray membranes can produce per day, including reverse osmosis (RO), ultrafiltration (UF) and membrane separation bioreactors (MBR), by the number of membrane elements sold.

8 : Volatile organic compounds

9 : Since efforts to achieve the fiscal 2024 target began recently, there are no figures to report for fiscal 2023. During this year, measures were taken to determine the anticipated high-risk issues, countries, regions, and industries, and preparations were made to identify and investigate the relevant suppliers.

10 : Since efforts to achieve the fiscal 2024 target began recently, there are no figures to report for fiscal 2023. The plan is to survey the Company's major suppliers of lubricants containing palm oil by investigating those that account for 90% or more of the Company's palm oil-related purchasing amount in fiscal 2023.

11 : A movement aimed at ensuring stable logistics function necessary for people's lives and for industrial activities while also contributing to economic growth in response to the shortage of truck drivers

12 : Toray Group Business Strategy Discussions are opportunities to check the progress made on medium-term management issues, including initiatives for sustainability, and the direction of business operations.

CSR Roadmap 2025 (Fiscal 2023 – Fiscal 2025)

In June 2023, Toray Group established its eighth Medium-Term CSR Plan, CSR Roadmap 2025, covering the period from fiscal 2023 to fiscal 2025.

Taking the Group's 11 material issues into account, CSR Roadmap 2025 outlines the activity targets and main initiatives for each of the ten themes in Toray's CSR Guidelines, as well as key performance indicators (KPIs). The purpose is to systematically promote the Group's CSR activities in an integrated manner with the Medium-Term Management Program.

For more information on the CSR Roadmap 2025, refer to the PDF file below.



(PDF:770KB) [PDF](#)

CSR Roadmap 2025 KPI List

Along with listing the main initiatives for each CSR Guidelines theme, the roadmap establishes KPIs to quantitatively monitor yearly progress.

	Key Performance Indicators (KPIs)	Targets			Reporting Scope
		Fiscal 2023	Fiscal 2024	Fiscal 2025	
1 Corporate Governance	① Toray Group Business Strategy Discussion sessions held at Board of Directors meetings (times)	8	8	8	※ 1
	② Board of Directors' positive assessment of the implementation of the Basic Policy for Internal Control Systems (%)	90%	90%	90%	※ 1
2 Ethics and Compliance	③ Number of major violations of laws or ordinances	0	0	0	※ 1
	④ Group companies implementing internal legal audit (%)	● Toray Industries, Inc.: 100% ● Group companies in and outside Japan: Implemented focusing on high-risk companies			※ 1

(PDF:112KB) [PDF](#)

Relationship between the CSR Guidelines and SDGs/ESG Categories

The relationship between each theme of the Toray Group CSR Guidelines and the SDGs/ESG categories is shown in this comparative table.

	3	GOOD HEALTH AND WELL-BEING			•				•			•
	4	QUALITY EDUCATION								•		•
	5	GENDER EQUALITY								•	•	•
	6	CLEAN WATER AND SANITATION			•				•		•	•
	7	AFFORDABLE AND CLEAN ENERGY			•				•			
	8	DECENT WORK AND ECONOMIC GROWTH			•					•	•	•

(PDF:89.4KB) [PDF](#)

CSR Roadmap 2025 (FY 2023 – FY 2025)

The CSR Roadmap 2025 is directly linked to TORAY VISION 2030 and Project AP-G 2025. These management strategies are designed to ensure the Group lives up to its Corporate Philosophy, which includes the principles and values it has upheld since the beginning, and which is also its reason for being and purpose. The new roadmap also aims to achieve sustainable development for the Group and society as a whole, as well as the Toray Group Sustainability Vision, ensuring that Toray Group remains a highly valuable corporate group that is respected by society.

The relationship between CSR, the Toray Group Sustainability Vision, the Toray Philosophy, and our management strategies is illustrated by the following diagram.



Figure 1. The relationship between CSR, the Toray Group Sustainability Vision, the Toray Philosophy, and our management strategies

In June 2023, Toray Group selected 11 CSR-related material issues: five issues in the category of “Contribution to Society through the Creation of New Value” and six issues in the category of “Management Foundation.” They are shown below.

Contribution to Society through the Creation of New Value

Accelerating Climate Change Mitigation Accelerate the shift to carbon neutrality by contributing to reduction of global greenhouse gas emissions through innovative technologies and advanced materials and by pursuing emissions reduction across the Toray Group.
Promoting a Circular Economy Promote sustainable, circular resource use and production by increasing recycling, using biomass-based raw materials, and converting CO2 into resources.
Taking a Nature-Positive Approach Contribute to restoration of the natural environment by offering products that help provide clean water and air , reduce environmental impact, and otherwise benefit the environment and by working to preserve green spaces and properly manage chemical substances.
Committed to Healthier Lives Contribute to healthy, hygienic lifestyles by providing advanced materials that promote health and longevity, reduce the burden on nursing care and healthcare providers, improve the quality of medical care, and contribute to human safety.
Developing in Collaboration with Stakeholders Focus on sustainable development for both the Group and society by pursuing co-creation with stakeholders and contributing solutions to social issues. Appropriately disclose information and promote dialogue with stakeholders.

Management Foundation

Ensuring Safety and Fire Accident Prevention Protect public safety and the personal safety of employees by pursuing zero accidents, thoroughly practicing disaster and fire prevention, and ensuring safe work environments.
Ensuring Ethics and Compliance Act with fairness, high ethical standards and a strong sense of responsibility while complying with laws, regulations and social norms to earn trust and meet social expectations.
Enhancing Product Quality and Safety Provide safe, high-quality products by further strengthening quality control, quality assurance, and product safety management.
Strengthening Corporate Governance Maintain sound management across the Toray Group by reviewing management systems and programs, strengthening internal controls, and implementing risk management (managing risks related to business activities such as economic security, security trade, and information security).
Establishing Sustainable Supply Chain Focus on building a stable, sustainable supply chain by promoting environmental conservation and respect for human rights throughout the supply chain.
Respecting Human Rights and Promoting Human Resource Diversity Respect internationally recognized human rights and create work environments that allow a diverse pool of human resources to demonstrate their creativity.

To address the material issues for Toray Group’s CSR initiatives, the CSR Roadmap 2025 establishes specific targets, key initiatives, and KPIs for measuring progress on achieving the targets for each of the 10 guidelines shown on the following pages. By systematically implementing the CSR Roadmap 2025, the Group will strive to contribute to society by creating new value and work to enhance its management foundation.

1 Corporate Governance

Implementation leader

General Manager of Corporate Strategic Planning Div. (Department responsible for implementation: Corporate Strategic Planning Div.)

Continually revise management systems, strengthen internal controls as part of efforts to fulfill the company's social responsibilities

Related Material Issues for CSR

CG Strengthening Corporate Governance

CSR Roadmap Goals

- (1) Further improve governance by ensuring that Board of Directors operates in a manner that contributes to the enhancement of corporate value over the medium to long term
- (2) Perform monitoring based on the Basic Policy for Internal Control Systems, in accordance with Japan's Companies Act

Main Initiatives

		Material Issues	KPI
(1)	Regularly hold Toray Group Business Strategy Discussion ¹ sessions at Board of Directors meetings	CG	1- 1
(2)	Consider the appropriate form of Toray head office involvement in the execution of business at each group company from the viewpoint of balancing the effectiveness of group-wide governance with the dynamic decision-making of subsidiaries	CG	—
(3)	Expand opportunities for directors and corporate auditors to get the training they need to acquire the knowledge required to fulfill their responsibilities (excluding execution) and to fulfill their roles appropriately, including use of external programs	CG	—
(4)	Operate an effective internal control system Related main initiatives: 2-(4), 4-(2), 5-(4)	CG	1- 2

¹ Toray Group Business Strategy Discussions are opportunities to check the progress made on medium-term management issues, including initiatives for sustainability, and the direction of business operations.

2 Ethics and Compliance

Implementation leader

General Manager of Legal & Compliance Div.
(Department responsible for implementation:
Compliance Dept.)

Ensure all executives and employees uphold a sense of responsibility, fairness and high ethical standards, and act with a keen sense of compliance to maintain the trust of society

Related Material Issues for CSR

EC Ensuring Ethics and Compliance

CSR Roadmap Goals

- (1) No major cases throughout the Toray Group of non-compliance with or violation of bribery regulations, antitrust laws, etc.
- (2) Implement monitoring to raise ethical and compliance awareness throughout Toray Group
- (3) Enhance awareness-raising and educational activities relating to corporate ethics and compliance

Main Initiatives

	Material Issues	KPI
(1) Aim for no major cases of non-compliance with or violations of laws and regulations	EC	2-①
(2) Practice appropriate transactions based on free, fair, and transparent market competition	EC	—
(3) Prohibit any association with organized criminal groups or other anti-social forces and take a firm stance against them	EC	—
(4) Conduct internal legal audits and improve problems found in the audits Related main initiatives: 1-(4), 4-(2), 5-(4)	EC	2-②
(5) Appropriately operate a whistle-blowing system Related main initiatives: 8-(3), 9-(2)	EC	—
(6) Thoroughly disseminate the Ethics & Compliance Code of Conduct	EC	—
(7) Provide information and implement education on major laws and regulations and other compliance-related matters Related main initiative: 4-(1)	EC	2-③

3 Safety, Accident Prevention, and Environmental Preservation

Implementation leaders

General Manager of Manufacturing Div. (Dept. responsible for implementation: Environment & Safety Dept.): Main initiatives (1)-(5), (8)-(10)
General Manager of Engineering Div. (Dept. responsible for implementation: Second Engineering Dept.): Main initiatives (6), (7)

Ensure the safety and health of society and employees, and protect the environment in all business processes, from procuring raw materials and manufacturing to the supply and disposal of products

Related Material Issues for CSR

- CC Accelerating Climate Change Mitigation
 CE Promoting a Circular Economy
NP Taking a Nature-Positive Approach
 SF Ensuring Safety and Fire Accident Prevention

CSR Roadmap Goals

- (1) Place the highest priority on safety, thoroughly uphold the basic rules, and strive to prevent disasters, fires, and environmental accidents
- (2) Based on the Toray Group Sustainability Vision, reduce environmental impact, focusing on addressing climate change, effectively utilizing water resources, and protecting the environment and biodiversity

Main Initiatives

	Safety	Material Issues	KPI
(1)	Aim for zero major accidents	SF	3-①
(2)	Achieve world's best standard for safety management	SF	3-②
(3)	Create a comfortable working environment to ensure the safety and health of employees and to raise the level of safety and health	SF	—
	Accident Prevention		
(4)	Aim for zero fire and explosion accidents	SF	3-③
	Environmental Prevention		
(5)	Aim for zero environmental accidents	SF	3-④
(6)	Reduce greenhouse gas emissions per unit of revenue Related main initiatives: 7-(4)(5), 9-(4)	CC CE NP	3-⑤* 3-⑥
(7)	Reduce water consumption per unit of revenue Related main initiatives: 7-(3)(5)	CC CE NP	3-⑦*
(8)	Aim for a high waste recycling rate Related main initiatives: 7-(4)(5)	CC CE NP	3-⑧
(9)	Reduce atmospheric VOC ² emissions	NP	3-⑨
(10)	Pursue the greening of each site in consideration of the regulations of each country and region and harmony with the surrounding environment	CC NP	—

² Volatile organic compounds

* KPIs 3-⑤ and 3-⑦ are the same as targets in the Medium-Term Management Program, Project AP-G 2025

4 Product Quality and Safety

Implementation leader

General Manager of Quality Assurance Div.
(Dept. responsible for implementation: Quality Assurance Planning & Administration Dept.)

Provide safe, highly reliable products by striving to enhance management systems for product quality assurance and safety, and disclose appropriate information

Related Material Issues for CSR

QS Enhancing Product Quality and Safety

CSR Roadmap Goals

- (1) Enhance the group-wide frameworks for quality control, quality assurance, and product safety management
- (2) Achieve zero product accidents

Main Initiatives

	Material Issues	KPI
(1) Ensure that quality assurance compliance education is being fully implemented Related main initiative: 2-(7)	QS	4-①
(2) Enhance the auditing function to ensure improvement and continuity of Toray Group's overall quality assurance framework, and conduct auditing to check its effectiveness Related main initiatives: 1-(4), 2-(4), 5-(4)	QS	4-②
(3) Expand the use of the quality-related data management system with fraud prevention features across the entire Group	QS	—
(4) Promote the construction of systems in each business to facilitate deliberation, approval, and management related to quality assurance activities	QS	—
(5) Aim for zero product accidents	QS	4-③

5 Risk Management

Implementation leader

General Manager of Corporate Strategic Planning Div. (Department responsible for implementation: Corporate Strategic Planning Div.)

Under normal conditions, assess and analyze risks, and strive to mitigate and prevent them from materializing; and in the event of a crisis that could have a significant impact on management activities, strive to prevent damage from increasing, by bringing the situation quickly under control and normalizing conditions with a prompt and appropriate response

Related Material Issues for CSR

CG Strengthening Corporate Governance

CSR Roadmap Goals

- (1) Reduce risks by identifying and mitigating risks that affect the resolution of management issues across the Group
- (2) Enhance internal controls across the Group and raise the level of risk mitigation efforts
- (3) Instill greater risk management among employees by rolling out risk management education throughout the Toray Group

Main Initiatives

	Material Issues	KPI
Under normal conditions, manage risks by identifying and addressing two main types of risks:		
(1) (1) Priority risks for Toray Group, which are established based on periodic assessments every three years	CG	—
(2) (2) Specified risks, which are established based on constant monitoring, investigation and analysis of risk trends in and outside Japan		
Related main initiative: 9-(5)		
(2) In the event of an emergency, respond appropriately in accordance with the Risk Management Regulations	CG	—
(3) Follow up on progress made to address Toray Group's priority risks	CG	—
(4) Follow up on the status of internal control implementation at each group company concerned	CG	5-①
Related main initiatives: 1-(4), 2-(4), 4-(2)		
(5) Enhance cooperation with crisis management committees at Group sites outside Japan concerning crisis management under normal conditions	CG	—
(6) Implement risk reduction across the Group for information security risks such as cyberattacks and information leaks	CG	5-②
(7) Provide risk management education	CG	—

6 Communication

Implementation leader

General Manager of General Administration & Communications Div. (Department responsible for implementation: Corporate Communication Dept.)

Disclose corporate information in an active, fair and straightforward manner to maintain management transparency; and disclose information appropriately to encourage dialogue and cooperation with stakeholders including customers, employees, stockholders, business partners, consumers, mass media, and other parties

Related Material Issues for CSR

CS Developing in Collaboration with Stakeholders

CSR Roadmap Goals

- (1) In accordance with the Basic Policies to Promote Dialogue with Stakeholders and the Information Disclosure Principles, enhance communication activities with each stakeholder group to improve corporate value
- (2) Promote dialogue and collaboration with each stakeholder group, and reflect information obtained in management decisions in a timely and appropriate manner

Main Initiatives

	Material Issues	KPI
(1) Actively dispatch information on the Toray Philosophy and use education to ensure it is embraced throughout the Group	CS	—
(2) Enhance information dissemination utilizing owned media such as the Group's websites and social media accounts	CS	6-①
(3) Strive to ascertain customer needs and improve customer satisfaction	CS	—
(4) Facilitate exchange of opinions between management and employees, ascertain issues and problems, and reflect them in the Group's CSR initiatives	CS	6-②
(5) Expand opportunities for management to disseminate information and promote communication with stockholders and investors	CS	6-③
(6) Enhance communication with the mass media	CS	6-④

7 Contributing Solutions to Social Issues through Business Activities

Implementation leader

General Manager of Corporate Strategic Planning Div. (Department responsible for implementation: Corporate Strategic Planning Div., Environmental Solutions Dept., Sustainable Technology Dept.)

Leverage innovation to provide solutions to various social issues such as climate change, resource and energy use, water resource and natural environment conservation, improvement of medical care, and promotion of public health, thereby contributing to sustainable development for society

Related Material Issues for CSR

CC Accelerating Climate Change Mitigation

NP Taking a Nature-Positive Approach

CS Developing in Collaboration with Stakeholders

CE Promoting a Circular Economy

HL Committed to Healthier Lives

CSR Roadmap Goals

Leverage Sustainability Innovation Business³ to address social issues by growing businesses based on the provision of innovative technologies and advanced materials, and by creating new technologies

Main Initiatives

	Material Issues	KPI
(1) Expand revenues from Sustainability Innovation Business ³	CC CE NP HL CS	7-①*
(2) Expand contribution to CO ₂ reduction in the value chain Related main initiative: 9-(4)	CC CE NP CS	7-②*
(3) Expand water filtration throughput contribution by Toray's water treatment membranes Related main initiative: 3-(7)	CC CE NP CS	7-③*
(4) Conduct a wide variety of product research and technology development to help build a low-carbon, circular economy Related main initiatives: 3-(6)(8)	CC CE NP CS	—
(5) Contribute to the utilization of biomass in and recycling of plastic products, the spread of renewable energy and hydrogen, and the reuse of water resources Related main initiatives: 3-(6)(7)(8)	CC CE NP CS	—
(6) Contribute to countermeasures to public health risks, including infectious diseases, by developing and upgrading materials and products for personal protective equipment, as well as materials to protect environmental hygiene including of air and water	NP HL CS	—

³ Business areas and product lines that can help realize the Toray Group Sustainability Vision

* KPIs 7-① to 7-③ are the same as targets in the Medium-Term Management Program, Project AP-G 2025

Human Rights Promotion 8 and Human Resources Development

Implementation leader

General Manager of Human Resources Div.
(Department responsible for implementation:
Personnel Dept., Industrial Relations Dept.)

Respect human rights, provide safe and healthy workplaces for employees, secure and train personnel, and diversify while striving to protect employment

Related Material Issues for CSR

HL Committed to Healthier Lives

HR Respecting Human Rights and Promoting Human Resource Diversity

CSR Roadmap Goals

- (1) Respect human rights and ensure fair promotions based on merit throughout the Toray Group by eliminating discrimination based on factors such as race, creed, skin color, gender (including gender identity and sexual orientation), religion, nationality, language, ability/disability, physical attributes, assets, and place of birth
- (2) Ensure work environments take into consideration the health and diversity of employees and build a vibrant and rewarding workplace culture group-wide, working systematically to secure and train personnel

Main Initiatives

Human Rights Promotion	Material Issues	KPI
(1) Implement human rights education and training	HR	8-①
(2) Achieve the legally mandated employment rate of persons with disabilities	HR	8-②
Operate a whistle-blowing system and consultation service at each Toray Group company to promptly and appropriately respond to any problem reported in an effort to prevent or mitigate any negative impact on human rights Related main initiatives: 2-(5), 9-(2)	HR	—
Human Resources Development		
As part of career development initiatives for core staff, enhance the use of the career path worksheets included in the personnel information system	HR	8-③
(5) Systematically hire, develop, and appoint core staff outside Japan	HR	—
(6) Create workplace environments in which women will feel comfortable performing their duties	HL HR	—
(7) Promote the use and improve the operation of measures to support employee work-life balance	HR	8-④ 8-⑤
(8) Reduce overtime work exceeding standard hours	HL HR	8-⑥
(9) Encourage the use of annual paid leave by labor union members	HL HR	8-⑦

9 Establishing Sustainable Supply Chain

Implementation leader

General Manager of Purchasing & Logistics Div. (Department responsible for Implementation: Purchasing & Logistics Planning & Administration Dept.)

To establish a sustainable supply chain, work closely with suppliers, processing vendors, subcontractors, customers and distribution companies to implement socially responsible procurement throughout the supply chain in order to ensure responsible practices with respect to environmental preservation and human rights

Related Material Issues for CSR

CS Developing in Collaboration with Stakeholders

SC Establishing Sustainable Supply Chain

CSR Roadmap Goals

To ensure socially responsible procurement by the Toray Group, work with suppliers, processing vendors, subcontractors and other business partners to implement CSR initiatives that include compliance with laws and regulations, amelioration of global warming, environmental conservation, and respect for human rights

Main Initiatives

	Material Issues	KPI
(1) Request suppliers to comply with the Toray Group CSR Procurement Guidelines, and strive to ascertain the status of each company's CSR initiatives	CS SC	9-①
(2) Identify high-risk areas that may have a negative impact on the environment and human rights, and promote supply chain due diligence to implement measures to prevent or mitigate the identified risks Related main initiatives: 2-(5), 8-(3)	CS SC	9-②
(3) Promote procurement of responsibly sourced materials such as non-conflict minerals and sustainable palm oil	CS SC	9-③
(4) Reduce CO ₂ emissions intensity from distribution activities Related main initiatives: 3-(6), 7-(2)	CS SC	9-④
(5) Continually investigate and ascertain logistics risks related to natural disasters such as typhoons and heavy rains, and strive to reduce risks Related main initiative: 5-(1)	CS SC	9-⑤
(6) Continually work to reduce the environmental impact and improve the quality of distribution activities	CS SC	—
(7) In accordance with the Declaration of Voluntary Activities for the White Logistics Movement, ⁴ contribute to sustainable logistics, for instance by selecting logistics companies that are engaged in working style reform, etc.	CS SC	—

⁴ A movement aimed at ensuring stable logistics function necessary for people's lives and for industrial activities while also contributing to economic growth in response to the shortage of truck drivers

10 Social Contribution Activities as a Good Corporate Citizen

Implementation leader

General Manager of General Administration & Communications Div. (Department responsible for implementation: CSR Operations Dept.)

Proactively participate in local communities and the larger society in order to contribute to development in a way befitting a good corporate citizen

Related Material Issues for CSR

CS Developing in Collaboration with Stakeholders

CSR Roadmap Goals

- (1) Promote social contribution activities in ways that are unique to Toray, voluntarily and continuously engaging in the priority areas of “science and technology promotion,” “environment and communities,” and “health and welfare”
- (2) As a responsible member of society, implement social contribution activities that help to solve the global issues addressed by the SDGs and other initiatives

Main Initiatives

	Material Issues	KPI
(1) Implement social contribution activities at the appropriate scale	CS	10-①
(2) Actively engage in social contribution activities that are distinctive of Toray Group, focusing on science and technology promotion	CS	—
(3) Promote active planning and implementation of voluntary social contribution activities at each Group site, on an ongoing basis	CS	10-②
(4) Implement a range of educational support activities that capture the interest and curiosity of youngsters through school visits and company tours focusing on areas such as science, the environment, and career opportunities, thereby helping to inspire upcoming generations	CS	10-③
(5) Educate employees at Toray Group in order to instill the significance of social contribution	CS	—
(6) Support the improvement and development of science and technology and the promotion of science education through the activities of Toray science foundations in and outside Japan	CS	—
(7) Share information with internal and external stakeholders on Toray Group's social contribution activities via websites and other means	CS	—

CSR Roadmap 2025 KPI List

Reporting Scope: ※1: Toray Group Companies, ※2: Toray Industries, Inc.

	Key Performance Indicators (KPIs)	Targets			Reporting Scope
		Fiscal 2023	Fiscal 2024	Fiscal 2025	
1 Corporate Governance	❶ Toray Group Business Strategy Discussion sessions held at Board of Directors meetings (times)	8	8	8	※ 1
	❷ Board of Directors' positive assessment of the implementation of the Basic Policy for Internal Control Systems (%)	90%	90%	90%	※ 1
2 Ethics and Compliance	❶ Number of major violations of laws or ordinances	0	0	0	※ 1
	❷ Group companies implementing internal legal audits (%)	●Toray Industries, Inc.: 100% ●Group companies in and outside Japan: Implemented focusing on high-risk companies			※ 1
	❸ Group companies providing information and implementing education on major laws and regulations and other compliance-related matters (%)	100%	100%	100%	※ 1
3 Safety, Accident Prevention, and Environmental Preservation	❶ Number of major accidents	0	0	0	※ 1
	❷ Achievement for world's best standard for safety management (not exceeding 0.05 frequency rate for occupational accidents resulting in lost work time)	No more than 0.05	No more than 0.05	No more than 0.05	※ 1
	❸ Number of fire and explosion accidents	0	0	0	※ 1
	❹ Number of environmental accidents	0	0	0	※ 1
	❺ Reduction of greenhouse gas emissions per unit of revenue (%)	At least 40% lower than fiscal 2013 (Fiscal 2025)			※ 1
	❻ Increase in solar power generation capacity (%)	At least 10% higher than fiscal 2022 (Fiscal 2025)			※ 1
	❼ Reduction of water usage per unit of revenue (%)	At least 40% lower than fiscal 2013 (Fiscal 2025)			※ 1
	❽ Waste recycling rate (%)	At least 86%	At least 87%	At least 87%	※ 1
	❾ Reduction of atmospheric VOC emissions (%)	At least 70% lower than fiscal 2000	At least 72% lower than fiscal 2000	At least 72% lower than fiscal 2000	※ 1
4 Product Quality and Safety	❶ Quality assurance compliance education (% of people trained)	100%	100%	100%	※ 1
	❷ Quality and product safety audit implementation rate (%)	100%	100%	100%	※ 1
	❸ Number of product accidents	0	0	0	※ 1
5 Risk Management	❶ Group companies implementing self-assessment and results follow-up using the internal control checklist (%)	35%	70%	100%	※ 1
	❷ Group companies implementing information security evaluation and risk reduction (%)	35%	70%	100%	※ 1

	Key Performance Indicators (KPIs)	Targets			Reporting Scope
		Fiscal 2023	Fiscal 2024	Fiscal 2025	
6 Communication	❶ Number of corporate website page views (per month)	1 million page views	1 million page views	1 million page views	※ 2
	❷ Interviews conducted to exchange opinions within the company (rate of progress)	(First round) 100% completed	(Second round) 30%	(Second round) 60%	※ 1
	❸ Interviews with key investors in which management participates (number)	Cumulative total of 120	Cumulative total of 120	Cumulative total of 120	※ 1
	❹ News releases (number)	200	200	200	※ 1
7 Contributing Solutions to Social Issues through Business Activities	❶ Revenues from Sustainability Innovation Business	1,600 billion yen (Fiscal 2025)			※ 1
	❷ Contribution to CO ₂ reduction in value chain ³	15 times compared to fiscal 2013 (Fiscal 2025)			※ 1
	❸ Contribution of Toray water treatment products ⁴	2.9 times compared to fiscal 2013 (Fiscal 2025)			※ 1
8 Human Rights Promotion and Human Resources Development	❶ Group companies implementing human rights education and training (%)	100%	100%	100%	※ 1
	❷ Group companies that have achieved legally mandated employment rate of persons with disabilities (%)	100%	100%	100%	Toray Group (Japan)
	❸ Career development initiatives for core staff using the personnel information system (use of career path worksheets) (% of employees)	Year-on-year increase	Year-on-year increase	Year-on-year increase	※ 1
	❹ Employees returning to work from childcare leave (%)	100%	100%	100%	Employees of Toray Industries, Inc.
	❺ Male employees taking childcare leave or other leave for the same reason (%)	Year-on-year increase	Year-on-year increase	Year-on-year increase	Employees of Toray Industries, Inc. (not including those posted outside Japan)
	❻ Reduction in employees who exceed 45 hours/month of non-statutory working hours	Year-on-year reduction	Year-on-year reduction	Year-on-year reduction	※ 2
	❼ Available annual paid leave used by labor union members (%)	90%	90%	90%	※ 2
9 Establishing Sustainable Supply Chain	❶ Suppliers agreeing to the Toray Group CSR Procurement Guidelines (%)	At least 75%	At least 85%	At least 90%	※ 1
	❷ Implementation of supply chain due diligence (% of cases)	At least 60% (Fiscal 2024)		At least 90%	※ 1
	❸ Oil procurement needs met by palm oil sourced in a manner that is environmentally responsible and respectful of human rights (% of oil purchased, by value)	At least 70% (Fiscal 2024)		At least 90%	※ 2
	❹ Reduction in CO ₂ emissions per unit of sales from distribution activities (year-on-year)	1%	1%	1%	Toray Group (Only specified consigners, Toray Industries, Inc., TAF)
	❺ Key external inventory sites that have been assessed for natural disaster risk and have implemented measures to mitigate serious risks (%)	At least 60%	At least 75%	At least 90%	※ 2
10 Social Contribution Activities as a Good Corporate	❶ Social contribution expenditure (% change from average expenditure over last six years)	100% or higher	100% or higher	100% or higher	※ 1
	❷ Social contribution activities (number)	2,500 or more	2,500 or more	2,500 or more	※ 1
	❸ Beneficiaries of educational support activities such as science classes for schools and career education (number)	15,000 or more	15,000 or more	15,000 or more	※ 1

³ Toray calculates the CO₂ emissions reduced throughout the value chain of products in accordance with the chemical sector guidelines of the Japan Chemical Industry Association, the International Council of Chemical Associations (ICCA), and the World Business Council For Sustainable Development (WBCSD).

⁴ Toray calculates water treated with Toray's water treatment membranes by multiplying the amount of fresh water that its ultrafiltration water treatment membranes can produce per day, including reverse osmosis (RO), ultrafiltration (UF) and membrane separation bioreactors (MBR), by the number of membrane elements sold.

Relationship between CSR Guidelines and SDGs and ESG Categories

CSR Guideline			1 Corporate Governance	2 Ethics and Compliance	3 Safety, Accident Prevention, and Environmental Preservation	4 Product Quality and Safety	5 Risk Management	6 Communication	7 Contributing Solutions to Social Issues through Business Activities	8 Human Rights Promotion and Human Resources Development	9 Establishing Sustainable Supply Chain	10 Social Contribution Activities as a Good Corporate Citizen
SDGs and ESG Categories												
SDGs		1 NO POVERTY										●
		2 ZERO HUNGER							●			●
		3 GOOD HEALTH AND WELL-BEING			●				●			●
		4 QUALITY EDUCATION								●		●
		5 GENDER EQUALITY								●	●	●
		6 CLEAN WATER AND SANITATION			●				●		●	●
		7 AFFORDABLE AND CLEAN ENERGY			●				●			
		8 DECENT WORK AND ECONOMIC GROWTH			●					●	●	●
		9 INDUSTRY, INNOVATION AND INFRASTRUCTURE			●				●			●
		10 REDUCED INEQUALITIES								●	●	●
		11 SUSTAINABLE CITIES AND COMMUNITIES			●		●					●
		12 RESPONSIBLE CONSUMPTION AND PRODUCTION			●	●		●	●		●	●
		13 CLIMATE ACTION			●		●	●	●		●	●
		14 LIFE BELOW WATER			●				●		●	●
		15 LIFE ON LAND			●				●		●	●
		16 PEACE, JUSTICE AND STRONG INSTITUTIONS	●	●	●					●	●	●
		17 PARTNERSHIPS FOR THE GOALS						●				●
ESG Categories		Environment			●				●		●	●
		Social			●	●		●	●	●	●	●
		Governance	●	●		●	●					

External Evaluation

Evaluations from the Perspective of Socially Responsible Investment

Included in Dow Jones Sustainability™ Asia / Pacific Index

Toray Industries is included in the Dow Jones Sustainability™ Asia/Pacific Index. This stock index measures sustainability performance at companies identified by S&P Global.



Listed in The S&P Global Sustainability Yearbook 2024

Toray Industries is among the 759 global leaders in sustainability listed in The S&P Global Sustainability Yearbook 2024 published by S&P Global.



Included in FTSE4Good Index / FTSE Blossom Japan Index / FTSE Blossom Japan Sector Relative Index

Toray Industries is included in the FTSE4Good Index Series, the FTSE Blossom Japan Index Series, and the FTSE Blossom Japan Sector Relative Index, all developed by FTSE Russell, a wholly owned subsidiary of the London Stock Exchange Group.



Received AAA rating in MSCI ESG Ratings / Included in MSCI Japan ESG Select Leaders Index

Toray Industries has received the highest ESG rating of AAA in the MSCI ESG Ratings and is included in the MSCI Japan ESG Select Leaders Index. MSCI provides institutional investors (from pension funds to hedge funds) across the globe with various tools to support investment decisions.



Notes:

- 1 The use by Toray Industries, Inc. of any MSCI ESG Research LLC or its Affiliates ("MSCI") data, and the use of MSCI logos, trademarks, service marks or index names herein, do not constitute a sponsorship, endorsement, recommendation, or promotion of Toray Industries, Inc. by MSCI. MSCI services and data are the property of MSCI or its information providers, and are provided 'as-is' and without warranty. MSCI names and logos are trademarks or service marks of MSCI.
- 2 The inclusion of Toray Industries, Inc. in any MSCI Index, and the use of MSCI logos, trademarks, service marks or index names herein, do not constitute a sponsorship, endorsement or promotion of Toray Industries, Inc. by MSCI or any of its affiliates. The MSCI indexes are the exclusive property of MSCI. MSCI and the MSCI index names and logos are trademarks or service marks of MSCI or its affiliates.

Attained Highest DBJ Environmental Rating

In recognition of its outstanding environmental measures, Toray Industries has acquired the highest environmental rating level awarded by the Development Bank of Japan Inc. (DBJ).

This marks the fourth consecutive year the Company has attained this top-level rating.



In June 2024, the Company received financing under the DBJ Environmentally Rated Loan Program, with rating results indicating "excellent advanced environmental measures."

Recognized by CDP

In the 2023 survey conducted by CDP, a global non-profit environmental organization, Toray Industries received an "A-" rating in the category of Water Security and a "B" rating in the category of Climate Change.

External Evaluation of Information Disclosure to Investors

In the “Investor Relations” section of its corporate website, Toray Industries provides information about its management policies, strategies, financial data and results for stockholders and investors. In an effort to disclose information fairly, the Company promptly posts financial data and presentation materials, including English translations, used in its briefings for institutional investors. In fiscal 2023, Toray's publications were evaluated externally by a number of organizations, as shown below.

● Website Evaluations

Organization details	Evaluations
Daiwa Investor Relations Co., Ltd.	2023 Internet IR Awards Award for outstanding website
Nikko Investor Relations Co., Ltd.	2023 All Japanese Listed Companies' Website Ranking (AAA Website in overall ranking)
GOMEZ	Silver Prize (top in textile sector) in IR Site Ranking 2023

● Annual Report Evaluation

Evaluations
LACP 「2022/23 Vision Awards」 Gold Award, Technical Achievement Award

Toray Group Sustainability Vision



Providing Innovative Technologies and Advanced Materials to Help Address Global Issues

At the Toray Group, we consider sustainability to be the most important global issue of the 21st century. Today, climate change, water scarcity, and resource depletion are just some of the mounting environmental challenges facing the planet. With the global population expected to increase to some ten billion people by 2050 and aging demographics on the increase worldwide, an interlinked web of global issues are posing ever-graver problems.

Since Toray's founding in 1926, we have always believed that materials can change lives, true to our fundamental corporate principle of contributing to society. At the Toray Group, we make it our mission to deliver innovative technologies and advanced materials that provide real solutions to the challenges the world faces with balancing development and sustainability.

We are convinced that Toray can continue to grow without negatively impacting global sustainability. By delivering on our corporate philosophy of "contributing to society through the creation of new value with innovative ideas, technologies and products," we will do our utmost to address global issues, including the goals of the Paris Agreement and the United Nations Sustainable Development Goals (SDGs), while working closely with our business partners worldwide.

Four Perspectives of the World as Envisioned by the Toray Group in 2050



**A net zero emissions world,
where greenhouse gas
emissions are completely
offset by absorption**



**A world where resources are
sustainably managed**



**A world with a restored natural
environment, with clean water
and air for everyone**



**A world where everyone
enjoys good health and
hygiene**

Progress against the Commitments for 2030

The Toray Group is striving to achieve the following quantitative targets.

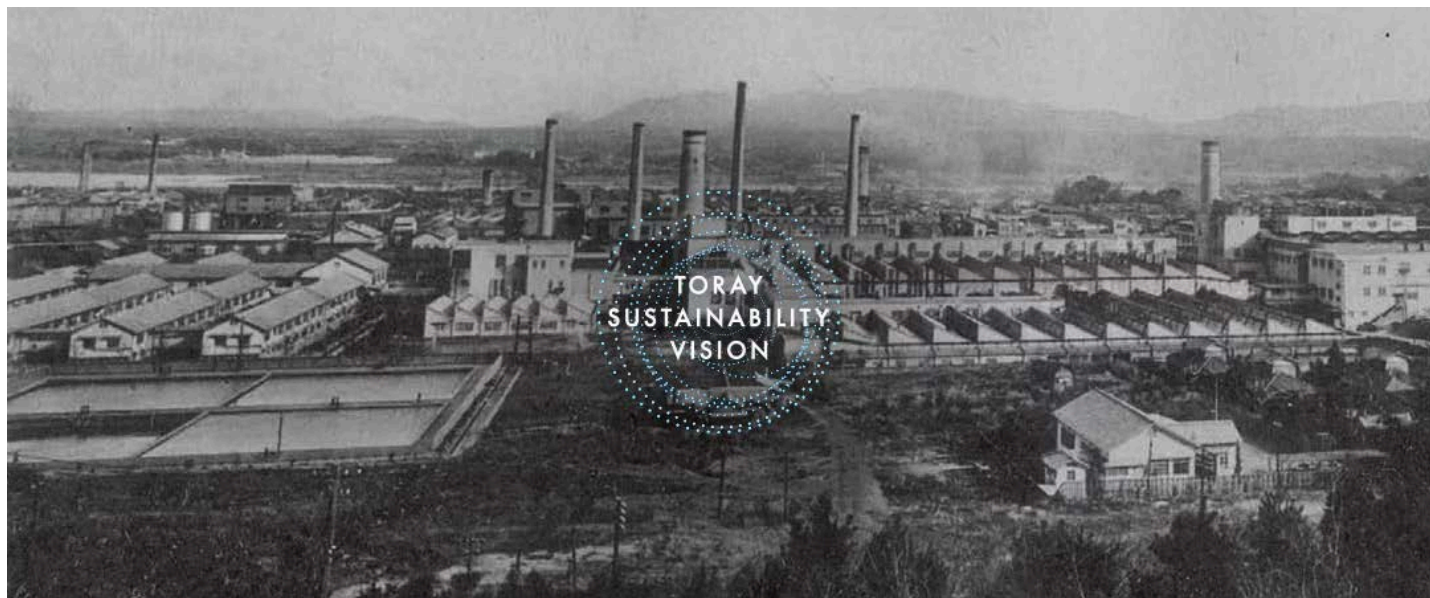
		FY 2013 Actual (Baseline) (J-GAAP)	FY 2023 Actual ⁸	FY 2030 Target ⁸
Supply of Sustainability Innovation products ¹		562.4 billion yen	2.3-fold	4.5-fold
CO ₂ emissions avoided in value chain ²		38 million tons	10.3-fold	25-fold
Water filtration throughput contribution by Toray's water treatment membranes ³		27.23 million tons/day	2.7-fold	3.5-fold
Greenhouse gas emissions in production activities ⁴	Per unit of revenue ^{6&7} across the Toray Group	356 tons/100 million yen	36% reduction ⁹	50% or more reduction
	Greenhouse gas emissions of Toray Group in Japan ^{5&6}	2.45 million tons	26% reduction ⁹	40% or more reduction
Water usage in production activities	Per unit of revenue ⁷ across the Toray Group	14,693 tons/100 million yen	35% reduction ⁹	50% or more reduction

- 1 (1) Products that accelerate measures to counter climate change; (2) products that facilitate sustainable, recycling-based use of resources and production; (3) products that help provide clean water and air and reduce environmental impact; and (4) products that help deliver better medical care and hygiene for people worldwide
- 2 Toray calculates the CO₂ emissions reduced throughout the value chain of products in accordance with the chemical sector guidelines of the Japan Chemical Industry Association, the International Council of Chemical Associations (ICCA), and the World Business Council for Sustainable Development (WBCSD).
- 3 Water treated annually with Toray water treatment membranes. It is calculated by multiplying the amount of fresh water that the Toray membranes can produce per day, including reverse osmosis (RO), ultrafiltration (UF) and membrane separation bioreactors (MBR), by the number of membrane elements sold.
- 4 With the use of renewable energies and other zero emission power sources rising worldwide, the Toray Group aims to employ zero-emission power sources at a rate equivalent to or better than the targets in each country by fiscal 2030.
- 5 In Japan, Toray works to surpass the reduction target set for the industrial sector by the Japanese government (absolute emissions reduced by 38%) in its comprehensive plan (Cabinet decision on October 22, 2021) based on Japan's Act on Promotion of Global Warming Countermeasures.
- 6 The calculation method has been changed to multiplying the degree of financial control Toray Industries has over the individual subsidiary, in accordance with the GHG protocol, the international standard.
- 7 FY2013 results are based on net sales (J-GAAP)
- 8 Each relative ratio is calculated in comparison to FY 2013.
- 9 The calculation of the figure for the baseline of FY 2013 includes data for companies that joined the Toray Group in FY 2014 or later.

Toray Group Sustainability Vision

Download [PDF](#)

History



Companies are Public Institutions

Since our founding, we at Toray have assumed the role of a public institution and have executed our corporate activities with the foremost goal of contributing to society. Below, we introduce initiatives taken throughout Toray's history that anticipated the modern sustainability movement, while examining our insights and the historical context.

Our founder's slogan was "To generate major benefits for the nation and the economy."

Context

The time was between the First and Second World Wars.

Japan was in the process of transforming from an agricultural to an industrial nation but suffered from a lack of foreign exchange reserves and products for export. To complicate matters, on September 1, 1923, the Great Kanto Earthquake struck 1.9 million people in what is still the greatest natural disaster in Japanese history. This ushered in a period of extended stagnation for the Japanese economy.

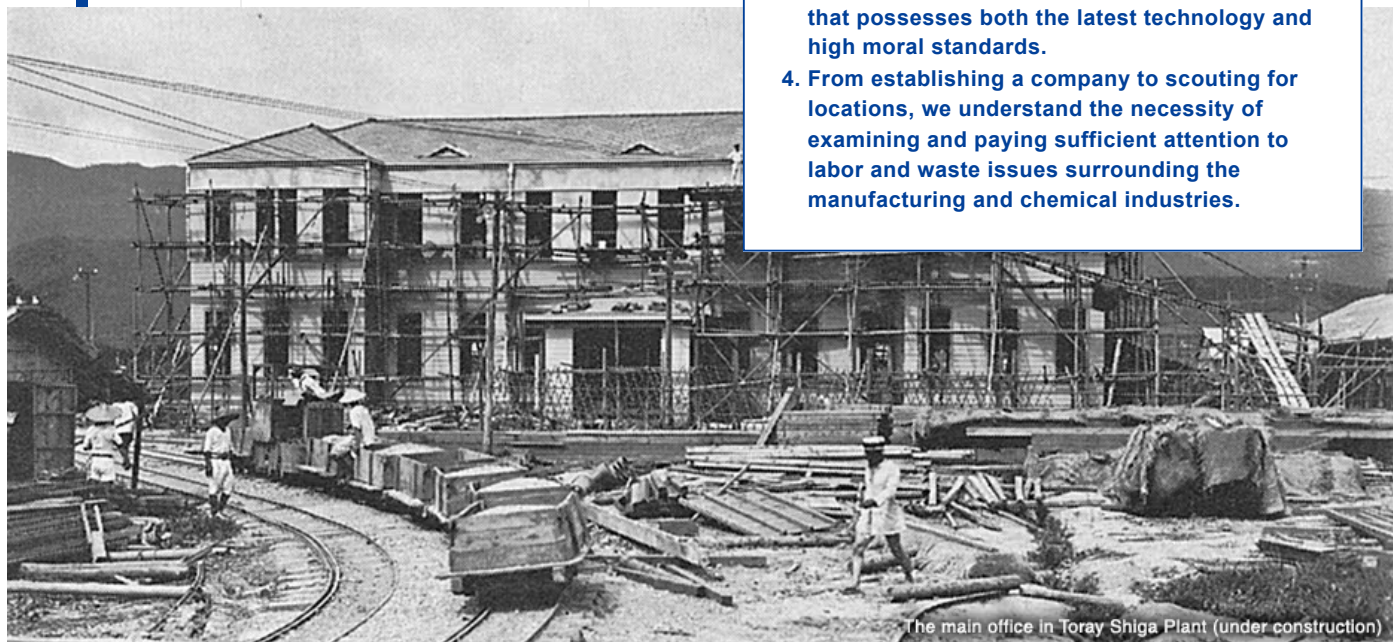
TORAY'S Episode

Toyo Rayon's founding objective was to spur major development of the nation and the economy.

At the time, Japan relied heavily on imports of wool and raw cotton for its clothing. Yunosuke Yasukawa, Toyo Rayon's first chairman and the managing director of what was then Mitsui & Co., believed that by achieving domestic production of rayon made from locally sourced pulp, Japan would be able to reduce its dependence on foreign imports, provide better clothing for the nation, and secure much-needed foreign currency. Following Toyo Rayon's founding in 1926, newly-hired technicians acquired technical knowledge and skills from foreign engineers, while the company dedicated itself to improving equipment and facilities, and to developing new products.

Toray Insights

1. We will develop the rayon business to become a major contributor to the nation and the economy, both by achieving self-sufficiency in clothing production and in helping secure foreign currency.
2. Through young Japanese technicians' early adoption of technical knowledge from foreign engineers and the in-house development of products, facilities, and equipment, we will establish our own production technology and secure competitive strength internationally.
3. Based on the belief that "the plant should be a place for the cultivation of human character," our first Shiga Plant manager, Asahiko Karashima (later our second chairman) has focused on educating and nurturing the abilities of our employees while creating a model plant that possesses both the latest technology and high moral standards.
4. From establishing a company to scouting for locations, we understand the necessity of examining and paying sufficient attention to labor and waste issues surrounding the manufacturing and chemical industries.



The main office in Toray Shiga Plant (under construction)

Context

After Japan's defeat in the Pacific War, the country set out to rebuild its economy.

Three years and eight months after the outbreak of the Pacific war in December 1941, the Second World War finally ended with Japan's defeat in August 1945. Following the war, the Supreme Commander of the Allied Powers (GHQ) led efforts to democratize Japan, and the Japanese economy, after suffering the devastating ravages of war, set out on the road to recovery.

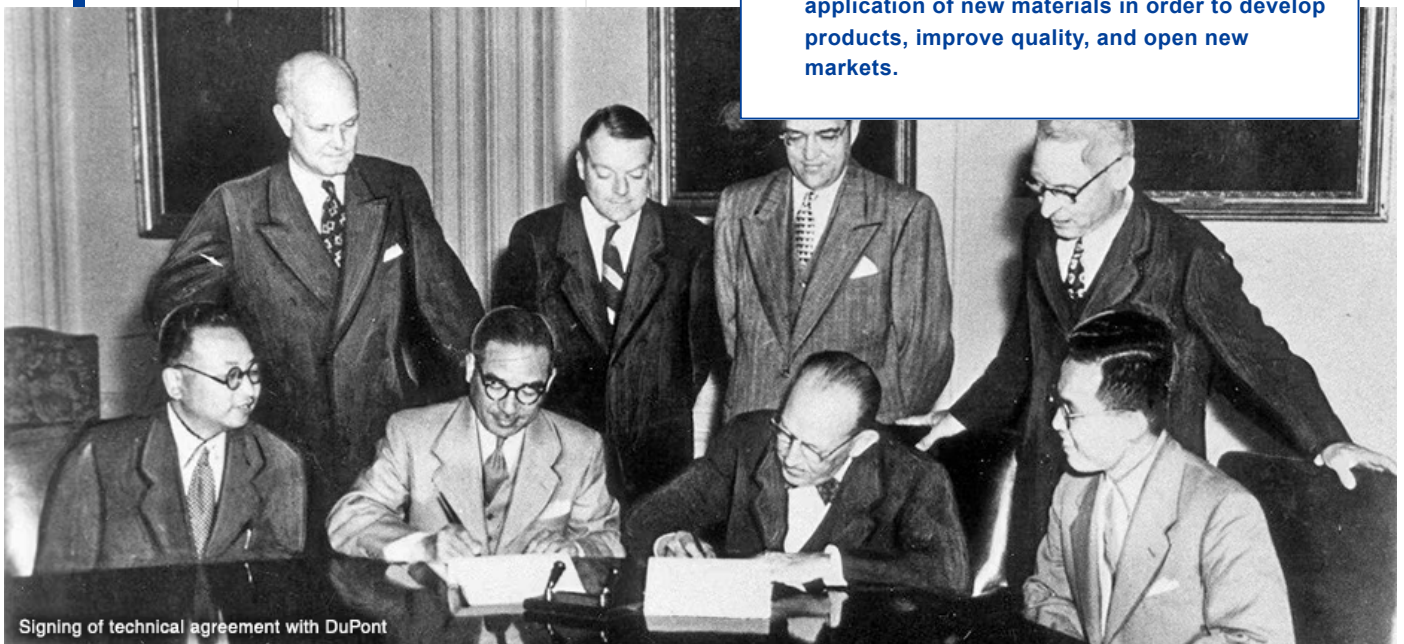
TORAY'S Episode

Began a technology partnership with DuPont following the development of original nylon processing technology.

Toyo Rayon succeeded in the synthesis and melt spinning of nylon 6 fiber in 1941 but did not begin plans for its mass production until after the war. In 1951, Toyo Rayon concluded a patent licensing agreement with America's DuPont and began full-scale production of nylon fiber.

Toray Insights

1. **After getting started with nylon production, we can expand our portfolio to include polyester and other fibers.**
2. **We have entered into a technical partnership with DuPont, as we have both been independently developing Nylon 6, and will begin turning our attention to the export market thanks to the added value achieved through high-order processing.**
3. **We have realized the essential importance of collaborating with customers on each application of new materials in order to develop products, improve quality, and open new markets.**



Signing of technical agreement with DuPont

Established the company motto, "Toyo Rayon contributes to communities"

Context

After making a miraculous recovery, the Japanese economy entered a period of rapid economic growth.

In 1954, the Japanese economy launched into a period of remarkable growth. At the time, people were hungry for prosperity, and economic development became the nation's top priority. Globally, this period saw the beginning of the Cold War, as capitalist and communist nations began their battle for global dominance.

TORAY'S Episode

In 1955, Toyo Rayon expressly laid out a company motto reflecting the management philosophy passed down since its founding. This was revisited in 1986, after which a new corporate motto of "Contributing to society through the creation of new value with innovative ideas, technologies and products." was established. In 1960, Toyo Rayon set up a foundation to promote and support basic science in Japan. In 1993 and 1994, it established independent science foundations in three Southeast Asian nations, where the company had expanded early on.

Toray Insights

1. From the start, Toyo Rayon's main business objective has been to improve people's quality of life by helping develop the nation and the economy; increasing profit has been the means to achieve this.
2. The dramatic expansion of Toray's achievements is due to the support it has received from communities in recognition of its efforts to implement its corporate principle of "contributing to society."
3. As a resource-poor nation, Japan will prosper only if its manufacturing industry is further developed and primary importance is placed on promoting and developing the country's science and technology.



Toyo Rayon Science Foundation First Award Presentation Ceremony (Mar.1961)



Malaysia Toray Science Foundation Inaugural Ceremony (Nov. 1993)

Context

With the rise of mass consumerism, Japan emerged as a dominant economic power.

Companies from developed nations laid the technical foundation of the manufacturing industries that supported Japan's postwar recovery. Furthermore, the manufacturing industry was able to build its export competitiveness under a fixed exchange rate of 360 yen to the dollar. By 1986 Japan had grown to just below the US as the world's second largest economy by nominal GDP.

TORAY'S Episode

A robust R&D infrastructure for developing new products through original technology

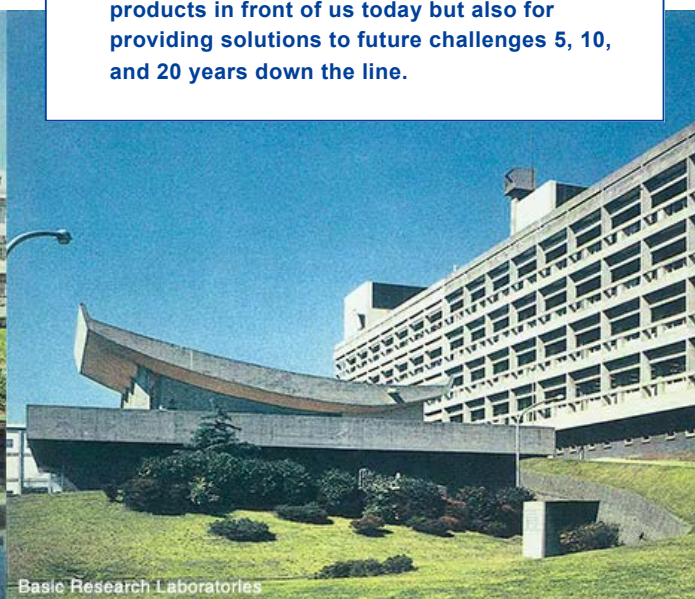
Toray's management understood the essential nature of producing new products and technologies based on the results of its own research and technical developments. To achieve this, the company made sure not to rely on technologies borrowed from the West or other companies and circumvented competition from domestic and international firms by differentiating its products and services. In 1956, Toray established the Central Research Laboratory in Otsu (Shiga Prefecture) and, in 1962, its Basic Research Laboratory in Kamakura (Kanagawa Prefecture). From here, it devoted itself to developing new products. At the Basic Research Laboratory, Toray anticipated strong results from the creative research and technical developments it achieved based on fundamentals in independent research.

Toray Insights

1. We have realized the importance of creating new growth businesses through independent basic research in order for Toray to continue to grow.
2. As a manufacturing company, strengthening core technologies and basic research is a pivotal and ongoing management issue. Japan's national prosperity also depends on its ability to produce industrial products, making R&D vitally important to the country as a whole.
3. We recognize the importance of undertaking ambitious research not only for improving the products in front of us today but also for providing solutions to future challenges 5, 10, and 20 years down the line.



Central Research Laboratories



Basic Research Laboratories

Context

Dramatic economic growth for both the Japanese and global economies.

The global economy during the 1960's experienced a period of remarkable growth that lasted until the Nixon and Oil shocks of 1971 and 1973, respectively. In Japan, household appliances, automobiles and other consumer durables became widespread in society giving birth to an era of mass consumption. Following the Tokyo Olympics in 1964, the Japanese economy temporarily stagnated after a round of investments in infrastructure but rebounded shortly thereafter, leading to a wave of economic prosperity lasting until 1970.

TORAY'S Episode

Toray's plastics business blossoms into the company's 2nd operational pillar.

Along with Toray's original development of nylon and acrylic fibers, the company licensed polyester technology from the U.K. firm ICI in 1957. With this agreement, Toray became one of the world's leading manufacturers of all three major types of synthetic fiber in the 1960's.

This period saw a rapid growth in plastics with the expansion of the household appliance and automotive industries. Against this backdrop, Toray found success with a business model of guaranteed quality backed by constant exploration of new materials and applications.

Toray Insights

1. We recognize that "materials, which form the base of all products, have the power to intrinsically change society."
2. As a materials manufacturer, Toray pioneers new markets and applications alongside its clients, while offering new and innovative materials with a mission to meet the demands of both its customers and society.



Signing of technical agreement about polyester with ICI (Feb. 1957)



Polyester Film Lumirror™

Establishing an overseas manufacturing subsidiary through technology transfers

Context

Countries around the world pursued economic growth through the development of their textile industries.

In the 1960's, America pressured the Japanese textile industry - heavily dependent on US exports - to restrict its international output. Conversely, developing nations hoping to achieve economic independence pursued economic growth through the development of their manufacturing industries. Many countries began implementing industrialization policies. Some looked to Japan, hoping to transfer its fiber and textile technologies given the rapid growth the country had displayed over the past several decades.

TORAY'S Episode

Toray's first joint venture in Thailand in 1963 and the transfer of its technology.

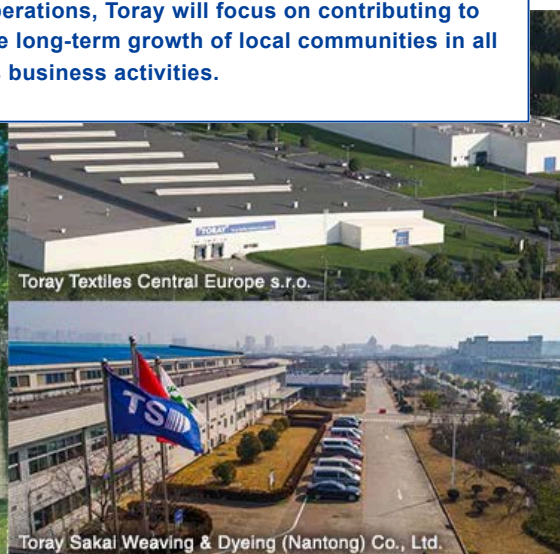
Toray established its first joint venture in Thailand with a business that provided integrated spinning, weaving and dyeing of polyester-rayon fabric. Toray's original objective in setting up this venture was to secure a place to export its staple polyester fiber but began overseas production of yarn and raw fiber at about the same time.

Toray Insights

1. While considered a sunset industry by some, we believe that globally the fibers and textiles trade is growing and intend to further expand our business.
2. We will continue to create advanced materials through innovative, cutting-edge research and technical developments, while building a business centered on high value-added products. We will also achieve dramatic reductions in costs by developing transformative operational processes.
3. To best address matters such as demand and competitive pricing, we will carry out production at the most suitable overseas locations and develop product applications according to local needs. Profit received through our global operations will be reinvested in the research and development of new innovative processes and the next generation of advanced materials, creating an on-going cycle of development and growth.
4. Concerning its overseas expansion of operations, Toray will focus on contributing to the long-term growth of local communities in all its business activities.



Thai Toray Textile Mills Public Company Limited



Toray Textiles Central Europe s.r.o.

Toray Sakai Weaving & Dyeing (Nantong) Co., Ltd.

Context

Japan and the world find the limits of economic growth.

Within an ongoing climate of rapid economic growth, Japan faced a financial recession in 1964 and 1965. Among companies in the fibers and textiles industry this was known as the "Nylon shock." In the 1970's the global economy suffered two additional shocks with the Nixon and oil crises that occurred in 1971 and 1973.

TORAY'S Episode

A two-pronged strategy of internationalization and diversification

After surviving the Nylon shock, Toray foresaw the eventual maturation of the domestic textile market and began taking measures to expand and develop its overseas operations. The company further sought to diversify into new businesses. To mark this occasion, Toray rebranded with a new name, Toray Industries, Inc., and accelerated the internationalization of its fibers and textiles operations, while diversifying into plastics and other new ventures.

Toray Insights

1. We are beginning plans to expand our plastics business in addition to our core synthetic fiber business.
2. Toray is gaining wide recognition with its Toray Nylon and Toray Teton product lines.
3. As part of our corporate redesign, Toray is launching an internal organization for developing new businesses, while simultaneously accelerating the expansion of our overseas fibers and textiles business.



Expansion of Toray's carbon fiber business for the next generation of aircraft structures.

Context

Fluctuation in exchange rates due to Japan-US trade frictions and international compromise.

In 1980, Japan sunk into its longest recession since World War Two, which lasted for three years. It began with the second oil shock brought on by the Iranian revolution. Domestic demand stagnated, but with a booming American economy, Japan expanded its US-bound exports, helping to rekindle the economy. At the same time, this sparked trade tensions between the US and Japan. At the 1985 G7 summit, the Plaza Accord was signed, further exacerbating the yen's appreciation.

TORAY'S Episode

Developing strong and heat-resistant high-performance carbon fibers.

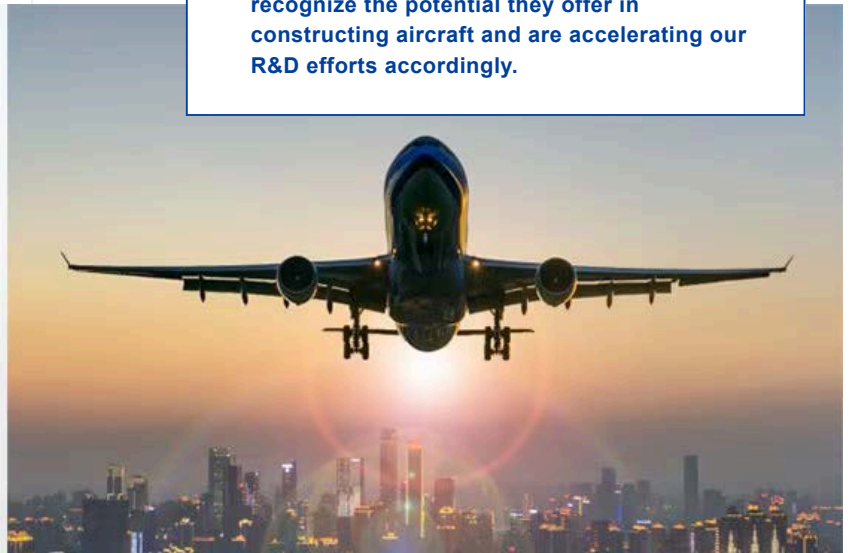
After successfully developing polyacrylonitrile-based carbon fiber, Toray initiated its test production in quantities of a few hundred grams per month in 1970. Thanks to a boost from the "black shaft" revolution, Toray's production saw stable growth early on that translated into the fiber's adoption as a primary structural material in aircraft in the 1980's. Today, the Toray Group manufactures its carbon fiber around the globe in Japan, France, America, and Korea, earning it the number 1 spot globally in terms of both quality and quantity.

Toray Insights

1. **Cultivating and expanding a new core business on top of our plastics, fibers, and textiles operations is essential to Toray's long-term ongoing growth.**
2. **Toray's polyacrylonitrile-based carbon fiber is increasingly being used as a light-weight material with the potential to reduce the environmental burden of textiles.**
3. **Given the strong, lightweight, and rust-proof qualities of carbon fiber composite materials, we recognize the potential they offer in constructing aircraft and are accelerating our R&D efforts accordingly.**



Carbon Fiber TORAYCA™



Increased orders for reverse osmosis (RO) membranes used at water treatment facilities

Context

Many regions still lack access to clean water in the 21st century.

Research and development of membranes for reverse osmosis began in the 1960's, with many envisioning their application in seawater desalination. In recent years, membrane treatment methods have proven to offer much lower treatment costs than conventional evaporation methods, leading to large plants placing constant orders for these transformative membranes. In combination with other functional membranes, reverse osmosis membranes are also helping solve the challenge of wastewater reclamation.

TORAY'S Episode

Toray's functional membranes give around 400 million people access to clean water.

Toray began its research on reverse osmosis membranes in the 1960's and started developing its water treatment membrane business in the 1980's. Today, as part of its integrated system proposals, Toray has developed a lineup of membranes with functions covering reverse osmosis, ultrafiltration, microfiltration, and more. Toray currently supplies membranes to 70 countries worldwide, which collectively are capable of processing 60 million tons of water a day. This is equivalent to the amount of water used by around 400 million people.

Toray Insights

- 1. The dramatic increase in global population has created the threat of water shortages around the world. Recognizing that access to clean water is a pressing issue humanity must address, we have initiated early measures to tackle this challenge.**
- 2. From the start, we have advanced R&D that aims to make seawater desalination a reality and have led comprehensive efforts to improve Toray's manufacturing efficiency. With current bases positioned in Japan, America, Europe, China, Korea, and the Middle East, our seawater desalination plants will begin taking orders on a global scale.**
- 3. Toray will provide pivotal support in national projects to develop large-scale, high-efficiency desalination plants.**



Reverse-osmosis Membrane Elements ROMEMBRA™



Photo provided
by Sembcorp Industries

Seawater Desalination Plant

A century since Toray's founding: looking ahead to the next hundred years

Context

With a long-term plan in place, Toray continues pursuing future challenges.

The 20th century was defined by war. Even today, regional conflicts continue to unfold, trade wars escalate between superpowers, and even talk of conflict in space begins. Against this backdrop, the United Nations has taken the lead in efforts to address global challenges through international collaboration in order to ensure the continued well-being of humanity and the environment. For its part, Toray has established a long-term plan in continuing to pursue new challenges moving forward.

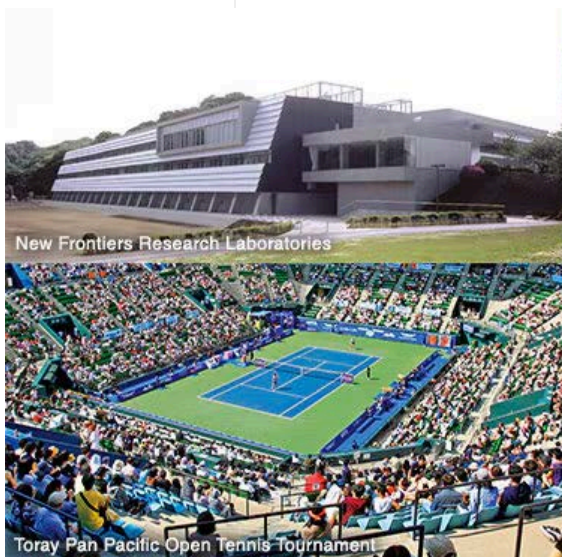
TORAY'S Episode

Believing perseverance is power, Toray maintains a steady management philosophy.

Toray has focused special attention on basic research to create innovative products. While some products take as much as fifty or sixty years to find market success, Toray's tenacious investments in R&D have borne fruit in a rich and broad portfolio. With a management philosophy that perseverance is power, Toray has continued to honor its dividend policy towards its shareholders, while providing consistent support to sports and culture through long-term sponsorships of worldwide women's tennis tournaments, the Shanghai International Marathon, and more.

Toray Insights

- 1. Toray will engage in research activities inspired by the twin slogans of "long-term continuity" and "the deeper, the newer." Centered on its core technologies, Toray will pursue research and technical developments with long-term objectives firmly in mind.**
- 2. We intend to contribute to society directly through our business activities and will work to solve social and environmental issues concerning the planet and the health and longevity of human society through the power of materials.**



Four Perspectives of the World as Envisioned by the Toray Group in 2050



Towards 2050

A net zero emissions world, where greenhouse gas emissions are completely offset by absorption

ACTIONS

Accelerating measures to counter climate change

In order to keep the air temperature from rising by more than 1.5°C due to global warming, we must become carbon neutral by 2050. Being carbon neutral means that the amount of greenhouse gases such as carbon dioxide that we are emitting is equivalent to the amount being absorbed. In addition to reducing the amount of carbon dioxide emitted during the product manufacturing stage, the Toray Group will utilize materials and technologies associated with energy conservation and new and renewable forms of energy to work toward creating a new-energy society. This can be achieved by reducing product weight in order to reduce fuel consumption, thereby improving carbon dioxide emissions throughout the entire product lifecycle, leveraging renewable energies such as wind power, which does not produce carbon dioxide, and utilizing hydrogen and electric vehicles.



**AFFORDABLE AND
CLEAN ENERGY**



**INDUSTRY, INNOVATION
AND INFRASTRUCTURE**



**CLIMATE
ACTION**



Curbing CO₂ emissions throughout the life cycle of products

Toray provides lightweight and strong carbon fiber that can reduce the weight of aircraft and automobiles, to improve fuel economy and reduce CO₂ emissions.



Building a renewable energy economy

Toray supplies materials for use in renewable energy technologies including wind and solar energy, and in hydrogen conversion, storage, and fuel cells.



Reducing CO₂ emissions in manufacturing

Toray actively strives to reduce CO₂ emissions in manufacturing, through process improvements that conserve energy, use renewable energy and reduce the use of coal.

Related Story



Material benefits: how carbon fiber is reducing our environmental footprint

Carbon fiber is a “wonder” material, adding exceptional strength without weight to aircraft, wind turbines and cars. New technologies devoted to improving its production and recycling mean even greater environmental benefits lie ahead.



The materials that are building a renewable energy economy

To halt the rise of greenhouse gas emissions, we need to convert as many sectors of the economy to renewable energy as quickly as possible. Advanced materials are improving the efficiency of the renewable energy industry while helping other sectors, such as transport, adapt to electrification.

Four Perspectives of the World as Envisioned by the Toray Group in 2050



Towards 2050

A world where resources are sustainably managed

ACTIONS

Realizing sustainable, recycling-based use of resources and production

In order to create a sustainable society, we must transition to a so-called recycling-based society — a society managed in a sustainable manner that makes effective use of, and recycles, our limited resources. Specifically, this involves using our limited resources sustainably by reducing our use of fossil fuels such as oil, reducing and reusing waste plastic, effectively using and reusing water resources, and making effective use of carbon dioxide. This transition to a recycling-based society will also contribute to resolving the issues of global warming and marine plastic waste. The Toray Group will contribute to creating this recycling-based society by developing and commercializing bioplastics that use plants and other biological resources, promoting the recycling of textiles, camera film and resin products, and reducing waste at the production stage.



**INDUSTRY, INNOVATION
AND INFRASTRUCTURE**



**RESPONSIBLE
CONSUMPTION
AND PRODUCTION**



**LIFE
BELOW WATER**



Using non-fossil resources (bioresources)

Toray works to reduce the world's dependency on fossil fuel resources by manufacturing non-edible plant-based fibers and developing materials and fuels using biotechnologies and membrane separation technology.



Promoting product recycling

Toray facilitates recycling of its diverse products including fibers, resins, films, and carbon fiber.



Reducing waste at production sites

Toray implements measures to use resources more effectively, practices recycling, and works to reduce waste.

Related Story



Moral fiber: sugar cane replaces petroleum to make eco-friendly polyester fabrics

The development of plant-based polyester could help save the earth by changing what we wear, while significant sales figures suggest consumers are all too happy to make the switch to eco-apparel.



Sweet success for biomass technologies

The need for more sustainable manufacturing processes has led to exciting innovations in the development of new biotechnologies, notably in the global production of sugar.

Four Perspectives of the World as Envisioned by the Toray Group in 2050



Towards 2050

A world with a restored natural environment, with clean water and air for everyone

ACTIONS

Providing clean water and air, and reducing environmental impact

Population growth, the development of the agricultural and livestock industry, and industrialization have led to water and air pollution becoming global issues. We must solve these problems and create a greener world in which everyone has access to safe water and air, and where people can live in harmony with nature while considering natural capital. The Toray Group is committed to bringing about such a world by reducing and controlling the amount of water used in our manufacturing processes, actively preventing air and water pollution, keeping the water supply safe using water treatment membrane technology, and improving the indoor air environment using high-performance air filters. We contribute to reducing the impact on ecosystems through technologies that reduce the use of harmful substances such as organic solvents and materials used as substitutes for natural products such as feathers and leather. We are also focusing on environmental education, to raise awareness around environmental issues in the younger generation.



ZERO HUNGER



**GOOD HEALTH
AND WELL-BEING**



**CLEAN WATER
AND SANITATION**



**INDUSTRY, INNOVATION
AND INFRASTRUCTURE**



**RESPONSIBLE
CONSUMPTION
AND PRODUCTION**



**LIFE
BELOW WATER**



**LIFE
ON LAND**



Providing safe water using membrane technologies

Toray supplies water treatment technologies for the desalination, purification, and reuse of water to address water scarcity and reduce environmental impacts.



Managing water usage at plants and preventing air and water pollution

Toray pursues greater reuse of water, purification of exhaust ventilation and wastewater, and appropriate management of chemical substances at its plants. In areas where water resources are particularly scarce, Toray takes additional steps to curb water intake.



Providing ultrafine filter fibers for cleaner air

Toray supplies proprietary ultrafine fiber non-woven fabrics that remove particulates from the air, delivering cleaner air around the world.



Inspiring interest in the environment

Toray supports education to raise awareness of environmental issues such as water scarcity.

Related Story



Turn of the tide: tackling water scarcity with technology and common purpose

As the world's water crisis intensifies, governments, business and communities are uniting to protect clean water sources, use them more responsibly, and even create new drinking water from the sea.



Membrane innovation turns seawater into freshwater

The global water crisis is being tackled with new technologies – with encouraging results. Specialized water-purification membranes can separate the salt from seawater and deliver clean water to millions of people worldwide.

Four Perspectives of the World as Envisioned by the Toray Group in 2050



Towards 2050

A world where everyone enjoys good health and hygiene

ACTIONS

Contributing to better medical care and hygiene for people worldwide

Innovative diagnostic technologies and curative medicines are required in both developed and developing countries, but these bring with them the challenges of increased medical costs and an increased burden on healthcare sites. In the 21st century, the most significant challenges facing society are raising the healthcare and public sanitation services required to maintain a healthy and independent way of life, and providing high-quality medical care.

Toray contributes to human health through advanced materials and innovative technologies, focusing on health and longevity, improving the quality of medical care, reducing burdens on medical institutions, and focusing on human safety, in order to create a world in which all people lead healthy and hygienic lives.



ZERO HUNGER



**GOOD HEALTH
AND WELL-BEING**



**INDUSTRY, INNOVATION
AND INFRASTRUCTURE**



**CLIMATE
ACTION**



Improving the quality of medical care with innovative technologies and advanced materials

Toray helps improve the quality of medical care with early diagnosis of diseases and innovative drugs and devices.



Contributing to health and longevity

Toray promotes health, longevity and better quality of life by providing products that enhance physical functions that change with age.



Helping to keep people safe

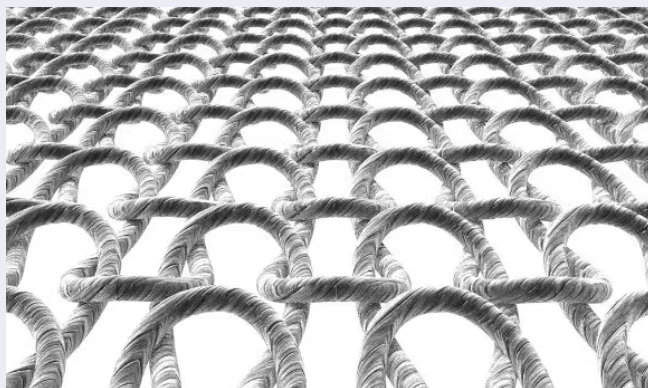
Toray helps protect people from infectious diseases, accidents, disasters, and extreme weather events such as heatwaves.

Related Story



[Synthetic innovation helps translate nature's greatest narrative: our genes](#)

Our genes are the blueprints of life – and advanced technology is enabling experts to analyze them in dynamic new ways. The result: earlier detection of diseases and a healthier outlook for future generations.



[Long-life fabric gains new meaning as wearable tech promotes wellbeing for an aging world](#)

Technologies associated with “performance fabrics” are advancing all the time, meaning a step up in quality of life and health for everyone – from athletes to seniors

CSR Activity Report (CSR Guideline Activity Reports)

Toray Group has established CSR Guidelines to govern its CSR initiatives. Intended to be comprehensive, they cover aspects from corporate governance to social contribution. The CSR Guidelines consist of ten themes, each of which is assigned an implementation leader.

The Group also establishes a CSR roadmap every three years to ensure that all of its efforts to live up to the CSR Guidelines move forward in a systemic and organized manner. Each CSR roadmap defines targets for specific initiatives and establishes key performance indicators (KPIs) to ensure that progress is quantitatively managed each year.

➤ [Click here for the comparative table of CSR activity report items with ESG topics](#)

CSR Guidelines Revised June 2023	
1 Corporate Governance Continually revise management systems, strengthen internal controls as part of efforts to fulfill the company's social responsibilities.	➤ Read more
2 Ethics and Compliance Ensure all executives and employees uphold a sense of responsibility, fairness and high ethical standards, and act with a keen sense of compliance to maintain the trust of society.	➤ Read more
3 Safety, Accident Prevention, and Environmental Preservation Ensure the safety and health of society and employees, and protect the environment in all business processes, from procuring raw materials and manufacturing to the supply and disposal of products.	➤ Read more
4 Product Quality and Safety Provide safe, highly reliable products by striving to enhance management systems for product quality assurance and safety, and disclose appropriate information.	➤ Read more
5 Risk Management Under normal conditions, assess and analyze risks, and strive to mitigate and prevent them from materializing; and in the event of a crisis that could have a significant impact on management activities, strive to prevent damage from increasing, by bringing the situation quickly under control and normalizing conditions with a prompt and appropriate response.	➤ Read more

6 Communication Disclose corporate information in an active, fair and straightforward manner to maintain management transparency; and disclose information appropriately to encourage dialogue and cooperation with stakeholders including customers, employees, stockholders, business partners, consumers, mass media, and other parties.	➤ Read more
7 Contributing Solutions to Social Issues through Business Activities Leverage innovation to provide solutions to various social issues such as climate change, resource and energy use, water resource and natural environment conservation, improvement of medical care, and promotion of public health, thereby contributing to sustainable development for society.	➤ Read more
8 Human Rights Promotion and Human Resources Development Respect human rights, provide safe and healthy workplaces for employees, secure and train personnel, and diversify while striving to protect employment.	➤ Read more
9 Establishing Sustainable Supply Chain To establish a sustainable supply chain, work closely with suppliers, processing vendors, subcontractors, customers and distribution companies to implement socially responsible procurement throughout the supply chain in order to ensure responsible practices with respect to environmental preservation and human rights.	➤ Read more
10 Social Contribution Activities as a Good Corporate Citizen Proactively participate in local communities and the larger society in order to contribute to development in a way betting a good corporate citizen.	➤ Read more

Progress on CSR Roadmap 2025 KPIs in Fiscal 2023

CSR Roadmap 2025 (Fiscal 2023–2025)

Progress on CSR Roadmap 2025 KPIs in Fiscal 2023

CSR Initiatives	CSR Roadmap goals	Key performance indicators	Reporting period	Targets			Results (Ratio of achievement)	Implementation leader*
				Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2023	
1 Corporate Governance	(C1) Further improve governance by ensuring that Board of Directors operates in a manner that contributes to the achievement of corporate value and the development of the group	● Times when Board of Directors convenes	● Times Group	● 1	● 1	● 1	● 1	Takeshi Terashima (Chairman of the Board), Director (Chairman of the Board), Executive Managing Director, Indubank, Tomy Industries, Inc.
	(C2) Performance monitoring based on the Basic Policy for Internal Control Systems, in accordance with Japan's Corporate Act	● Board of Directors' audit of implementation of the implementation of the Basic Policy for Internal Control Systems (BICS)	● Times Group	● 10%	● 30%	● 50%	● 10%	
2 Ethics and Compliance	(C3) No major cases throughout the Group of non-compliance with or violation of the regulations, without harm, etc.	● Number of major violations of laws or regulations	● Times Group	● 1	● 1	● 1	● 1	Toshihiro Yamamoto (Executive Vice President, Chair of Compliance Officer), Tomy Industries, Inc.
	(C4) Improving monitoring to legal affairs and compliance awareness throughout Tomy Group	● Group companies' implementation of internal high audits (%)	● Times Group	● 100%	● 100%	● 100%	● 100%	
	(C5) Enhance compliance training and education activities relating to compliance ethics and compliance	● Group companies' completion of compliance training (%)	● Times Group	● 100%	● 100%	● 100%	● 100%	
	Review measures for CSR	● Improving Ethics and Compliance	● Times Group	● 100%	● 100%	● 100%	● 100%	

(PDF:300KB) [PDF](#)

Progress on CSR Roadmap 2025 KPIs in Fiscal 2023

CSR Guidelines	CSR Roadmap goals	Key performance indicators	Reporting Scope ¹
1 Corporate Governance Continually revise management systems, strengthen internal controls as part of efforts to fulfill the company's social responsibilities	(1) Further improve governance by ensuring that Board of Directors operates in a manner that contributes to the enhancement of corporate value over the medium to long term (2) Perform monitoring based on the Basic Policy for Internal Control Systems, in accordance with Japan's Companies Act Related Materiality for CSR ● Strengthening Corporate Governance	① Toray Group Business Strategy Discussion sessions held at Board of Directors meetings (times)	① Toray Group
		② Board of Directors' positive assessment of the implementation of the Basic Policy for Internal Control Systems (%)	② Toray Group
2 Ethics and Compliance Ensure all executives and employees uphold a sense of responsibility, fairness and high ethical standards, and act with a keen sense of compliance to maintain the trust of society	(1) No major cases throughout the Toray Group of non-compliance with or violation of bribery regulations, antitrust laws, etc (2) Implement monitoring to raise ethical and compliance awareness throughout Toray Group (3) Enhance awareness-raising and educational activities relating to corporate ethics and compliance Related Materiality for CSR ● Ensuring Ethics and Compliance	① Number of major violations of laws or ordinances	① Toray Group
		② Group companies implementing internal legal audits (%)	② Toray Group
		③ Group companies providing information and implementing education on major laws and regulations and other compliance-related matters (%)	③ Toray Group

	Targets			Results		Implementation leader ³
	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2023	Degree of success ²	
	① 8	① 8	① 8	① 8	① ○	Tetsuya Tsunekawa Senior Vice President (Member of the Board), Corporate Strategic Planning Division, HS Division, Toray Industries, Inc.
	② 90%	② 90%	② 90%	② 96%	② ○	
	① 0	① 0	① 0	① 0	① ○	Yoshio Yamamoto Corporate Vice President, Legal & Compliance Division, Toray Industries, Inc.
	② ・ Toray Industries, Inc.: 100% ・ Group companies in and outside Japan: Implemented focusing on high-risk companies			② 100%	② ○	
	③ 100%	③ 100%	③ 100%	③ 100%	③ ○	

1 "Toray Group" refers to Toray Industries, Inc. and Toray Group companies in and outside Japan. "Toray Group (Japan)" refers to Toray Group companies in Japan. "Toray Group (Outside Japan)" refers to Toray Group companies outside Japan.

2 The degree of success is defined as follows : ○ means the target was fully met; △ means the target was 50% met or better; and × means the target was less than 50% met. "N.A." means no targets were specified for the fiscal year under review.

3 Names and job titles of implementation leaders are current as of March 31 2024.

4 For further detail, see the "Occupational Safety and Accident Prevention Activities" page of the "Safety, Accident Prevention and Environmental Preservation" section of the report.

5 For further detail, see the "Environmental Risk Management" page of the "Safety, Accident Prevention and Environmental Preservation" section of the report.

6 The calculation of the figure for the baseline of fiscal 2013 includes data for companies that joined the Toray Group in fiscal 2014 or later.

7 Until fiscal 2022, this was calculated by multiplying the GHG emissions and revenue of individual subsidiaries worldwide by the applicable Toray Industries' equity share. In fiscal 2023 however, the calculation method changed, and the degree of financial control Toray Industries has over the individual subsidiary (not the equity share) is now used, in accordance with the GHG Protocol, the international standard.

8 For further detail, see the "Initiatives for Quality Assurance and Product Safety" page of the "Product Quality and Safety" section of this report.

9 Since efforts to achieve the fiscal 2024 target began recently, there are no figures to report for fiscal 2023.

During this year, measures were taken to determine the anticipated high-risk issues, countries, regions, and industries, and preparations were made to identify and investigate the relevant suppliers.

10 Since efforts to achieve the fiscal 2024 target began recently, there are no figures to report for fiscal 2023.

The plan is to survey the Company's major suppliers of lubricants containing palm oil by investigating those that account for 90% or more of the Company's palm oil-related purchasing amount in fiscal 2023.

Progress on CSR Roadmap 2025 KPIs in Fiscal 2023

CSR Guidelines	CSR Roadmap goals	Key performance indicators	Reporting Scope ¹
3 Safety, Accident Prevention, and Environmental Preservation Ensure the safety and health of society and employees, and protect the environment in all business processes, from procuring raw materials and manufacturing to the supply and disposal of products	(1) Place the highest priority on safety, thoroughly uphold the basic rules, and strive to prevent disasters, fires, and environmental accidents (2) Based on the Toray Group Sustainability Vision, reduce environmental impact, focusing on addressing climate change, effectively utilizing water resources, and protecting the environment and biodiversity Related Materiality for CSR ● Accelerating Climate Change Mitigation ● Promoting a Circular Economy ● Taking a Nature-Positive Approach ● Ensuring Safety and Fire Accident Prevention	① Number of major accidents	① Toray Group
		② Achievement for world's best standard for safety management (not exceeding 0.05 frequency rate for occupational accidents resulting in lost work time)	② Toray Group
		③ Number of fire and explosion accidents	③ Toray Group
		④ Number of environmental accidents	④ Toray Group
		⑤ Reduction of greenhouse gas emissions per unit of revenue (%)	⑤ Toray Group
		⑥ Increase in solar power generation capacity (%)	⑥ Toray Group
		⑦ Reduction of water usage per unit of revenue (%)	⑦ Toray Group
		⑧ Waste recycling rate (%)	⑧ Toray Group
		⑨ Reduction of atmospheric VOC emissions (%)	⑨ Toray Group
4 Product Quality and Safety Provide safe, highly reliable products by striving to enhance management systems for product quality assurance and safety, and disclose appropriate information	(1) Enhance the group-wide frameworks for quality control, quality assurance, and product safety management (2) Achieve zero product accidents Related Materiality for CSR ● Enhancing Product Quality and Safety	① Quality assurance compliance education (% of people trained)	① Toray Group
		② Quality and product safety audit implementation rate (%)	② Toray Group
		③ Number of product accidents	③ Toray Group
5 Risk Management Under normal conditions, assess and analyze risks, and strive to mitigate and prevent them from materializing; and in the event of a crisis that could have a significant impact on management activities, strive to prevent damage from increasing, by bringing the situation quickly under control and normalizing conditions with a prompt and appropriate response	(1) Reduce risks by identifying and mitigating risks that affect the resolution of management issues across the Group (2) Enhance internal controls across the Group and raise the level of risk mitigation efforts (3) Instill greater risk management among employees by rolling out risk management education throughout the Toray Group Related Materiality for CSR ● Strengthening Corporate Governance	① Group companies implementing self-assessment and results follow-up using the internal control checklist (%)	① Toray Group
		② Group companies implementing information security evaluation and risk reduction (%)	② Toray Group

	Targets			Results		Implementation leader ³
	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2023	Degree of success ²	
① 0	① 0	① 0	① 0	① 1	① ×	Kazuyuki Adachi Executive Vice President (Member of the Board), Manufacturing Division, Toray Industries, Inc. Hiroyuki Matsuda Senior Vice President, Information Systems Division, Engineering Division, Toray Industries, Inc.
② No more than 0.05	② No more than 0.05	② No more than 0.05	② No more than 0.05	② 0.40	② ×	
③ 0	③ 0	③ 0	③ 0	③ 1 ⁴	③ ×	
④ 0	④ 0	④ 0	④ 0	④ 4 ⁵	④ ×	
⑤ At least 40% lower than fiscal 2013 (Fiscal 2025)				⑤ 36.0% ^{6&7}	⑤ —	
⑥ At least 10% higher than fiscal 2022 (Fiscal 2025)				⑥ 101%	⑥ —	
⑦ At least 40% lower than fiscal 2013 (Fiscal 2025)				⑦ 35.3% ⁶	⑦ —	
⑧ At least 86%	⑧ At least 87%	⑧ At least 87%	⑧ At least 87%	⑧ 87.0%	⑧ ○	
⑨ At least 70% lower than fiscal 2000	⑨ At least 72% lower than fiscal 2000	⑨ At least 72% lower than fiscal 2000	⑨ At least 72% lower than fiscal 2000	⑨ 72.5%	⑨ ○	
① 100%	① 100%	① 100%	① 100%	① 100%	① ○	Shinichiro Hata Corporate Vice President, Quality Assurance Division, Toray Industries, Inc.
② 100%	② 100%	② 100%	② 100%	② 100%	② ○	
③ 0	③ 0	③ 0	③ 0	③ 1 ⁸	③ ×	
① 35%	① 70%	① 100%	① 100%	① 35%	① ○	Tetsuya Tsunekawa Senior Vice President (Member of the Board), Corporate Strategic Planning Division, HS Division, Toray Industries, Inc.
② 35%	② 70%	② 100%	② 100%	② 35%	② ○	

1 "Toray Group" refers to Toray Industries, Inc. and Toray Group companies in and outside Japan. "Toray Group (Japan)" refers to Toray Group companies in Japan.

"Toray Group (Outside Japan)" refers to Toray Group companies outside Japan.

2 The degree of success is defined as follows : ○ means the target was fully met; △ means the target was 50% met or better; and × means the target was less than 50% met. "N.A." means no targets were specified for the fiscal year under review.

3 Names and job titles of implementation leaders are current as of March 31 2024.

4 For further detail, see the "Occupational Safety and Accident Prevention Activities" page of the "Safety, Accident Prevention and Environmental Preservation" section of the report.

5 For further detail, see the "Environmental Risk Management" page of the "Safety, Accident Prevention and Environmental Preservation" section of the report.

6 The calculation of the figure for the baseline of fiscal 2013 includes data for companies that joined the Toray Group in fiscal 2014 or later.

7 Until fiscal 2022, this was calculated by multiplying the GHG emissions and revenue of individual subsidiaries worldwide by the applicable Toray Industries' equity share. In fiscal 2023 however, the calculation method changed, and the degree of financial control Toray Industries has over the individual subsidiary (not the equity share) is now used, in accordance with the GHG Protocol, the international standard.

8 For further detail, see the "Initiatives for Quality Assurance and Product Safety" page of the "Product Quality and Safety" section of this report.

9 Since efforts to achieve the fiscal 2024 target began recently, there are no figures to report for fiscal 2023.

During this year, measures were taken to determine the anticipated high-risk issues, countries, regions, and industries, and preparations were made to identify and investigate the relevant suppliers.

10 Since efforts to achieve the fiscal 2024 target began recently, there are no figures to report for fiscal 2023.

The plan is to survey the Company's major suppliers of lubricants containing palm oil by investigating those that account for 90% or more of the Company's palm oil-related purchasing amount in fiscal 2023.

Progress on CSR Roadmap 2025 KPIs in Fiscal 2023

CSR Guidelines	CSR Roadmap goals	Key performance indicators	Reporting Scope ¹
6 Communication Disclose corporate information in an active, fair and straightforward manner to maintain management transparency; and disclose information appropriately to encourage dialogue and cooperation with stakeholders including customers, employees, stockholders, business partners, consumers, mass media, and other parties	(1) In accordance with the Basic Policies to Promote Dialogue with Stakeholders and the Information Disclosure Principles, enhance communication activities with each stakeholder group to improve corporate value (2) Promote dialogue and collaboration with each stakeholder group, and reflect information obtained in management decisions in a timely and appropriate manner Related Materiality for CSR ● Developing in Collaboration with Stakeholders	① Number of corporate website page views (per month)	① Toray Industries, Inc.
		② Interviews conducted to exchange opinions within the company (rate of progress)	② Toray Group
		③ Interviews with key investors in which management participates (number)	③ Toray Group
		④ News releases (number)	④ Toray Group
7 Contributing Solutions to Social Issues through Business Activities Leverage innovation to provide solutions to various social issues such as climate change, resource and energy use, water resource and natural environment conservation, improvement of medical care, and promotion of public health, thereby contributing to sustainable development for society	(1) Leverage Sustainability Innovation Business to address social issues by growing businesses based on the provision of innovative technologies and advanced materials, and by creating new technologies Related Materiality for CSR ● Accelerating Climate Change Mitigation ● Promoting a Circular Economy ● Taking a Nature-Positive Approach ● Committed to Healthier Lives ● Developing in Collaboration with Stakeholders	① Revenues from Sustainability Innovation Business	① Toray Group
		② Contribution to CO ₂ reduction in value chain	② Toray Group
		③ Contribution of Toray water treatment products	③ Toray Group

	Targets			Results		Implementation leader ³
	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2023	Degree of success ²	
① 1 million page views	① 1 million page views	① 1 million page views	① 1 million page views	① 1.12 million page views	① ○	Shigeki Taniguchi Senior Vice President, CSR & Investor Relations, General Administration & Communications Division, Tokyo Head Office, Toray Industries, Inc.
② (First round) 100% completed	② (Second round) 30%	② (Second round) 60%	② 100%	② ○		
③ Cumulative total of 120	③ Cumulative total of 120	③ Cumulative total of 120	③ Cumulative total of 197	③ ○		
④ 200	④ 200	④ 200	④ 178	④ △		
① 1,600 billion yen (Fiscal 2025)				① 1,311.5 billion yen	① —	Tetsuya Tsunekawa Senior Vice President (Member of the Board), Corporate Strategic Planning Division, HS Division, Toray Industries, Inc.
② 15 times compared to fiscal 2013 (Fiscal 2025)				② 10.3 times	② —	
③ 2.9 times compared to fiscal 2013 (Fiscal 2025)				③ 2.7 times	③ —	

1 "Toray Group" refers to Toray Industries, Inc. and Toray Group companies in and outside Japan. "Toray Group (Japan)" refers to Toray Group companies in Japan.

"Toray Group (Outside Japan)" refers to Toray Group companies outside Japan.

2 The degree of success is defined as follows : ○ means the target was fully met; △ means the target was 50% met or better; and × means the target was less than 50% met. "N.A." means no targets were specified for the fiscal year under review.

3 Names and job titles of implementation leaders are current as of March 31 2024.

4 For further detail, see the "Occupational Safety and Accident Prevention Activities" page of the "Safety, Accident Prevention and Environmental Preservation" section of the report.

5 For further detail, see the "Environmental Risk Management" page of the "Safety, Accident Prevention and Environmental Preservation" section of the report.

6 The calculation of the figure for the baseline of fiscal 2013 includes data for companies that joined the Toray Group in fiscal 2014 or later.

7 Until fiscal 2022, this was calculated by multiplying the GHG emissions and revenue of individual subsidiaries worldwide by the applicable Toray Industries' equity share. In fiscal 2023 however, the calculation method changed, and the degree of financial control Toray Industries has over the individual subsidiary (not the equity share) is now used, in accordance with the GHG Protocol, the international standard.

8 For further detail, see the "Initiatives for Quality Assurance and Product Safety" page of the "Product Quality and Safety" section of this report.

9 Since efforts to achieve the fiscal 2024 target began recently, there are no figures to report for fiscal 2023.

During this year, measures were taken to determine the anticipated high-risk issues, countries, regions, and industries, and preparations were made to identify and investigate the relevant suppliers.

10 Since efforts to achieve the fiscal 2024 target began recently, there are no figures to report for fiscal 2023.

The plan is to survey the Company's major suppliers of lubricants containing palm oil by investigating those that account for 90% or more of the Company's palm oil-related purchasing amount in fiscal 2023.

Progress on CSR Roadmap 2025 KPIs in Fiscal 2023

CSR Guidelines	CSR Roadmap goals	Key performance indicators	Reporting Scope ¹
8 Human Rights Promotion and Human Resources Development Respect human rights, provide safe and healthy workplaces for employees, secure and train personnel, and diversify while striving to protect employment	(1) Respect human rights and ensure fair promotions based on merit throughout the Toray Group by eliminating discrimination based on factors such as race, creed, skin color, gender (including gender identity and sexual orientation), religion, nationality, language, ability/disability, physical attributes, assets, and place of birth (2) Ensure work environments take into consideration the health and diversity of employees and build a vibrant and rewarding workplace culture group-wide, working systematically to secure and train personnel Related Materiality for CSR ● Committed to Healthier Lives ● Respecting Human Rights and Promoting Human Resource Diversity	① Group companies implementing human rights education and training (%)	① Toray Group
		② Group companies that have achieved legally mandated employment rate of persons with disabilities (%)	② Toray Group (Japan)
		③ Career development initiatives for core staff using the personnel information system (use of career path worksheets) (% of employees)	③ Toray Group
		④ Employees returning to work from childcare leave (%)	④ Employees of Toray Industries, Inc.
		⑤ Male employees taking childcare leave or other leave for the same reason (%)	⑤ Employees of Toray Industries, Inc. (not including those posted outside Japan)
		⑥ Reduction in employees who exceed 45 hours/month of non-statutory working hours	⑥ Toray Industries, Inc.
		⑦ Available annual paid leave used by labor union members (%)	⑦ Toray Industries, Inc.
9 Establishing Sustainable Supply Chain To establish a sustainable supply chain, work closely with suppliers, processing vendors, subcontractors, customers and distribution companies to implement socially responsible procurement throughout the supply chain in order to ensure responsible practices with respect to environmental preservation and human rights	(1) To ensure socially responsible procurement by the Toray Group, work with suppliers, processing vendors, subcontractors and other business partners to implement CSR initiatives that include compliance with laws and regulations, amelioration of global warming, environmental conservation, and respect for human rights Related Materiality for CSR ● Developing in Collaboration with Stakeholders ● Establishing Sustainable Supply Chain	① Suppliers agreeing to the Toray Group CSR Procurement Guidelines (%)	① Toray Group
		② Implementation of supply chain due diligence (% of cases)	② Toray Group
		③ Oil procurement needs met by palm oil sourced in a manner that is environmentally responsible and respectful of human rights (% of oil purchased, by value)	③ Toray Industries, Inc.
		④ Reduction in CO ₂ emissions per unit of sales from distribution activities (year-on-year)	④ Toray Group (Only specified consigners, Toray Industries, Inc., TAF)
		⑤ Key external inventory sites that have been assessed for natural disaster risk and have implemented measures to mitigate serious risks (%)	⑤ Toray Industries, Inc.

	Targets			Results		Implementation leader ³
	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2023	Degree of success ²	
① 100%	① 100%	① 100%	① 100%	① 100%	① ○	Katsuyuki Yanai Corporate Vice President, Human Resources Division, Toray Human Resources Development Center, Toray Industries, Inc.
② 100%	② 100%	② 100%	② 100%	② 59.4%	② △	
③ Year-on-year increase	③ Year-on-year increase	③ Year-on-year increase	③ Year-on-year increase	③ Year-on-year 101%	③ ○	
④ 100%	④ 100%	④ 100%	④ 100%	④ 99%	④ △	
⑤ Year-on-year increase	⑤ Year-on-year increase	⑤ Year-on-year increase	⑤ Year-on-year increase	⑤ Year-on-year 106%	⑤ ○	
⑥ Year-on-year reduction	⑥ Year-on-year reduction	⑥ Year-on-year reduction	⑥ Year-on-year reduction	⑥ Year-on-year 81.1%	⑥ ○	
⑦ 90%	⑦ 90%	⑦ 90%	⑦ 90%	⑦ 95.7%	⑦ ○	
① At least 75%	① At least 85%	① At least 90%	① 76.8%	① ○	Osamu Tsuneki Corporate Vice President, Purchasing & Logistics Division, Toray Industries, Inc.	
② At least 60% (Fiscal 2024)		② At least 90%	② — ⁹	② —		
③ At least 70% (Fiscal 2024)		③ At least 90%	③ — ¹⁰	③ —		
④ 1%	④ 1%	④ 1%	④ 11.5%	④ ○		
⑤ At least 60%	⑤ At least 75%	⑤ At least 90%	⑤ 59%	⑤ △		

1 "Toray Group" refers to Toray Industries, Inc. and Toray Group companies in and outside Japan. "Toray Group (Japan)" refers to Toray Group companies in Japan.

"Toray Group (Outside Japan)" refers to Toray Group companies outside Japan.

2 The degree of success is defined as follows : ○ means the target was fully met; △ means the target was 50% met or better; and × means the target was less than 50% met. "N.A." means no targets were specified for the fiscal year under review.

3 Names and job titles of implementation leaders are current as of March 31 2024.

4 For further detail, see the "Occupational Safety and Accident Prevention Activities" page of the "Safety, Accident Prevention and Environmental Preservation" section of the report.

5 For further detail, see the "Environmental Risk Management" page of the "Safety, Accident Prevention and Environmental Preservation" section of the report.

6 The calculation of the figure for the baseline of fiscal 2013 includes data for companies that joined the Toray Group in fiscal 2014 or later.

7 Until fiscal 2022, this was calculated by multiplying the GHG emissions and revenue of individual subsidiaries worldwide by the applicable Toray Industries' equity share. In fiscal 2023 however, the calculation method changed, and the degree of financial control Toray Industries has over the individual subsidiary (not the equity share) is now used, in accordance with the GHG Protocol, the international standard.

8 For further detail, see the "Initiatives for Quality Assurance and Product Safety" page of the "Product Quality and Safety" section of this report.

9 Since efforts to achieve the fiscal 2024 target began recently, there are no figures to report for fiscal 2023.

During this year, measures were taken to determine the anticipated high-risk issues, countries, regions, and industries, and preparations were made to identify and investigate the relevant suppliers.

10 Since efforts to achieve the fiscal 2024 target began recently, there are no figures to report for fiscal 2023.

The plan is to survey the Company's major suppliers of lubricants containing palm oil by investigating those that account for 90% or more of the Company's palm oil-related purchasing amount in fiscal 2023.

Progress on CSR Roadmap 2025 KPIs in Fiscal 2023

CSR Guidelines	CSR Roadmap goals	Key performance indicators	Reporting Scope ¹
10 Social Contribution Activities as a Good Corporate Citizen Proactively participate in local communities and the larger society in order to contribute to development in a way befitting a good corporate citizen	(1) Promote social contribution activities in ways that are unique to Toray, voluntarily and continuously engaging in the priority areas of “science and technology promotion,” “environment and communities,” and “health and welfare” (2) As a responsible member of society, implement social contribution activities that help to solve the global issues addressed by the SDGs and other initiatives Related Materiality for CSR ● Developing in Collaboration with Stakeholders	❶ Social contribution expenditure (% change from average expenditure over last six years)	❶ Toray Group
		❷ Social contribution activities (number)	❷ Toray Group
		❸ Beneficiaries of educational support activities such as science classes for schools and career education (number)	❸ Toray Group

	Targets			Results		Implementation leader ³
	Fiscal 2023	Fiscal 2024	Fiscal 2025	Fiscal 2023	Degree of success ²	
	① 100% or higher	① 100% or higher	① 100% or higher	① 124%	① ○	Shigeki Taniguchi Senior Vice President, CSR & Investor Relations, General Administration & Communications Division, Tokyo Head Office, Toray Industries, Inc.
	② 2,500 or more	② 2,500 or more	② 2,500 or more	② 2,173	② △	
	③ 15,000 or more	③ 15,000 or more	③ 15,000 or more	③ 18,816	③ ○	

1 "Toray Group" refers to Toray Industries, Inc. and Toray Group companies in and outside Japan. "Toray Group (Japan)" refers to Toray Group companies in Japan.

"Toray Group (Outside Japan)" refers to Toray Group companies outside Japan.

2 The degree of success is defined as follows : ○ means the target was fully met; △ means the target was 50% met or better; and × means the target was less than 50% met. "N.A." means no targets were specified for the fiscal year under review.

3 Names and job titles of implementation leaders are current as of March 31 2024.

4 For further detail, see the "Occupational Safety and Accident Prevention Activities" page of the "Safety, Accident Prevention and Environmental Preservation" section of the report.

5 For further detail, see the "Environmental Risk Management" page of the "Safety, Accident Prevention and Environmental Preservation" section of the report.

6 The calculation of the figure for the baseline of fiscal 2013 includes data for companies that joined the Toray Group in fiscal 2014 or later.

7 Until fiscal 2022, this was calculated by multiplying the GHG emissions and revenue of individual subsidiaries worldwide by the applicable Toray Industries' equity share. In fiscal 2023 however, the calculation method changed, and the degree of financial control Toray Industries has over the individual subsidiary (not the equity share) is now used, in accordance with the GHG Protocol, the international standard.

8 For further detail, see the "Initiatives for Quality Assurance and Product Safety" page of the "Product Quality and Safety" section of this report.

9 Since efforts to achieve the fiscal 2024 target began recently, there are no figures to report for fiscal 2023.

During this year, measures were taken to determine the anticipated high-risk issues, countries, regions, and industries, and preparations were made to identify and investigate the relevant suppliers.

10 Since efforts to achieve the fiscal 2024 target began recently, there are no figures to report for fiscal 2023.

The plan is to survey the Company's major suppliers of lubricants containing palm oil by investigating those that account for 90% or more of the Company's palm oil-related purchasing amount in fiscal 2023.

CSR Activity Report (CSR Guideline Activity Reports)

Corporate Governance

Continually revise management systems, strengthen internal controls as part of efforts to fulfill the company's social responsibilities.



Basic Approach

From the outset, one of Toray Group's managerial principles has been that the purpose of a company is to contribute to society. The Group has developed the Toray Philosophy that incorporates this principle.

The Toray Philosophy is structured with the following components: the Corporate Philosophy, Corporate Missions, and Corporate Guiding Principles. The Corporate Missions specify the Group's commitment "To practice sincere and trustworthy management," and the Corporate Guiding Principles stipulate the Group's commitment to "Acting with fairness, high ethical standards and a strong sense of responsibility while complying with laws, regulations and social norms to earn trust and meet social expectations."

In establishing its corporate governance structure, the Group seeks to fulfill these philosophies as its basic policy.

Related Policies

> [Basic Policy on Corporate Governance](#)

Related Information

> [Corporate Governance](#)

[Corporate Governance Report](#) **PDF**

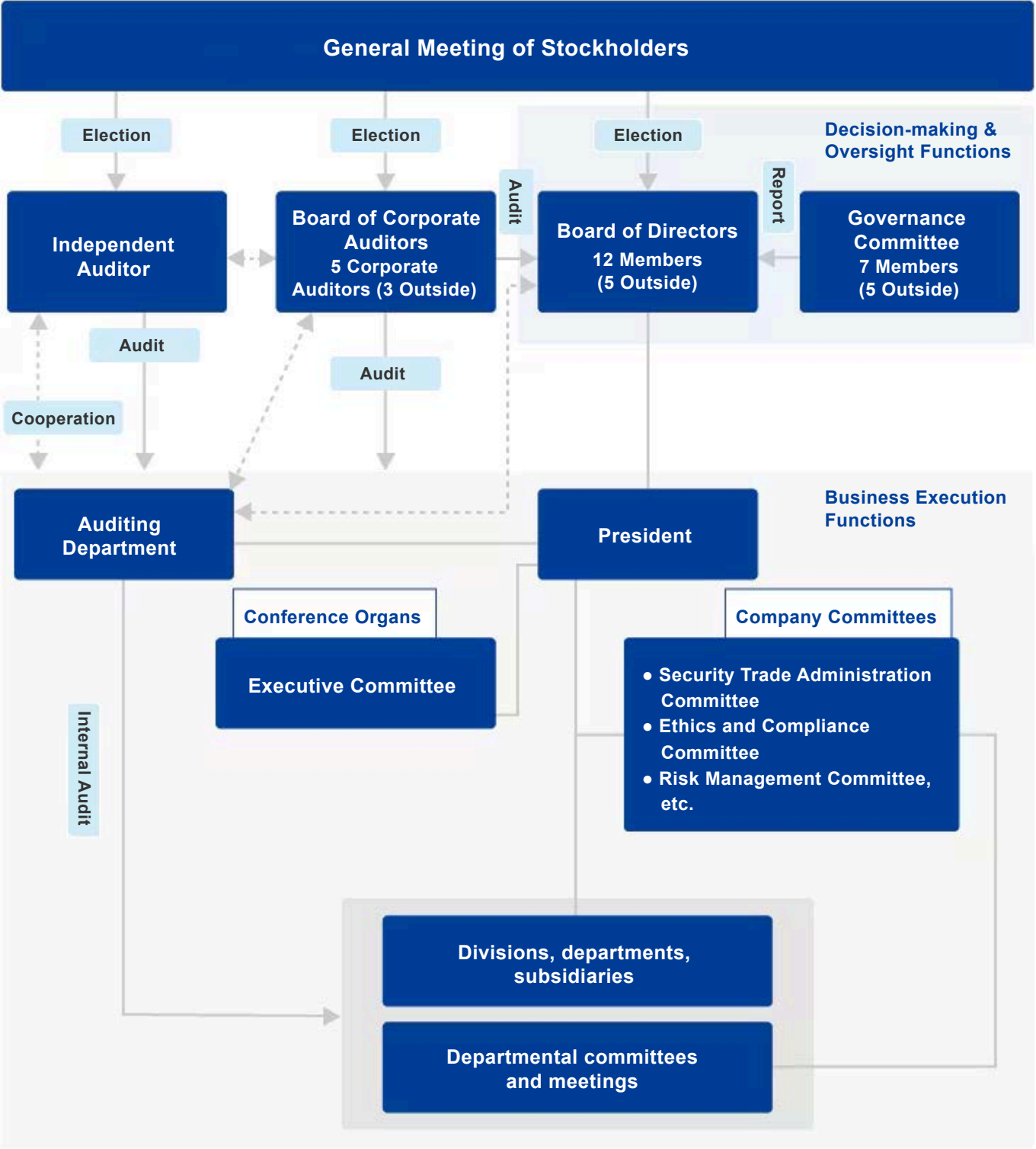
Structure

Toray Industries, Inc. operates as a company with a Board of Corporate Auditors and Board of Directors. The Board of Directors, which includes outside directors, decides on the business execution and supervises the execution of duties by the directors. The Board of Corporate Auditors includes outside auditors and independently audits the execution of duties by the directors, separately from the Board of Directors and the executing organization. This framework is designed to secure the transparency and fairness of decisions made by the Board of Directors. In addition, there is a Governance Committee, which serves as a voluntary advisory body to the Board of Directors. The Governance Committee deliberates on all matters relating to corporate governance, enhancing the effectiveness of governance by the Board of Directors.

Toray Group operates in a broad spectrum of business fields at a global level. Business management and decision-making, as well as oversight, require assessment of a wide variety of risks from multiple perspectives based on expertise related to the day-to-day operations of the Group's worksites. To that end, the composition of the Board of Directors is designed to ensure that members bring a diverse range of perspectives to management oversight and decision-making based on their expertise in the Group's businesses. Meanwhile, outside directors are elected to the Board to ensure transparency and fairness, to ensure oversight from an even broader perspective, and to obtain appropriate managerial advice from a medium- to long-term perspective.

The Board of Corporate Auditors is entirely independent of the Board of Directors. Based on professional expertise in finance, accounting, and law, as well as an understanding of the Group's businesses, the Board of Corporate Auditors exercises oversight over directors' execution of their duties. The Governance Committee consists of the chairman, the president, and all outside directors, and an outside director serves as a chairperson. In fiscal 2023, the Board of Directors held 14 meetings, the Board of Corporate Auditors held 11 meetings, and the Governance Committee held 13 meetings¹.

¹ For the attendance of each director, please refer to pages 9-20 of the [Notice of the 143rd Ordinary General Meeting of Stockholders](#). All corporate auditors attended every board meeting. (See page 27 of the [Corporate Governance Report](#).)



Name		Business operations				Corporate			Strategic
		Management experience	Global business	Technology / Manufacturing / R&D	Sales and marketing	Legal / Intellectual property / Risk management	Accounting / Finance	Human resource management / diversity	
Member of the Board	Akihiro Nikkaku	•	•					•	
	Mitsuo Ohya	•			•			•	
	Satoru Hagiwara	•		•		•			
	Kazuyuki Adachi	•	•	•					
	Kazuhiro Shuto	•	•		•				
	Tetsuya Tsunekawa	•		•					• (DX)
	Masahiko Okamoto		•				•		
	Kunio Ito						•	•	• (ESG)
	Ryoji Noyori			•					• (Science and technology)
	Susumu Kaminaga	•	•						• (Business strategies)
	Kazuo Futagawa					•			• (Policy science)
	Yuko Harayama							•	• (Innovation)
Corporate Auditor	Hideki Hirabayashi	•	•			•			
	Yoshiyuki Tanaka	•	•	•					
	Hiroyuki Kumasaka					•	•		
	Makiko Takabe					•		•	
	Kozo Ogino	•					•		

* The skills matrix above is not an exhaustive list of all the knowledge and experience held by the individuals, but presents up to three major skills among those that the Company expects of them to promote management strategies.

* For a brief biography of each director and corporate auditor, please refer to pages 9-20 of the [Notice of the 143rd Ordinary General Meeting of Stockholders](#) and pages 24-28 of the [Notice of the 142nd Ordinary General Meeting of Stockholders](#).

CSR Roadmap 2025 Targets

CSR Roadmap goals

1. Further improve governance by ensuring that Board of Directors operates in a manner that contributes to the enhancement of corporate value over the medium to long term.
2. Perform monitoring based on the Basic Policy for Internal Control Systems, in accordance with Japan's Companies Act.

Main initiatives and Key Performance Indicators

	KPI
(1) Regularly hold Toray Group Business Strategy Discussion sessions at Board of Directors meetings	1-①
(2) Consider the appropriate form of Toray head office involvement in the execution of business at each group company from the viewpoint of balancing the effectiveness of group-wide governance with the dynamic decision-making of subsidiaries	-
(3) Expand opportunities for directors and corporate auditors to get the training they need to acquire the knowledge required to fulfill their responsibilities (excluding execution) and to fulfill their roles appropriately, including use of external programs	-
(4) Operate an effective internal control system	1-②

Key Performance Indicator (KPI)	Target			Fiscal 2023 Result
	Fiscal 2023	Fiscal 2024	Fiscal 2025	
1-① Toray Group Business Strategy Discussion sessions held at Board of Directors meetings (times)	8 times	8 times	8 times	8 times
1-② Board of Directors' positive assessment of the implementation of the Basic Policy for Internal Control Systems (%)	90%	90%	90%	96%

Reporting scope: Toray Group

Related Materiality for CSR

- Strengthening Corporate Governance

* Click [here](#) for the Materiality View of CSR Roadmap 2025 (PDF:392.4KB).

[PDF](#)

Looking to the Future

Toray Industries' Board of Directors conducted a "Questionnaire Survey to Evaluate the Effectiveness of the Board of Directors in the Fiscal Year Ended March 31, 2024." The survey had among 18 respondents, comprising all of the Board members and corporate auditors. Additional interviews were also conducted with eight outside directors and outside corporate auditors to hear their opinions in relation to their responses to the questionnaire. In order to ensure transparency and objectivity, the Company contracted a third-party organization to collect and tabulate the questionnaires and conduct the interviews.

Analysis and evaluation of the effectiveness of the Board of Directors based on the above process concluded that the Board of Directors had generally fulfilled its roles and responsibilities in fiscal 2023. These include promoting diversity by changing the composition of the Board of Directors, continuing dialogue among outside directors and executive officers, and the creation of an environment that supports appropriate risk-taking to respond to the changing business environment. With regard to the matter of "diversity on the Board of Directors," discussions continue to be held on the issue of appointing human resources who will contribute to the realization of the Toray Philosophy, based on the premise of ensuring quality. In terms of "further activating Board of Directors discussions," specific measures for improvement are being taken in fiscal 2024 and beyond, continuing from fiscal 2023, to further improve the effectiveness of the supervisory function of the Board of Directors.

With respect to the opinions, etc., received from the members of the Board and corporate auditors in the course of evaluating the effectiveness of the Board of Directors, the Governance Committee will hold in-depth discussions based on those opinions with a view to further improving the effectiveness of the Board of Directors, as necessary.

Click [here](#) for the main initiatives and KPIs for CSR Guideline No. 1 "Corporate Governance" during the CSR Roadmap 2025 period (fiscal 2023–2025).

[PDF](#)

Ensuring Proper Business Conduct and Transparency

CSR Roadmap 2025
Main Initiatives (1)(2)(3)(4)

Toray Group Business Strategy Discussion sessions held at Board of Directors meetings (times)

■Reporting scope ■Target in fiscal 2023
Toray Group 8 times

Result in fiscal 2023

8 times

Board of Directors' positive assessment of the implementation of the Basic Policy for Internal Control Systems (%)¹

■Reporting scope ■Target in fiscal 2023
Toray Group 90%

Result in fiscal 2023

96 %

¹ To evaluate the effectiveness of internal control relating to the Board of Directors, a questionnaire is given to all 18 directors and corporate auditors. It covers each of the nine items in the Basic Policy on Internal Control System set in accordance with the provisions of the Companies Act of Japan.

In this way, internal control effectiveness is evaluated by all directors and corporate auditors, and then monitored as a KPI of the internal control system to be shared with stakeholders.

The Toray Industries Board of Directors holds regular Toray Group Business Strategy Discussion sessions to confirm the direction of and progress on management strategies for Toray Group sustainable growth and creation of medium- to long-term corporate value. Eight discussion sessions were held in fiscal 2023.

In addition, Toray Industries uses external programs to provide directors with the data and latest information that provide the basis for improving and reviewing corporate governance so that they have all of the knowledge needed to appropriately execute their duties and fulfill their role. Moreover, to enable outside directors and outside corporate auditors to gain a deeper understanding of the Group, roundtable meetings between outside directors and company executives and managers are held regularly. Opportunities are also provided for plant tours and participation in officer and executive training.

Toray Industries operates a Basic Policy on Corporate Governance based on Japan's Corporate Governance Code, and regularly publishes a Corporate Governance Report, which also summarizes the status of internal control systems.

Toray Group maintains and improves group governance by establishing group-wide rules and regulations concerning ethics and compliance, efficient execution of duties, preservation and management of information, risk management, and other matters, in addition to holding regular meetings to receive direct reports on the management status of subsidiaries.

Toray Industries has set a KPI for “Board of Directors’ positive assessment of the implementation of the Basic Policy for Internal Control Systems.” The result for fiscal 2023 was 96%, surpassing the target of 90%.

Related Information

> [Basic Policy on Corporate Governance](#)

[Corporate Governance Report](#) 

> [Basic Policy on Internal Control System](#)

> [Information Disclosure Principles](#)

Click [here](#) for the main initiatives for CSR Guideline 1, “Corporate Governance” in CSR Roadmap 2025.

CSR Activity Report (CSR Guideline Activity Reports)

Ethics and Compliance

Ensure all executives and employees uphold a sense of responsibility, fairness and high ethical standards, and act with a keen sense of compliance to maintain the trust of society



Basic Approach

Toray Group's corporate philosophy is "Contributing to society through the creation of new value with innovative ideas, technologies and products."

To deliver on this commitment, Toray Group is contributing to society by leveraging innovative technologies and advanced materials to tackle important global issues. This effort requires that the Group earn and maintain the trust of diverse stakeholders by ensuring that its business activities comply with the laws and regulations of the countries where it does business, and by always acting with integrity.

Top management is taking the initiative by giving the highest priority to securing compliance, and by requiring that the Group and its suppliers facilitate ethics and compliance practices.

Related Policies

Internal Rules for Ethics and Compliance

Toray Industries, Inc. has established a set of internal rules for ethics and compliance, together with related standards and procedures. These internal rules set out the framework for practicing corporate ethics and legal compliance, and they are designed to foster a healthy corporate culture. The rules also outline how to respond to issues, identify causes and prevent recurrence, as well as initiatives to be taken by group companies in and outside Japan.

Ethics & Compliance Code of Conduct

Toray Group has established the Ethics & Compliance Code of Conduct as an important rule which every Toray Group executive and employee must comply with.

➤ [Ethics & Compliance Code of Conduct](#)

Structure

Toray Industries has established an Ethics and Compliance Committee, which is chaired by the president with membership comprising the Company's vice-presidents. At this committee, management and workers come together to consider and discuss policies related to corporate ethics and compliance. The status of the whistle-blowing system in Toray Group, including number of reports (consultations) received through hotlines and the outline of the cases, are reported to Board of Directors by the Ethics and Compliance Committee.

In fiscal 2023, the Ethics and Compliance Committee convened twice to deliberate on and discuss the results of fiscal 2022 initiatives, action plans for fiscal 2023, and the progress of implementation thus far. The committee also discussed individual measures such as the implementation of Compliance Month.

In each workplace, Toray Group is shifting away from a top-down approach to compliance measures, with the general manager of the division or department taking the lead on initiatives. Instead, a middle-up/middle-down approach starts with mid-level employees, who formulate and carry out the activities deemed necessary in their workplace and then report to top management with feedback based on their experience with the implemented activities.

In initiatives for group companies around the world, Toray Group has established the Affiliate Companies' Compliance Meeting and the Overseas Affiliate Companies' Compliance Meetings under the Ethics and Compliance Committee. Through these committees, the Group is promoting compliance activities in each company, country and region.



¹ Plant-Level CSR and Legal Compliance Committee has been established at each plant located outside of Tokyo and Osaka.

CSR Roadmap 2025 Targets

CSR Roadmap goals

1. No major cases throughout the Toray Group of non-compliance with or violation of bribery regulations, antitrust laws, etc
2. Implement monitoring to raise ethical and compliance awareness throughout Toray Group
3. Enhance awareness-raising and educational activities relating to corporate ethics and compliance

Main Initiatives and Key Performance Indicators

KPI

- (1) Aim for no major cases of non-compliance with or violations of laws and regulations

2-①

(2) Practice appropriate transactions based on free, fair, and transparent market competition	-
(3) Prohibit any association with organized criminal groups or other anti-social forces and take a firm stance against them	-
(4) Conduct internal legal audits and improve problems found in the audits	2-②
(5) Appropriately operate a whistle-blowing system	-
(6) Thoroughly disseminate the Ethics & Compliance Code of Conduct	-
(7) Provide information and implement education on major laws and regulations and other compliance-related matters	2-③

Key Performance Indicator (KPI)	Target			Fiscal 2023 Result
	Fiscal 2023	Fiscal 2024	Fiscal 2025	
2-① Number of major violations of laws or ordinances	0	0	0	0
2-② Group companies implementing internal legal audits (%)	Toray Industries, Inc. : 100% Group companies in and outside Japan : Implemented focusing on high-risk companies			100%
2-③ Group companies providing information and implementing education on major laws and regulations and other compliance-related matters (%)	100%	100%	100%	100%

Reporting scope: Toray Group

Related Materiality for CSR

- Ensuring Ethics and Compliance

* Click [here](#) for the Materiality View of CSR Roadmap 2025 (PDF:392.4KB).

PDF

Looking to the Future

With the slogan “Have the Integrity to Do the Right Thing in the Right Way,” since fiscal 2018, Toray has been promoting initiatives including the following four principles for taking more effective action to ensure compliance.

Compliance Action Principles

- **B** : Be fair, be honest and have Integrity
- **E** : Encourage respect and communication
- **A** : Adopt a *genba*² approach – Look to the facts!
- **R** : Responsibility as a member of our excellent company



² *Genba* is the Japanese word for “actual worksite.”

Under the name “Mission BEAR,” taking its acronym from the first word of each principle, Toray Group companies establish action plans and execute initiatives in line with the actual conditions of each company.

Toray Group performs regular follow-up to check the progress of each group company. Outstanding initiatives are shared with other companies in the Group, which are encouraged to independently enhance their compliance activities.

In fiscal 2023, Toray Industries continued to assist compliance initiatives at group companies and actively share compliance-related best practices such as Compliance Month, as well as sharing and utilizing compliance awareness survey results. Through these efforts, the Company strengthens the Group’s overall risk response by emphasizing factors unique to each region and type of business while reinforcing integrity driven corporate culture.

Click [here](#) for the main initiatives and KPIs for CSR Guideline No. 2 “Ethics and Compliance” during the CSR Roadmap 2025 period (fiscal 2023–2025). [PDF](#)

CSR Activity Report (CSR Guideline Activity Reports) - Ethics and Compliance

Establishing a Corporate Culture of Total Respect for Ethics and Compliance

Toray Group Ethics & Compliance Code of Conduct

CSR Roadmap 2025
Main Initiatives (6)(7)

The Ethics & Compliance Code of Conduct was updated in June 2023, and is an important set of rules that must be followed by every Toray Group executive and employee, including contracted, part-time and dispatched workers. This code of conduct is subject to periodic review by the Ethics and Compliance Committee, which is chaired by the president with membership comprising the Group's vice-presidents, and the results are reported to the directors. All of the employees are fully informed of this code of conduct.



[Download \(472KB\)](#)

[PDF](#)

Distribution rate of the Toray Group Ethics & Compliance Code of Conduct

CSR Roadmap 2025
Main Initiatives (6)(7)

Distribution rate of the Toray Group Ethics & Compliance Code of Conduct

100%

Toray Group

Toray Group translates and distributes its code of conduct in eight languages (English, Chinese, Korean, Thai, Malay, Indonesian, Spanish, and Hungarian) to ensure that Toray Group employees around the world understand the content.

Major Contents of Toray Group Ethics & Compliance Code of Conduct

1. Compliance for safety and the environment

(1) Working environment

We must protect the health and safety of ourselves and our co-workers by maintaining safe equipment, working conditions and working procedures. Besides following related laws and company rules, we should continue to take an active part in safety initiatives, with the aim of reducing workplace accidents to zero. Also, we should be mindful of the importance of close communication in promoting mental health in the workplace. Showing respect for others helps to create a positive and healthy work environment for all.

(2) Caring for the environment

We must follow all laws and company rules that relate to the environment, disaster prevention and the handling of chemical substances, based on the principle that we must leave the environment in a better state.

We should strive to reduce the impact that our business activities, products and services have on the environment, while also promoting diversity and sustainable use of resources.

2. Compliance for quality

(1) Safe and satisfactory products

We must always act according to the law and in the interests and spirit of product safety to ensure that we continue to make safe and satisfactory products in response to requirements of our customers. Also, we must understand the requirements of our customers appropriately, and design, manufacture and provide products in response to such requirements. If a problem should arise, we must respond quickly.

(2) Quality data management

We must obtain, forward, store and confirm quality data in agreed ways, and correctly inform customers of the data as necessary to ensure that we continue to keep our promise to customers. We as a company do not permit quality data falsification.

3. Compliance for human rights

(1) Respect for the character and individuality of employees

We must respect the individuality of every Toray Group employee and must not engage in spiteful treatment or discrimination.

We must respect the privacy of other employees and handle personal information with the utmost care.

(2) Preventing harassment and discrimination

We as Toray Group do not tolerate any form of harassment or discrimination, including sexual harassment and power harassment.

(3) Respect for the human rights of all stakeholders

We will not infringe on human rights or be complicit in infringing on the human rights. We must respect international human rights norms and act consistently with the Toray Group Policy for Human Rights.

4. Compliance for fair business activities

(1) Competing fairly

We must not participate in cartels or other illegal concerted practices, unfair treatment of business partners, or any conduct violating competition laws of each country/region.

We must not give or receive bribes both in relation to public officials and other business partners, or participate in any other form of corrupt practice. We must follow relevant laws and company rules in making political contributions and charitable donations.

We must accurately communicate information about the quality, functions and price of our products and services so as not to mislead our business partners and end users.

(2) Fair transaction and asset management

All transactions including purchase, sales and payment of expense must be done appropriately in accordance with the law and general accounting principles.

All company assets such as inventories and fixed assets must be controlled, used and maintained for business purpose only.

(3) International trade control and security trade administration

We must follow the relevant laws and regulations and comply with appropriate import and export procedures and trade controls when purchasing, exporting or importing products, machines, materials and samples, or when sharing our technology overseas, to avoid violation of sanctions imposed by the United Nations and governments such as the United States.

(4) Compliance with applicable laws in general

We must acknowledge that a violation of laws and regulations could undermine trust in the company, and comply with any and all laws and regulations including those related to;

- Insider trading
- Shut off of any relationship with antisocial forces
- Conflicts of interest

5. Compliance for intellectual property

(1) Respect for intellectual property rights of others

We must ensure that we do not infringe intellectual property rights of others, either intentionally or as the result of insufficient investigation.

6. Compliance for information management

(1) Information management

When we become aware of confidential information owned by either Toray Group or others, we must not disclose, publicize or use such information for unauthorized purposes both during and after our employment at Toray Group.

When handling personal information as part of our work, we must follow company policies for protecting such information and manage such information carefully and appropriately.

(2) Reporting and public disclosures

We must make disclosures as required by law and follow the Toray Group's Information Disclosure Principles with the aim of providing full, fair, accurate and timely reports and public disclosures about our business.

Major violations of laws or ordinances

CSR Roadmap 2025
Main Initiatives (1)

Number of major violations of laws or ordinances

■Reporting scope
Toray Group

■Target in fiscal 2023
0

Result in fiscal 2023

0



Toray Industries posts links to information on CSR and legal compliance on its corporate intranet. Toray Group circulates important information about legal and compliance matters that are highly relevant to its business in Japan and other countries. Group companies implement workshops to examine these matters and study cases of corporate misconduct in an effort to foster discussion in the workplace. Since fiscal 2012, Toray Industries has provided online training courses on Toray ethics and legal compliance for all executives and employees, including contracted, part-time and dispatched workers. In addition to training designed to instill an understanding of the Ethics and Compliance Code of Conduct and whistleblowing system, the Company sets specific course themes for each year on such topics as anti-corruption/bribery, human rights, and harassment. In fiscal 2023, the Company provided training on the Toray Group Ethics & Compliance Code of Conduct and the Group’s whistleblowing system. Participation in this course was 97.1% of targeted employees. In a survey of participants who took part in the online course, 58.9% responded that they “understand” the content of the Ethics and Compliance Code of Conduct, and 40.8% responded that they “understand to some extent.” Toray Industries will continue to disseminate information and provide education to ensure that ethics and legal compliance is even more fully understood moving forward. Group companies in Japan are using these materials to implement their own training.

Toray Industries has also added an evaluation point to the performance review system that applies to safety, CSR, quality assurance, and compliance. The aim is to reflect employees’ individual efforts regarding ethics and compliance in their personal evaluations and compensation.

Examples of Workplace Initiatives in Fiscal 2023

The Legal & Compliance Division at Toray Industries held an in-person Global Legal & Compliance Meeting for the first time in four years. Toray Group legal and compliance officers from various companies and regions gathered to discuss challenges and share solutions pertaining to legal and compliance activities.



The Global Legal & Compliance Meeting being held in person for the first time in four years

At the Toray Industries Seta Plant, an ethics training session was conducted for all employees involved in medical device quality assurance, technology, and production. The session featured a clinical technician who works with the SATAKE HotBalloon™ ablation catheter. Delivered from the perspective of a medical professional, the training explained how the Toray product is used in medical settings and what potential health risks product defects could pose.



Ethics training concerning medical devices

Expanding the Whistleblowing System

CSR Roadmap 2025
Main Initiatives (5)

Toray Industries established the Corporate Ethics and Legal Compliance Helpline as a whistleblowing system in fiscal 2003 and expanded the system to include all Toray Group companies in Japan in fiscal 2010. In 2022, the Company revised its internal rules in accordance with revisions to the Whistleblower Protection Act that went into effect in June of the same year. Executives, employees who have been retired for a year or less, and business partners were added as users of the whistleblowing system, and a provision regarding the designation of those who respond to reports to the whistleblowing system (whistleblowing report responders) was also added. Further, Toray Industries endeavored to encourage greater use of the whistleblowing system by, for example, providing examples of how to utilize the system.

The Company ensures that employees have access to alternative means of reporting and consulting such as via internal contact points at its offices and plants or directly to the secretariat of the Ethics and Compliance Committee via email or a dedicated form on the corporate intranet.

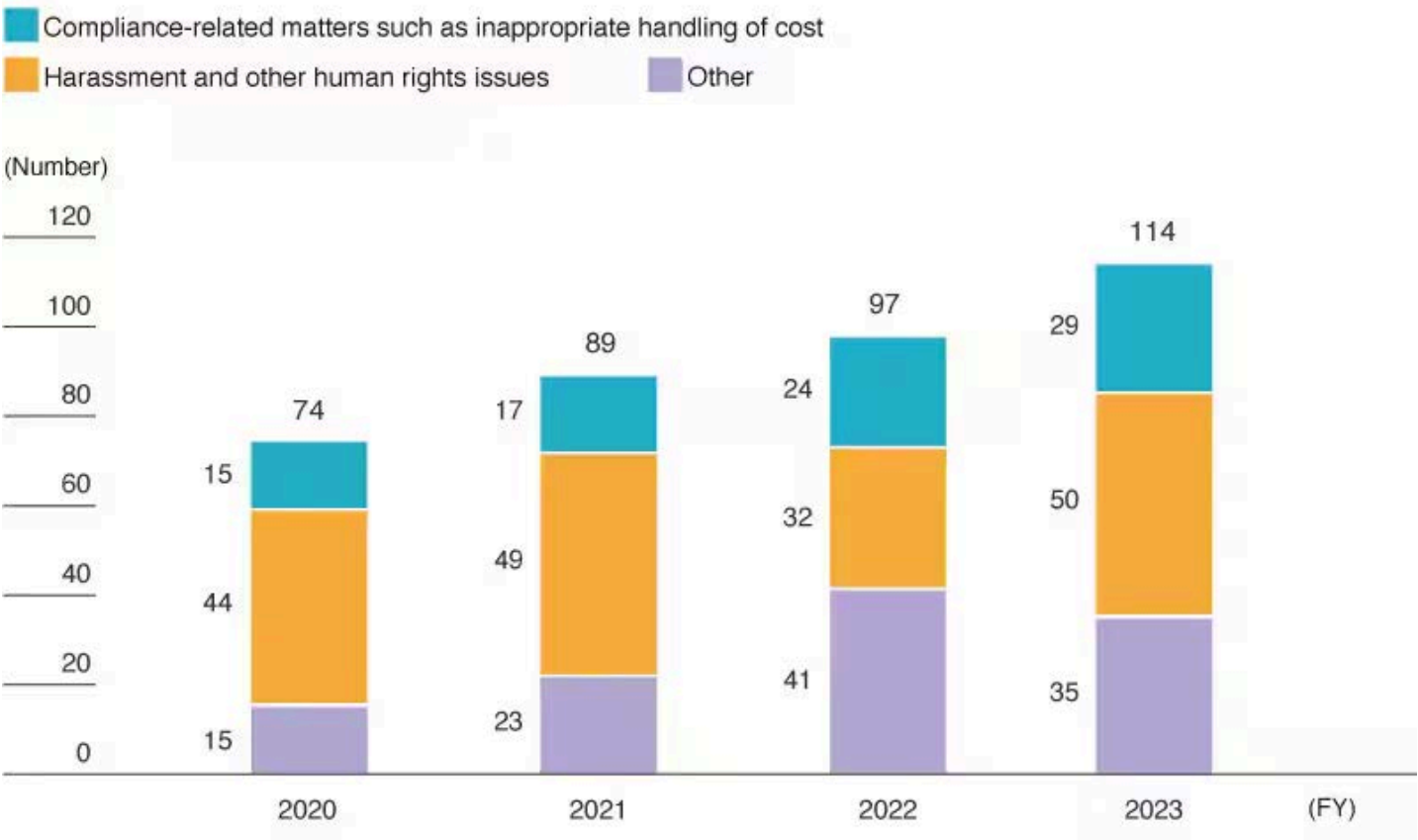
In addition, each Toray Group company in Japan has established a Helpline contact point. Moreover, Toray Industries has also created an external Helpline contact point shared by all group companies in Japan to make it easier for employees to report and consult.

Each group company outside Japan has also established a Helpline contact point (internal, outside, or regional contact points). These Helpline contact points have been in operation at all companies since fiscal 2017. Toray Group has worked to resolve reported issues, while carefully confirming circumstances in interviews and investigations, based on the laws, customs, and other regulations of each country and region.

Since fiscal 2016, Toray Industries has also maintained an additional whistleblowing system for group companies to directly report serious misconduct such as violations of antitrust laws and bribery, and it is working to inform all Toray Group companies about the system.

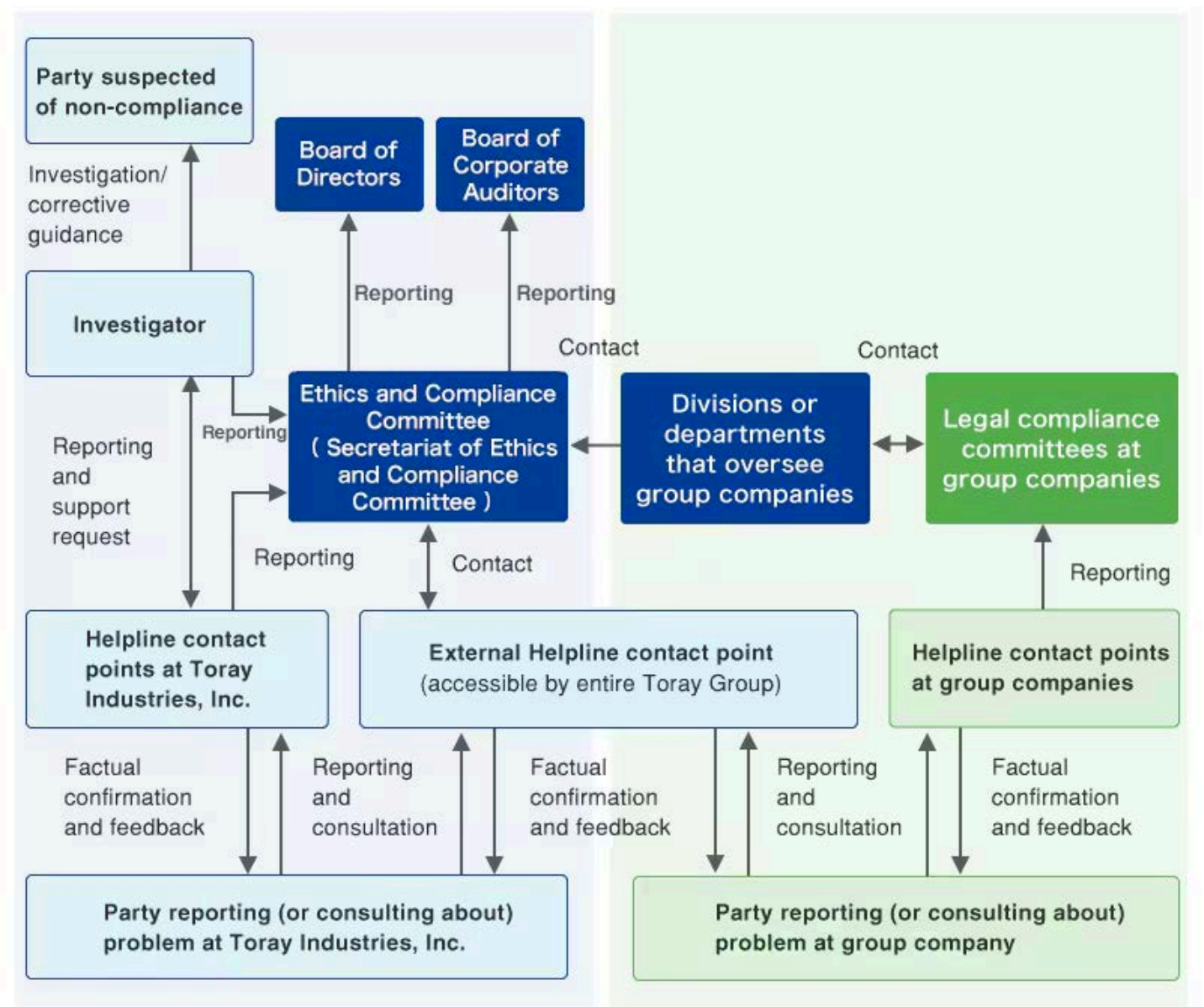
In fiscal 2023, Toray Industries and its group companies received a total of 114 whistleblowing reports and consultations, with 17 cases resulting in disciplinary action. Of these disciplinary cases, six were compliance-related matters such as inappropriate handling of cost, nine were harassment and other human rights issues, and two were categorized as other. Of the six compliance related cases, one involved a conflict of interest. No cases resulted in disciplinary action for antitrust law violation, corruption or bribery, mishandling of personal information belonging to customers, insider trading, or money laundering. The facts were investigated with complete discretion to protect against any risk of negative impact on the individual reporting to or consulting with the hotline. If a problem was identified, efforts were made to solve the problem and measures were taken in accordance with the internal rules of each company, such as employment rules.

Number and Subject of Reports (Consultations) Across Toray Group



The number of reports (consultations) and the details of the cases are reported to the Board of Directors and the Board of Corporate Auditors by the Ethics and Compliance Committee.

Group companies in and outside Japan that have established a whistle-blowing system	100%
---	------



¹ In addition to the above avenues, Toray Industries, Inc. receives reports on and addresses serious misconduct at all group companies in and outside Japan.

Implementing Internal Legal Audits

CSR Roadmap 2025
Main Initiatives (4)



In fiscal 2023, Toray Industries undertook an internal legal and compliance audit of designated divisions of Toray Industries and designated group companies worldwide to ensure compliance with the highly important antitrust laws, anti-bribery regulations, insider trading regulations, and contract signing rules. Although no inappropriate transactions were found under any of the audit items, the Company plans to continue working to ensure thorough awareness of legal compliance through educational activities and the dissemination of information in media such as company magazines.

Click [here](#) for the main initiatives for CSR Guideline 2, “Ethics and Compliance” in CSR Roadmap 2025.

Ensuring Tax Compliance

Toray Group Tax Policy

CSR Roadmap 2025
Main Initiatives (1)

With the release of a policy by the Organisation for Economic Co-operation and Development (OECD) to combat base erosion and profit shifting (BEPS), the complexity of taxation rules worldwide is steadily increasing. Due also to the growing importance of corporate governance related to taxation in Japan, Toray Group recognizes the necessity of highly transparent tax practices and corporate social responsibility. Therefore, the Group has enhanced its tax compliance efforts based on the Toray CSR Guidelines.

To ensure that this initiative can be taken to an even higher level, the Group has once again clarified the basic taxation compliance approach that each employee should take, and established the Toray Group Tax Policy, which was approved by the Board of Directors in April 2020.

Under the responsibility of the general manager of the Finance and Controller's Division¹, Toray Group will continue striving to improve its tax compliance while building its tax governance structure, centered on the Tax Department, to enhance corporate value.

Toray Group operates the Corporate Ethics and Legal Compliance Helpline, a whistleblowing system for group companies in and outside of Japan to report and consult on ethics and compliance issues, including unethical or illegal activities and concerns related to tax matters.

¹ As of July 2024, a senior vice president (member of the board) serves as the general manager of the Finance and Controller's Division.

Toray Group Tax Policy (Established April 2020)

Toray Group will continue to uphold the following tax policy and strive to improve its tax compliance while building its tax governance structure, to enhance corporate value.

Basic Policy

1. Toray Group makes efforts to pay taxes appropriately by complying with the tax laws of each country and international taxation rules.
2. Toray Group makes efforts to enhance corporate value and maximize shareholder value while minimizing tax risks and optimizing tax expenses.
3. Toray Group will not conduct arbitrary tax avoidance using tax havens or other methods.
4. Toray Group establishes good relationships with the tax authorities of each country.

Tax Compliance

Toray Group employees (including executives) recognize that complying with tax laws and rules is the best way to minimize tax risks and enhance corporate value. The Group conducts trainings so that employees can ensure tax compliance.

Tax Governance

Toray Group clarifies and implements tax rules within the Group to manage tax expenses and aim for an appropriate tax burden.

The Group makes efforts to establish good relationships with tax authorities in each country on matters that require cooperation.

Other Initiatives

CSR Roadmap 2025
Main Initiatives (1)

Transfer pricing is becoming more important as global trade increases. Toray Group therefore strives to allocate income appropriately by calculating transfer pricing using the arm's length principle. Moreover, the Group does not carry out tax planning strategies with the intention of inappropriately reducing Group taxes.

Click [here](#) for the main initiatives for CSR Guideline 2, "Ethics and Compliance" in CSR Roadmap 2025.

CSR Activity Report (CSR Guideline Activity Reports) - Ethics and Compliance

Improving Security Trade Controls

Watching the Latest Trends and Management Strategies for Security Trade Controls

CSR Roadmap 2025
Main Initiatives (1)

In addition to ongoing concerns about the spread of weapons of mass destruction, changes in the international security balance necessitate further risk management addressing security trade controls. Toray Industries, Inc. convenes a Security Trade Administration Committee comprising officers of divisions that are involved in exports and technology transfer. In fiscal 2023, the committee decided on measures to implement for the fiscal year after considering pressing risks based on recent international circumstances and regulatory trends. The committee members also convene a Divisional Security Trade Administration Committee that communicates corporate measures and implements supplementary programs, such as precautions to be taken by departments and group companies under its supervision.

Practically Addressing Risks

CSR Roadmap 2025
Main Initiatives (1)(7)

Toray Group performs risk management of security trade controls for the export of all products, devices, materials, and samples, as well as the provision of technology to non-residents of Japan (including residents falling under specific categories). Particularly strict management is necessary for TORAYCATM carbon fiber and its composite materials, semiconductor coating agents, and water treatment membranes, which are listed as restricted items requiring export permission from the Japanese Minister of Economy, Trade and Industry.

The following measures to enhance risk management associated with security trade controls have been implemented based on conditions in and outside of Japan.

(1) Enhanced employees' capacity for accurate judgment within Toray Industries' divisions and group companies

With the implementation of measures to mitigate the risk of COVID-19 infection, Toray Industries utilized web conferencing for highly specialized practical training and e-learning for basic level specialized training. The training programs continue to be improved to provide more effective teaching suitable to these methods. In fiscal 2023 Toray Industries provided the necessary practical knowledge to mid-level employees who play a central role in security trade control. Training was also given to newly appointed managers to promote appropriate management on the front lines. Study sessions and discussion meetings were held to focus on individual departments and companies in order to increase the reliability of transaction information. (A total of 11 courses were held with 364 employees participating in the web conference courses, 141 employees taking part in the e-learning courses, and 438 participating in hybrid meetings.) The Company also conducted a series of advanced courses for employees with specialized expertise to practice classifications. (A total of two courses were held with 334 employees participating in the web conference courses.)

In addition, the Company systematically encourages employees to take the various qualification exams authorized by the Center for Information on Security Trade Control (CISTEC) in Japan. In fiscal 2023, 254 Toray Group employees passed the exam, bringing the cumulative number of Toray Group employees who have passed the exam to 4,850 persons.

(2) Conducted regular audits

Toray Industries carried out paper audits and onsite audits of group companies, and provided individualized guidance based on the results to help group companies make improvements.

(3) Enhanced information sharing and reporting

Toray Industries integrated and centralized information on concerns such as suspicious trade inquiries, reported or consulted with the appropriate authorities as required, and took the appropriate measures. The Company also shared suspicious trade information at various company meetings, and took steps to improve its risk management.

(4) Improved inspection systems

Toray Industries has fully linked its security trade control system with its backbone sales system in order to prevent legal violations due to human error. The system increases the reliability of transaction information by thoroughly reviewing automatic matching results with CISTEC chaser information (i.e. high-risk entities from various watch lists). Support was also provided for the system's implementation across group companies in Japan. (The system has been implemented at Toray Research Center Inc. Implementation is under review at the following companies: Du Pont-Toray Co., Ltd., Toray Celanese Co., Ltd., and Toray Medical Co., Ltd.)

Click [here](#) for the main initiatives for CSR Guideline 2, "Ethics and Compliance" in CSR Roadmap 2025.

Antitrust Compliance and Corruption/Bribery Prevention

1. Compliance with Antitrust Laws

The Toray Group Ethics & Compliance Code of Conduct, revised in June 2022, stipulates the rules that all Toray Group executives and employees must follow regarding antitrust laws. Educational materials on antitrust laws have also been prepared in Japanese and English for all group employees. The Group has an Antitrust Law Compliance Program that is utilized by departments in Japan, along with Antitrust Law Red Cards that can be carried as a guide by employees.

In fiscal 2023, there were no legal actions taken against Toray Group due to anticompetitive activities, antitrust actions, or monopolistic practices.

2. Corruption and Bribery Prevention

In January 2020, the Group issued Anti-Bribery Regulations to clearly prohibit corrupt relationships with public officials and business partners. Approval and reporting rules were also established concerning the provision (or receiving) of money and other items to (from) public officials and business partners. Similar rules have been implemented at group companies worldwide.

The Ethics & Compliance Code of Conduct stipulates the guidelines that all Toray Group executives and employees must follow to avoid involvement in corruption and bribery. Guidelines and educational materials on related corruption and bribery prevention have also been prepared in Japanese and English for all Group employees and shared throughout the Group. In fiscal 2023, there were no legal actions taken against Toray Group due to corruption and bribery prevention.

In October 2023, Toray Industries, Inc. conducted e-learning on the Ethics & Compliance Code of Conduct, which includes topics such as compliance with antitrust laws and the prevention of corruption and bribery. This training was provided to all executives and employees, including contracted, part-time and dispatched workers, with 7,139 people taking the training.

Click [here](#) for the main initiatives for CSR Guideline 2, "Ethics and Compliance" in CSR Roadmap 2025.

CSR Activity Report (CSR Guideline Activity Reports) - Ethics and Compliance

Protection of Personal Information

CSR Roadmap 2025
Main Initiatives (1)

In order to comply with Japan's Act on the Protection of Personal Information, Toray Industries, Inc. has established Regulations for the Management of Personal Information, together with a management framework and practices to ensure each department manages personal information appropriately. Audits are regularly conducted into the management conditions in each department.

In fiscal 2023, the Company received no complaints concerning personal information and there were no data breaches.

Major Toray Group companies in and outside Japan also appropriately manage personal information in accordance with the management systems and methods set forth in the rules and regulations of each company.

Click [here](#) for the main initiatives for CSR Guideline 2, "Ethics and Compliance" in CSR Roadmap 2025.

Ethics and Compliance for Research Involving Human Biological Subjects and Information

Toray Industries Inc. aims to expand its business by helping to realize “a world where everyone enjoys good health and hygiene.” In addition to developing new products in the pharmaceutical and medical fields, the Company is working on creating high-value-added materials for the broader healthcare market, including functional fibers designed to appeal to human sensibilities. During its research and development processes, when conducting studies using human subjects or samples/information obtained from people (“research/testing involving humans”; hereafter, “human studies”), Toray personnel comply with the Company's ethical standards¹, which are based on national ethics guidelines².

The most important consideration for human studies is to protect the dignity and human rights of the research participants (providers of human samples or information). Therefore, individuals engaged in human studies (hereafter, “researchers”) are required to undergo prior training before starting their involvement, receive regular refresher training at least once a year, and submit research plans in advance for review and approval by internal and external experts.

The Company has established an Ethics Committee on Research Involving Human Biological Subjects³ (the “Ethics Committee”) and an Ethics Review Committee on Research Involving Human Biological Subjects⁴ (the “Ethics Review Committee”) to deliberate on the ethical and scientific validity of proposed human studies.

Research plans submitted by researchers to the Ethics Committee are rigorously reviewed by the Ethics Review Committee from the perspectives of ethical validity, scientific rationality, and the appropriateness of personal information management. The conclusions are then reported to the Ethics Committee. Based on this report, the Ethics Committee makes a comprehensive determination on whether to approve a proposed human study, taking into account factors such as institutional suitability.

Ethical Review System for Human Studies



The operation and review activities of the Ethics Review Committee are conducted in accordance with the Operational Procedures for the Ethics Review Committee on Research Involving Human Biological Subjects (hereafter, the “Procedures”) created based on the Company's ethical standards. In addition to reviewing proposed studies, the Ethics Review Committee also conducts researcher training, and fiscal year-end reviews of all current studies. It plays a key role in managing and ensuring the proper operation of the entire process for human studies. The Ethics Review Committee members, the Procedures, and the committee minutes are released on the Company's website and submitted to the Research Ethics Review Committee Reporting System operated by Japan's Ministry of Health, Labour and Welfare.

- 1 The Company's ethical standards: Toray Ethic Code for Research Involving Human Biological Subjects (established March 10, 2011; revised August 1, 2023; 6th Edition)
- 2 National ethics guidelines: “Ethical Guidelines for Medical and Biological Research Involving Human Subjects” (March 21, 2021; Ministry of Education, Culture, Sports, Science and Technology / Ministry of Health, Labour and Welfare / Ministry of Economy, Trade and Industry Notification No. 1)
- 3 Ethics Committee on Research Involving Human Biological Subjects: This body, chaired by the head of Toray's Research & Development Division, manages and oversees the Ethics Review Committee. As of July 2024, the corporate vice president serves as the head of the R&D Division.
- 4 Ethics Review Committee on Research Involving Human Biological Subjects: Taking a scientific and ethical standpoint, this body deliberates on whether proposed human studies should proceed based on Toray's ethical standards. Its conclusions are reported back to the Ethics Committee. The Ethics Review Committee consists of i) internal experts in natural sciences, ii) internal experts in humanities and social sciences, and iii) members of the public. The committee chair is an internal expert appointed by the Ethics Committee chair, and as of July 2024, the position is held by the director.

[Member of Ethics Review Committee on Research Involving Human Biological Subjects \(PDF : 86KB\)](#) [PDF](#)

[Minutes of 1st Ethics Review Committee on Research Involving Human Biological Subjects \(PDF : 87KB\)](#) [PDF](#)

[Minutes of 2nd Ethics Review Committee on Research Involving Human Biological Subjects \(PDF : 83KB\)](#) [PDF](#)

[Minutes of 3rd Ethics Review Committee on Research Involving Human Biological Subjects \(PDF : 85KB\)](#) [PDF](#)

[Minutes of 4th Ethics Review Committee on Research Involving Human Biological Subjects \(PDF : 85KB\)](#) [PDF](#)

[Minutes of 5th Ethics Review Committee on Research Involving Human Biological Subjects \(PDF : 88KB\)](#) [PDF](#)

[Minutes of 6th Ethics Review Committee on Research Involving Human Biological Subjects \(PDF : 85KB\)](#) [PDF](#)

[Minutes of 7th Ethics Review Committee on Research Involving Human Biological Subjects \(PDF : 85KB\)](#) [PDF](#)

[Minutes of 8th Ethics Review Committee on Research Involving Human Biological Subjects \(PDF : 85KB\)](#) [PDF](#)

[Minutes of 9th Ethics Review Committee on Research Involving Human Biological Subjects \(PDF : 85KB\)](#) [PDF](#)

[Minutes of 10th Ethics Review Committee on Research Involving Human Biological Subjects \(PDF : 85KB\)](#) [PDF](#)

[Minutes of 11th Ethics Review Committee on Research Involving Human Biological Subjects \(PDF : 86KB\)](#) [PDF](#)

[Minutes of 12th Ethics Review Committee on Research Involving Human Biological Subjects \(PDF : 83KB\)](#) [PDF](#)

[Minutes of 13th Ethics Review Committee on Research Involving Human Biological Subjects \(PDF : 112KB\)](#) [PDF](#)

[Minutes of 14th Ethics Review Committee on Research Involving Human Biological Subjects \(PDF : 112KB\)](#) [PDF](#)

Click [here](#) for the main initiatives for CSR Guideline 2, “Ethics and Compliance” in CSR Roadmap 2025.

CSR Activity Report (CSR Guideline Activity Reports) - Ethics and Compliance

Disclosure of Information Regarding the Ethical Treatment of Laboratory Animals

CSR Roadmap 2025
Main Initiatives (1)/(7)

Toray Industries, Inc. aims to contribute to society and personal health enhancement through the creation of new pharmaceuticals and medical devices. The Company believes that animal testing is necessary and required for verifying the safety and efficacy of these products. However, these tests must be carried out with respect for animal life, considering the 3R principles for animal testing; Replacement (use of alternatives to animals), Reduction (reducing the number of animals used), and Refinement (minimization of pain).

With these 3R principles as the core philosophy, Toray Industries has established company's rules to ensure that its animal testing is conducted ethically. The rules comply with the Act on Welfare and Management of Animals, the Standards Relating to the Care and Keeping and Reducing Pain of Laboratory Animals, the Guidelines for Proper Conduct of Animal Experiments, and other relevant guidelines. The Company is committed to the proper care and scientific use of laboratory animals.

Under the leadership of the head of the testing facility, the Company has set up an Animal Care and Use Committee. This committee carries out ethical and scientific review of the adequacy of all Company animal testing plans, focusing on the minimization of pain (Refinement), use of alternatives to animals (Replacement), and reducing the number of animals used (Reduction). Through these efforts, the Company strives to conduct appropriate animal testing based on the 3R principles. Specifically, as alternatives to animal testing, Toray has proactively adopted *in silico* evaluation¹ using computers and *in vitro* evaluation² using cultured cells. For pharmacokinetic evaluation, the Company has been able to reduce the number of animals used by adopting a simultaneous analysis method for multiple compounds administered in mixed doses. Humane endpoints (criteria for suspending and discontinuing experiments to avoid causing undue suffering) are also set for all planned experiments.

The committee provides all staff involved in animal testing with training on the handling of laboratory animals and biannual ethics education, making completion of these educational programs mandatory for those involved in such activities. The committee also works to raise awareness of animal testing and laboratory ethics.

In addition, the Animal Care and Use Committee carries out annual self-monitoring and evaluation of the regulations and systems in place, the committee actions, facility maintenance, and animal testing to verify that each test is conducted appropriately.

Toray Industries' Basic Research Center has continually received certification from the Assessment and Accreditation Center for Laboratory Animal Care and Use, Japan Pharmaceutical Information Center³ since 2012. Finally, as a symbolic act to express gratitude and respect toward the animals used in its tests, the Company holds a memorial service every year to honor these laboratory animals.

¹ *in silico* evaluation: An evaluation method that uses computers to predict the physiological activity, pharmacokinetics, toxicity, and other characteristics of a compound from existing data.

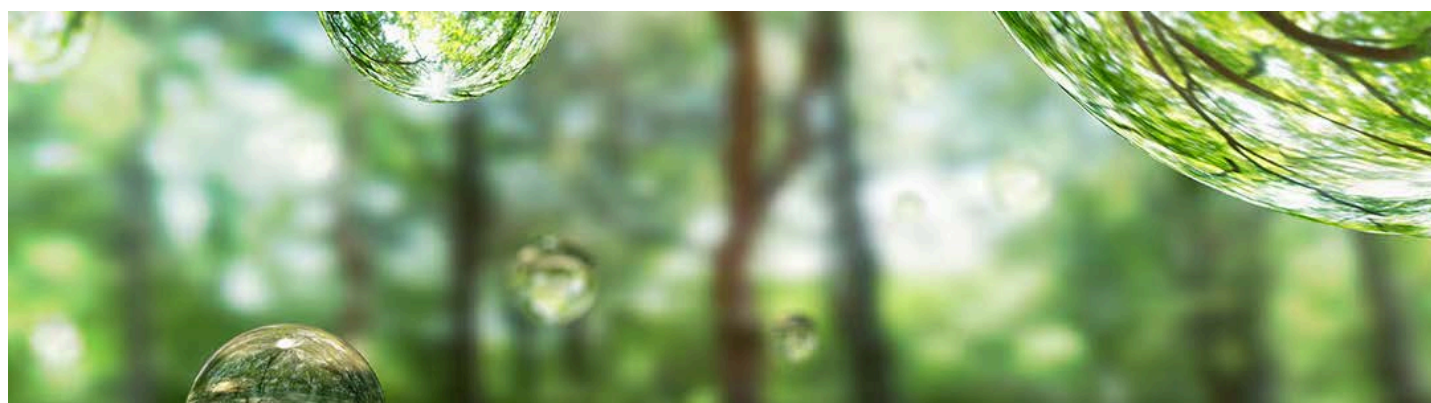
² *in vitro* evaluation: An evaluation method that detects the physiological activity, pharmacokinetics, toxicity, and other characteristics of a compound using human or animal cells and tissues in test tubes or culture dishes.

³ For a list of facilities certified by the Japan Pharmaceutical Information Center, click [here](#).

CSR Activity Report (CSR Guideline Activity Reports)

Safety, Accident Prevention, and Environmental Preservation

Ensure the safety and health of society and employees, and protect the environment in all business processes, from procuring raw materials and manufacturing to the supply and disposal of products.



Basic Approach to Environmental Preservation

Corporate efforts to help realize a sustainable society have become increasingly vital in recent years. Toray Group established its Medium-Term Environmental Plan in fiscal 2000 to strengthen and enhance initiatives for reducing environmental impact. The Group has set key performance indicators (KPIs) to reduce greenhouse gas emissions per unit of sales in order to fight global warming, as well as to reduce atmospheric emissions of certain chemical substances (PRTR substances and VOCs, etc.) and waste. These efforts have continued during the course of all five Medium-Term Environmental Plans up until fiscal 2020.

Under the Toray Group Sustainability Vision announced in July 2018, the Group aimed to achieve two targets per unit of revenue by 2030: a 30% reduction in greenhouse gas emissions from production activities and a 30% reduction in water usage, both compared with fiscal 2013.

Under the medium-term management program Project AP-G 2022, which covers the period from fiscal 2020 to fiscal 2022, the Group promoted the Challenge 30 Project, a company-wide project to tackle specific activities to realize the Toray Group Sustainability Vision of reducing greenhouse gas emissions and water consumption per unit of revenue. To achieve these two targets, three-year KPIs were included in CSR Roadmap 2022, the Group's medium-term CSR plan, and initiatives were implemented to meet the targets. With these efforts, the Group met its targets for fiscal 2030 ahead of schedule in fiscal 2022. Therefore, to further accelerate its activities to realize a sustainable world, the Group significantly raised the numerical targets in the Toray Group Sustainability Vision from the 30% reduction to a more than 50% reduction in both greenhouse gas emissions and water consumption per unit of revenue compared to fiscal 2013. The Group is also accelerating efforts by setting the target of reducing greenhouse gas emissions in Japan by at least 40% compared to fiscal 2013.

To meet the new targets, three-year KPIs have been included in CSR Roadmap 2025, which covers the period from fiscal 2023 to fiscal 2025. The company-wide Challenge 30 Project has also been renamed the Challenge 50+ Project to further promote reduction efforts through routine energy-saving activities, the introduction of renewable energy, elimination of the use of coal, and other means. Moreover, in addition to reducing greenhouse gas emissions and water consumption per unit of revenue, CSR Roadmap 2025 also continues to set KPIs relating to atmospheric VOC emission reduction and waste recycling rate improvement. The Group is taking steps to meet these, including by strengthening its management of priority-focus companies and factories, namely those have a particularly large environmental impact.

Using various communication and education tools, Toray Group is actively enhancing each employee's awareness and knowledge of environmental issues and sustainability. Specifically, the Group covers environmental topics in its in-house magazine "People." It also issues the internal "SI Report" concerning sustainability, and shares information worldwide about environmental accidents and near-misses. In addition, the Group conducts training at various organizational levels, including programs for new employees and seminars organized by Toray Corporate Business Research, Inc.

Since fiscal 2023, the Group has been offering intermediate and advanced environmental e-learning courses, building upon the basic course provided in fiscal 2022 (with an average of approximately 12,000 participants across three basic courses).

* Refer to the following activity reports for more information on basic approaches and policies regarding safety and disaster prevention, as well as for issue awareness and policies regarding individual environmental issues.

Related Policies

Ten Basic Environmental Rules (Established January 2000 and revised June 2011)

1. Prioritize environmental preservation

We shall comply with all laws, regulations, and agreements in all of our business activities. Taking biodiversity into consideration, we shall place the highest priority on environmental preservation in the manufacture, handling, use, sale, transport, and waste disposal of products.

2. Prevent global warming

We shall promote energy conservation and work to reduce our unit energy consumption and our carbon dioxide emissions.

3. Achieve zero emissions of environmental pollutants

We shall strive continuously to reduce our emissions with the ultimate goal of achieving zero emissions of hazardous chemical substances and waste materials into the environment.

4. Use safer chemical substances

We shall collect, maintain, and provide information on the health and environmental effects of the chemical substances we handle while striving to use safer chemical substances.

5. Promoting Recycling

We shall develop recycling technologies for products, containers, and packaging and cooperate with society in promoting the recovery and reuse of such items.

6. Improve the level of environmental management

We shall work to maintain and improve the level of our environmental management while working to upgrade our environmental management technology and skills, performing self auditing, and taking other measures.

7. Contribute to society through environmental improvement technologies and products

We shall meet the challenge of developing new technologies and shall contribute to society through environmental improvement technologies as well as products that place a low burden on the environment.

8. Improve the environmental management of our overseas businesses

In our overseas business activities, we shall place top priority on complying with local laws and regulations, and further, we shall manage those businesses in accordance with the management standards of the Toray Group.

9. Improve employees' environmental awareness

We shall strive to improve our employees' awareness of environmental issues through environmental education, social activities, internal communications activities, and other means.

10. Share environmental information with society

We shall deepen mutual understanding of Toray Group environmental policies and practices by widely publicizing our environmental preservation efforts and their results in environmental reports and other publications directed at local communities, investors, and the media.

Safety, Health, Accident Prevention and Environmental Preservation Management

Action Policy and Main Activities

Toray Group operates a policy for safety, health, accident prevention, and environmental activities. The policy is revised every year to reflect the results from the previous fiscal year, and specifies the main activities to implement in each policy area.

Safety, Health, Accident Prevention, and Environment Activity Policy of Toray Group in 2023

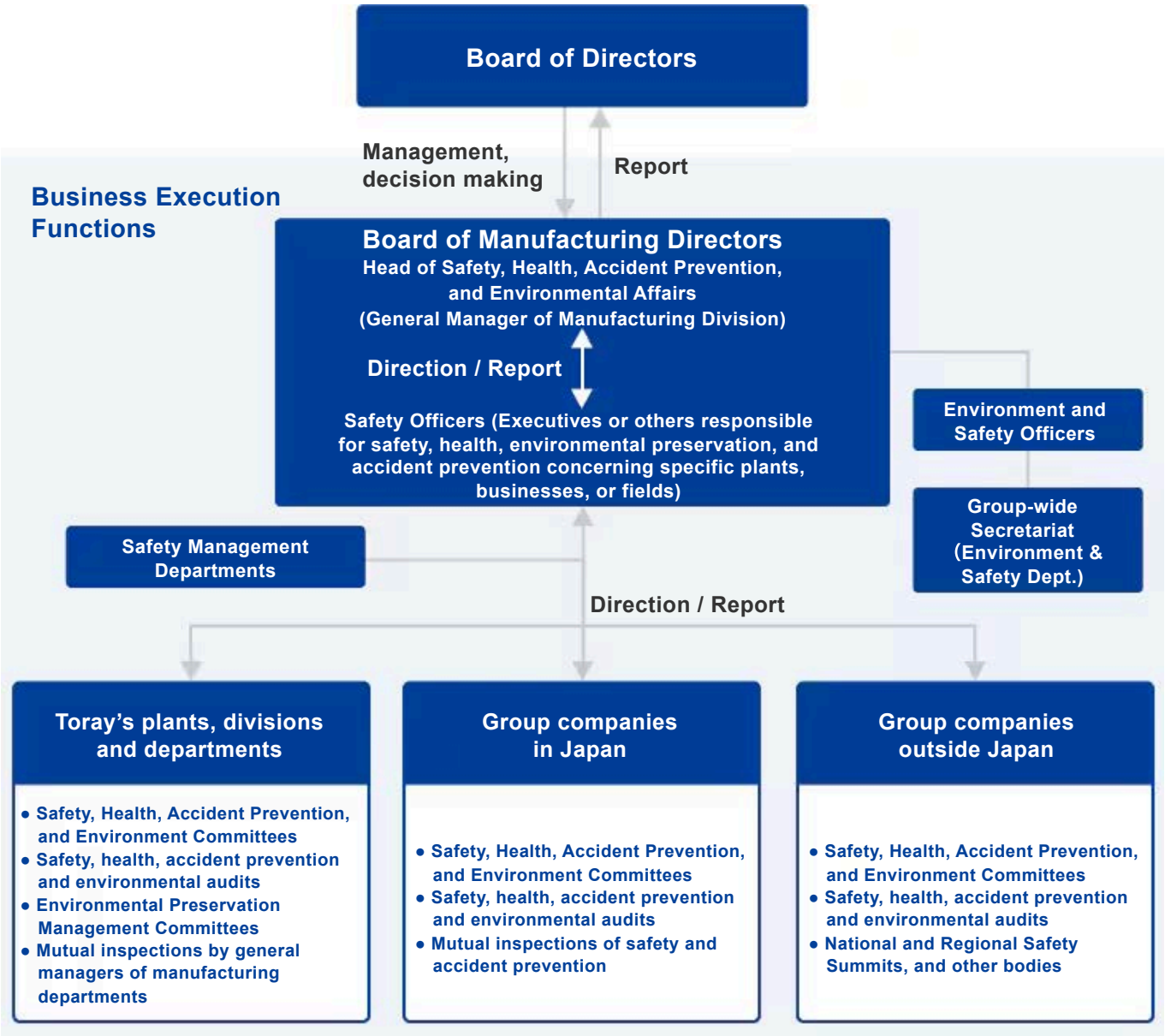
Action policy		Main activities
Safety	Pursue zero occupational accidents	• Follow rules thoroughly • Thorough elimination of similar accidents • Enhance safety activities in each business division
Healthier lives	Emphasize occupational health management	• Enhance and strengthen mental health management • Promote work environment improvement • Rigorous chemical substance management
Accident prevention	Pursue zero fire accidents	• Strengthen fire accident prevention management
	Enhance crisis management for natural disaster risks	• Strengthen preparation and response for large-scale earthquake and water disaster
Environment	Pursue zero environmental accidents	• Thorough elimination of similar accidents
	Promote Sustainability Vision	• Promote Challenge 50+ Project • Make efforts to reduce environmental impact • Address the problem of marine plastic waste

Structure

Safety, Health, Accident Prevention, and Environmental Preservation Promotion System

In order to promote the Toray Group's safety, health, accident prevention, and environmental preservation activities, the Head of Safety, Health, Accident Prevention, and Environmental Affairs (general manager of the Manufacturing Division¹) establishes and directs the relevant group-wide policies and key activities each year. Progress is managed by each group company and plant through various committees and audits, using the PDCA cycle.

Safety, Health, Accident Prevention, and Environmental Preservation Promotion System (Fiscal 2024)



¹ As of July 2024, the executive vice president (member of the board) responsible for the Manufacturing Division concurrently serves as the division's general manager.

Audits and Follow-Up Measures

Toray Group conducts annual audits to objectively assess and improve the execution and management of safety, health, accident prevention, and environmental initiatives at offices and plants of group companies. Internal audits are conducted using a standardized audit checklist, and encompass visits and production floor guidance provided by directors and managers from other group companies.

In fiscal 2023, audits were conducted for all 13 plants and one research laboratory at Toray Industries, 27 plants operated by 27 group companies in Japan, and 83 plants operated by 64 group companies outside Japan. The audits focused on the following areas: safety measures for edged tool work; prevention of electric fire and spontaneous combustion by heat storage inside heat insulating materials; compliance with revisions to the Industrial Safety and Health Act; and thoroughness of measures to prevent environmental accidents. The audits helped to secure systematic improvements by identifying and addressing facility issues and issues relating to management.

Responsible Care Program

Under Responsible Care (RC) programs, chemical companies pursue voluntary management of chemical substances, transparent disclosure, and communication with the public. Companies committed to RC take safety, health, and environmental measures across the entire product lifecycle—from development, manufacturing, distribution and consumer use to the disposal—and then disclose the results of their efforts.

Since 1995, Toray Group has participated as a founding member in the Japan Responsible Care Council (JRCC), established under the Japan Chemical Industry Association. The Group is committed to the safe handling of chemical substances and environmental preservation through RC activities.

In line with the Responsible Care Global Charter², Toray Group prepares RC activity plans and monitors their implementation group-wide. These plans and their results are compiled into a Responsible Care Implementation Plan/Report, which is submitted annually to the Japan Chemical Industry Association.

² The Responsible Care Global Charter was originally established in 2005 to encourage companies to take concrete action that is understandable to external stakeholders. The Charter was revised in 2014, and Toray Industries was a signatory to both the original and revised Charter.

ISO 14001 Certification

Toray Group is pursuing the acquisition of ISO 14001, the certification for environmental management system, by all of its group companies, offices, and plants. Toray Industries had completed accreditation for all 13 of its plants by the end of 2000. By fiscal 2023, 32 plants at 23 group companies in Japan and 68 plants at 50 group companies outside Japan were certified.

In fiscal 2023, Composite Materials (Italy) s.r.l. and its plant obtained certification for the first time. However, with the closure of the M3 Plant at Penfabric Sdn. Berhad (Malaysia), the total number of certified group companies increased by one, while the total certified plants remained the same.

Related Information

> [Sites with ISO 14001 Certification](#)

CSR Roadmap 2025 Targets

CSR Roadmap goals

1. Place the highest priority on safety, thoroughly uphold the basic rules, and strive to prevent disasters, fires, and environmental accidents
2. Based on the Toray Group Sustainability Vision, reduce environmental impact, focusing on addressing climate change, effectively utilizing water resources, and protecting the environment and biodiversity

Main Initiatives and Key Performance Indicators

	KPI
Safety	
(1) Aim for zero major accidents	3-①
(2) Achieve world's best standard for safety management	3-②
(3) Create a comfortable working environment to ensure the safety and health of employees and to raise the level of safety and health	-
Accident Prevention	
(4) Aim for zero fire and explosion accidents	3-③
Environmental Prevention	
(5) Aim for zero environmental accidents	3-④
(6) Reduce greenhouse gas emissions per unit of revenue	3-⑤⑥
(7) Reduce water consumption per unit of revenue	3-⑦
(8) Aim for a high waste recycling rate	3-⑧

(9) Reduce atmospheric VOC³ emissions

3-⑨

(10) Pursue the greening of each site in consideration of the regulations of each country and region and harmony with the surrounding environment

-

Key Performance Indicator (KPI)	Target			Fiscal 2023 Result
	Fiscal 2023	Fiscal 2024	Fiscal 2025	
3-① Number of major accidents	0	0	0	1
3-② Achievement for world's best standard for safety management (not exceeding 0.05 frequency rate for occupational accidents resulting in lost work time)	No more than 0.05	No more than 0.05	No more than 0.05	0.40
3-③ Number of fire and explosion accidents	0	0	0	1
3-④ Number of environmental accidents	0	0	0	4
3-⑤ Reduction of greenhouse gas emissions per unit of revenue (%)	At least 40% lower than fiscal 2013 (Fiscal 2025)			36.0% ^{4&5}
3-⑥ Increase in solar power generation capacity (%)	At least 10% higher than fiscal 2022 (Fiscal 2025)			101%
3-⑦ Reduction of water usage per unit of revenue (%)	At least 40% lower than fiscal 2013 (Fiscal 2025)			35.3% ⁵
3-⑧ Waste recycling rate (%)	At least 86%	At least 87%	At least 87%	87.0%
3-⑨ Reduction of atmospheric VOC emissions (%)	At least 70% lower than fiscal 2000	At least 72% lower than fiscal 2000	At least 72% lower than fiscal 2000	72.5%

Reporting scope: Toray Group

3 Volatile organic compounds

4 Until fiscal 2022, this was calculated by multiplying the GHG emissions and revenue of individual subsidiaries worldwide by the applicable Toray Industries' equity share. In fiscal 2023 however, the calculation method changed, and the degree of financial control Toray Industries has over the individual subsidiary (not the equity share) is now used, in accordance with the GHG Protocol, the international standard.

5 The calculation of the figure for the baseline of fiscal 2013 includes data for companies that joined the Toray Group in fiscal 2014 or later.

Related Materiality for CSR

- Accelerating Climate Change Mitigation
- Promoting a Circular Economy
- Taking a Nature-Positive Approach
- Ensuring Safety and Fire Accident prevention

* Click [here](#) for CSR Roadmap 2025 from the perspective of materiality (PDF:392.4KB).

PDF

Looking to the Future

Toray Group will continue to carry out safety, accident prevention and environmental preservation activities based on international frameworks such as ISO 14001 and Responsible Care as well as the Group's medium- and long-term and single-year goals. The Group is committed to protecting the health and safety of employees and the public and reducing its environmental impact.

Click [here](#) for the main initiatives and KPIs for CSR Guideline No. 3 "Safety, Accident Prevention, and Environmental Preservation" during the CSR Roadmap 2025 period (fiscal 2023–2025).

CSR Activity Report (CSR Guideline Activity Reports) - Safety, Accident Prevention, and Environmental Preservation

Occupational Safety and Accident Prevention Activities

Toray Group pursues its own safety activities using occupational health and safety management systems (such as OHSAS 18001 and ISO 45001). Toray Group employees take part in an introductory training session immediately after joining the Group to learn and demonstrate their level of understanding of specific procedures and internal rules related to occupational safety. For mid-level employees and managers, the Group provides education on management and supervisory responsibility for occupational safety at every type of group training it holds, as well as studies of more concrete case studies related to the occupational health and safety management systems. In addition, officers in charge of production, as well as production engineering and Environment & Safety Department employees, conduct safety and health, accident prevention, and environment audits of all group companies and plants every year and evaluate and seek improvements in the status of activities from a standardized perspective. In addition, best practices are shared at sites throughout the Group to enhance the entire Group's performance. Employees are key stakeholders of Toray Group. Needless to say, ensuring their safety is the prerequisite to their capacity to make the most of their potential.

Officers and employees work together to implement persistent safety initiatives with the goal of zero accidents, out of respect for humanity and the sanctity of life.

To raise the awareness, every year, Toray Group creates a group-wide safety slogan. In 2023, the aim was for each and every employee of Toray Group to come together as a concerted group to raise awareness of safety as the top priority and to ensure that basic safety rules and work fundamentals are thoroughly followed on work sites by upholding the Group slogan—Top Priority is Safety, Pursue “Zero Accidents,” Following the rules and thoroughness in fundamentals. By keeping the same fiscal 2023 slogan for fiscal 2024, the Group is working to further enhance safety awareness and promote strict adherence to safety rules.

Due to the potentially serious impact of an accident not only within the company but on surrounding communities, the Group acts with strong determination to prevent accidents such as fires and explosions, making accident prevention a top priority.

Toray Group sets up safety and health committees and works to ensure the safety and health of its employees through united efforts of labor and management, based on occupational safety and health laws in the countries in which it operates. These efforts help to ensure a pleasant working environment.

2023 Safety Slogan

Top Priority is Safety, Pursue “Zero Accidents”

—Following the rules and thoroughness in fundamentals—

Every year, the Toray Industries president, executive vice presidents and other officers, as well as Group company presidents and plant managers meet at the Toray Group Safety Meeting. At the meeting, safety action policies and main activities are shared to set a common course, activities at worksites are reported, and safety awards are given to raise awareness of safety and foster horizontal development for good practices. In 2023, for the first time in four years, the meeting was held in person at the Toray Human Resources Development Center as the main venue. To allow even greater participation, the event was carried out using a hybrid format, allowing various Toray plants and group companies worldwide to join in online.



2023 Toray Group Safety Meeting at Toray Human Resources Development Center

Furthermore, the Safety Summit, on-site safety lecture by Toray Industries directors, and other events are held on a national and regional basis, and at each group company and plant of the Group. These efforts promote a common awareness of the Toray Group safety slogan, policies, and main activities, enabling centralized management of safety activities across the Group.

In addition, representatives of the senior management and labor unions at Toray Industries hold regular meetings. They discuss issues related to safety and health, establish a shared understanding of the issues, and engage in forward-looking discussions to improve the workplace environment. Safety and health committee meetings are also held at each business site (plant) every month, with the participation of the site head, managers and labor union representatives concerned. They share safety activity policies and give and receive instructions to prevent recurrence of occupational accidents that have recently occurred in Toray Group, while also reporting and discussing other matters related to occupational safety and health.



Opening of the 2023 Health and Safety Conference (slogan chanting) (Toray Construction Co., Ltd.)



Keynote Address by the general manager of the Environment & Safety Department (Toray Industries) at the East and North China Safety Meeting [Toray Industries (China) Co., Ltd.]

Examples of Workplace Initiatives in Fiscal 2023

Two of the Group Companies Receiving Safety Awards

Toray Engineering Co., Ltd. has been recognized for its ongoing activities in providing safe and secure equipment and facilities through the establishment of a safety equipment supply system. The company received an encouragement prize at the 8th Mukaidono Safety Award. This program was established in 2015 in honor of Masao Mukaidono, Professor Emeritus at Meiji University, who is a leader in product and labor safety in Japan. Awards are presented to individuals and organizations that have made significant contributions to maintaining, improving, advancing and spreading safety practices within various industrial sectors.

As an outstanding workplace for safety and health in fiscal 2023, Toray Coms Gifu Co., Ltd. has been honored with an excellence award from the Gifu Labor Bureau under the Ministry of Health, Labour and Welfare. While recognizing the company for its proactive efforts in ensuring the safety and health of workers through labor-management cooperation, this award also commends the company's health and safety standards, making it a model for other companies.



Professor Masao Mukaidono (left) and the general manager of the Product Safety and Quality Assurance Management Department (right) (Toray Engineering Co., Ltd.)



President holding the award certificate together with the general manager of the Operations Division (Toray Coms Gifu Co., Ltd.)

Safety Meeting with the Central Japan Railway Company (JR Central) (Toray Industries, Inc. Gifu Plant)

On January 26, 2024, the Toray Industries Gifu Plant hosted a safety meeting with members of the Transportation Safety Department of Central Japan Railway Company (JR Central). The meeting included a presentation on the plant's safety activities, a tour of the film production department, and an exchange of opinions. The Gifu Plant representatives outlined their safety activities that began following a major accident in 1989, explained how the activities have evolved, and provided an overview of their current safety initiatives and approaches. JR Central shared their efforts to ensure safe and reliable transportation based on their Safety Charter and discussed their safety activities focused on the three pillars of people, systems, and equipment. The JR Central team commended the Gifu Plant for its high level of safety awareness, its proactive efforts to cultivate a safety-focused culture, and the comprehensive onsite safety measures it has implemented.



Safety meeting

Activity Report Meeting After a Workplace Accident and a Safety Conference (Toray Industries, Inc. Mishima Plant)

In March 2024, the Mishima Plant held a final report meeting concerning voluntary special safety activities implemented in response to a workplace accident that occurred at the plant in December 2023. Approximately 150 people, including online participants, attended the meeting. Four representative departments, including the film production section, the unit where the accident occurred, reported on their activity results. The plant also holds the Toray Mishima Plant General Safety Conference every year. It was recently held on December 18, 2023, at the Toray Human Resources Development Center. There were approximately 120 participants, including personnel from about 60 onsite group companies and offsite partner companies, as well as online attendees. The conference included reports on the safety performance of each department and company, recognition of outstanding cases, and presentations on safety initiatives by key departments and partner companies.



Final report meeting for voluntary special safety activities

Safety Audits at Group Companies Outside Japan (Toray Composite Materials America, Inc.)

To conduct a safety audit, an executive vice president of Toray Industries paid a three-day visit to the Decatur and Spartanburg Plants of Toray Composite Materials America, March 20-22, 2024. During the on-site inspections, the executive vice president offered guidance on enhancing safety, while emphasizing the need for work process automation and adherence to the 3S and 5S safety fundamentals.



Onsite inspection

Number of major accidents

■Reporting scope	■Target in 2023 (calendar year)
Toray Group	0

Result in 2023

1

Number of fire and explosion accidents

■Reporting scope	■Target in 2023 (calendar year)
Toray Group	0

Result in 2023

1

Achievement for world's best standard for safety management

(not exceeding 0.05 frequency rate for occupational accidents resulting in lost work time)

■Reporting scope	■Target in 2023 (calendar year)
Toray Group	No more than 0.05

Result in 2023

0.40

Toray Industries has collected data on all occupational accidents since 1980, and for Toray Group since 1990. Both the number of occupational accidents and frequency of occupational accidents resulting in lost work time have declined, compared with when the data was first collected. The frequency rate for occupational accidents resulting in lost work time for Toray Group overall in 2023 was 0.40. Although this is a positive result compared with that of Japan's manufacturing industry (1.29), it fell far short of the Group target of achieving the world's highest standard of safety management of 0.05 or lower. One reason for this is that group companies had many accidents resulting in lost work time. Accordingly, the Group is working to strengthen safety management at those group companies with support and guidance from Toray's main plant in Japan.

Toray Group will continue to identify the root cause of each accident to prevent reoccurrence, and avoid similar accidents based on the lessons learned in these accidents. Additionally, the Group will raise employee awareness of the need to practice safety first at all times.

Toray Group believes that safety activities depend upon a repetition of simple things. It is important to commit to the basics of safety and for everyone, without exception, to practice the basics at all times. The first step is to work on the comprehensive implementation of the 5S's—*seiri* (sort), *seiton* (set in order), *seiso* (shine), *seiketsu* (standardize) and *shitsuke* (sustain). Through these activities, all employees learn to adopt *seiketsu* and *shitsuke*.

Seiketsu fosters employees' motivation to keep the workplace standardized and clean, and *shitsuke* raises employees' awareness to adhere to the rules. They also take the time to reconsider movement pathways to make work safer. Managers repeatedly go around worksites, praising good behavior in an effort to raise workplace morale.

Next, the Group works to eliminate accidents in routine activities. Managers strive to maintain a sense of alertness in the workplace by continually reminding people to act with safety first, considering what the consequences (accidents) could be under any and all circumstances. In addition, if an occupational accident does occur, an accident report is sent out to the entire Toray Group. In an effort to eliminate similar accidents, the unit heads and unit chiefs of each workplace take a leading role in discussing the report with workplace team members, imagining the cause of the accident as a specific danger in their own workplace, in order to raise everyone's safety awareness and ensure commitment to the basics.

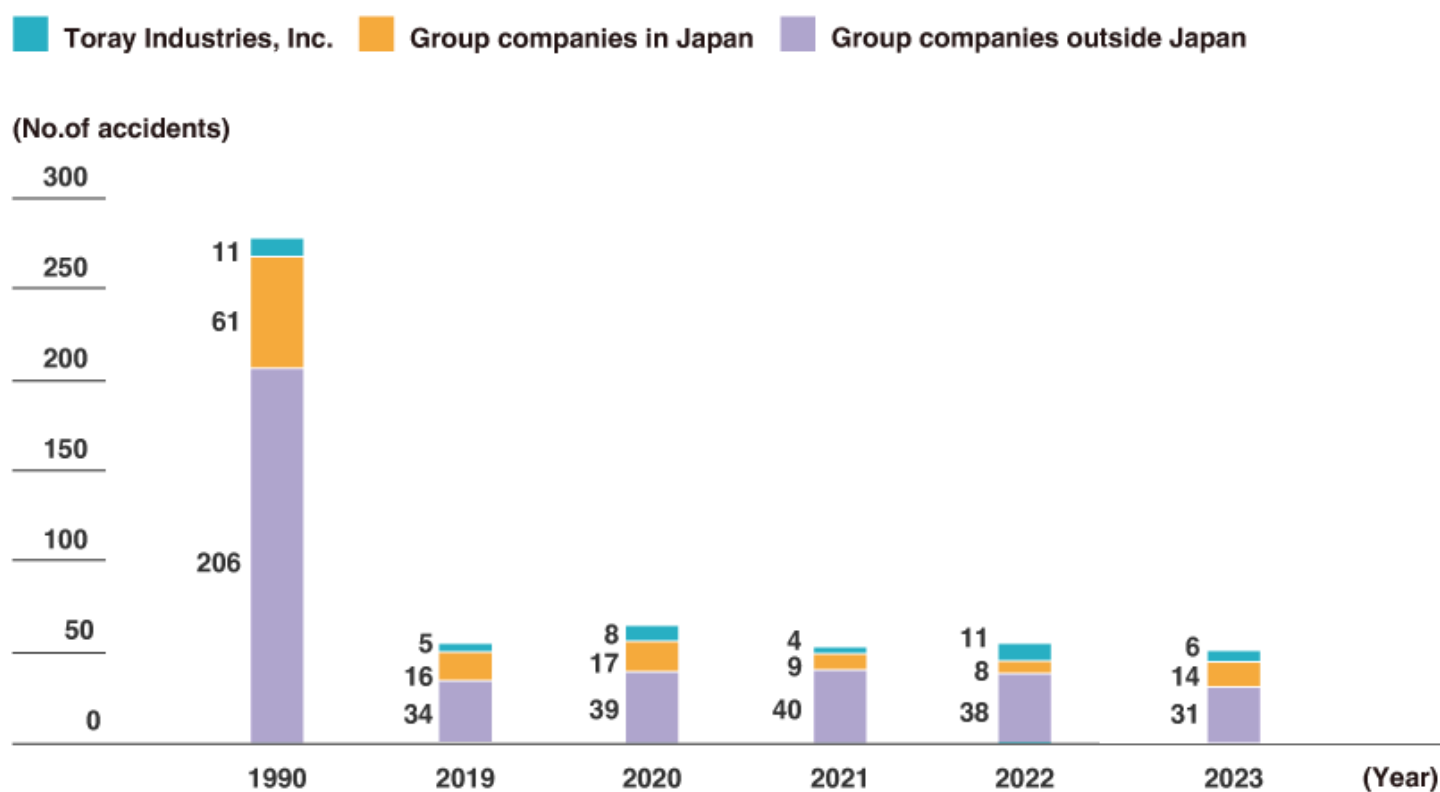
In fiscal 2023, a commuter bus accident occurred at a Group company outside Japan, resulting in multiple employee injuries. The accident was treated as a serious incident in accordance with company regulations. As part of its response measures, the company has implemented strict protocols for driver health management and is ensuring that employees wear seat belts while on board.

While there were no fire or explosion accidents at Toray Industries or Group companies in Japan in 2023, there was one such accident at a Group company overseas. The incident involved an explosion at a volatile organic compound (VOC) processing facility. In response, the company concerned revised its assessment criteria for equipment modifications to ensure compliance with Toray Industries' disaster prevention technical standards in the event of emergencies. In an effort to eliminate similar fire-related accidents, the Group has a system to enable Group companies to rapidly share critical information on fire-related accidents. The Group uses knowledge gained from previous accidents to adopt effective fire prevention strategies and implement unified accident prevention management standards.



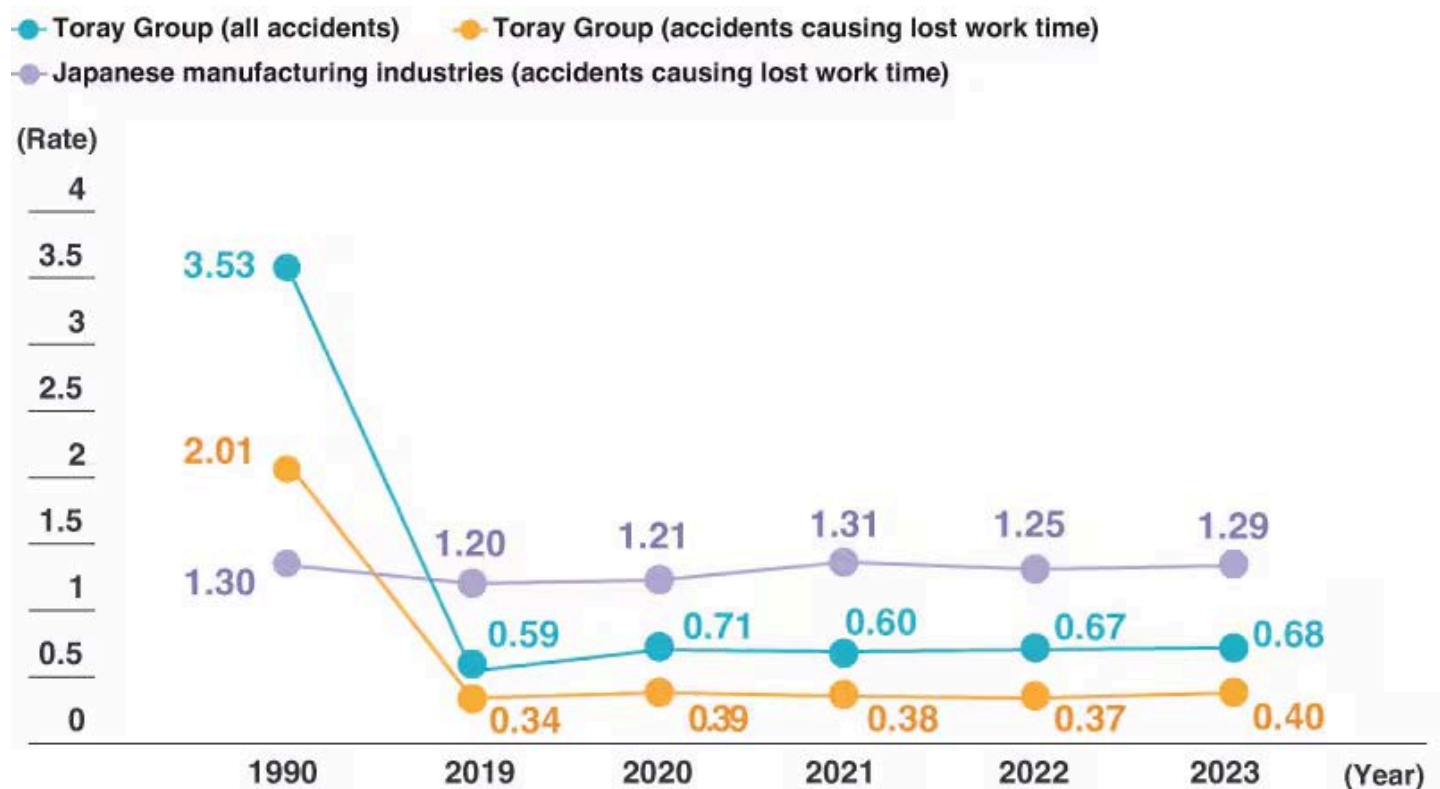
Example of work made safer by improving movement pathways by removing unnecessary items

Number of Occupational Accidents¹: Toray Group (Lost work time and non-lost work time)



¹ Data for Japan includes non-regular employees (part-time employees, contract employees, casual part-timers, and dispatched workers). Data from outside of Japan does not include temporary staff.

Occupational Accident Frequency Rate²: Toray Group



² Occupational accident frequency rate: The number of fatalities and injuries at worksites per one million cumulative working hours.

Identifying Danger (Hazards), Evaluating Risk, and Accident Surveys

1. Identifying danger (hazards) and evaluating risk

Toray Group has a system whereby employees report any potential risks in the workplace to managers and the managers provide feedback on countermeasures and improvements. Before starting work, hazard prediction information, near miss reports, and safety proposals are shared with employees to confirm and mitigate risks. Company inspectors also carry out audits to review the system for preventing occupational accidents and the status of the implementation of countermeasures. If there are any problems, the inspectors give instructions for improvements.

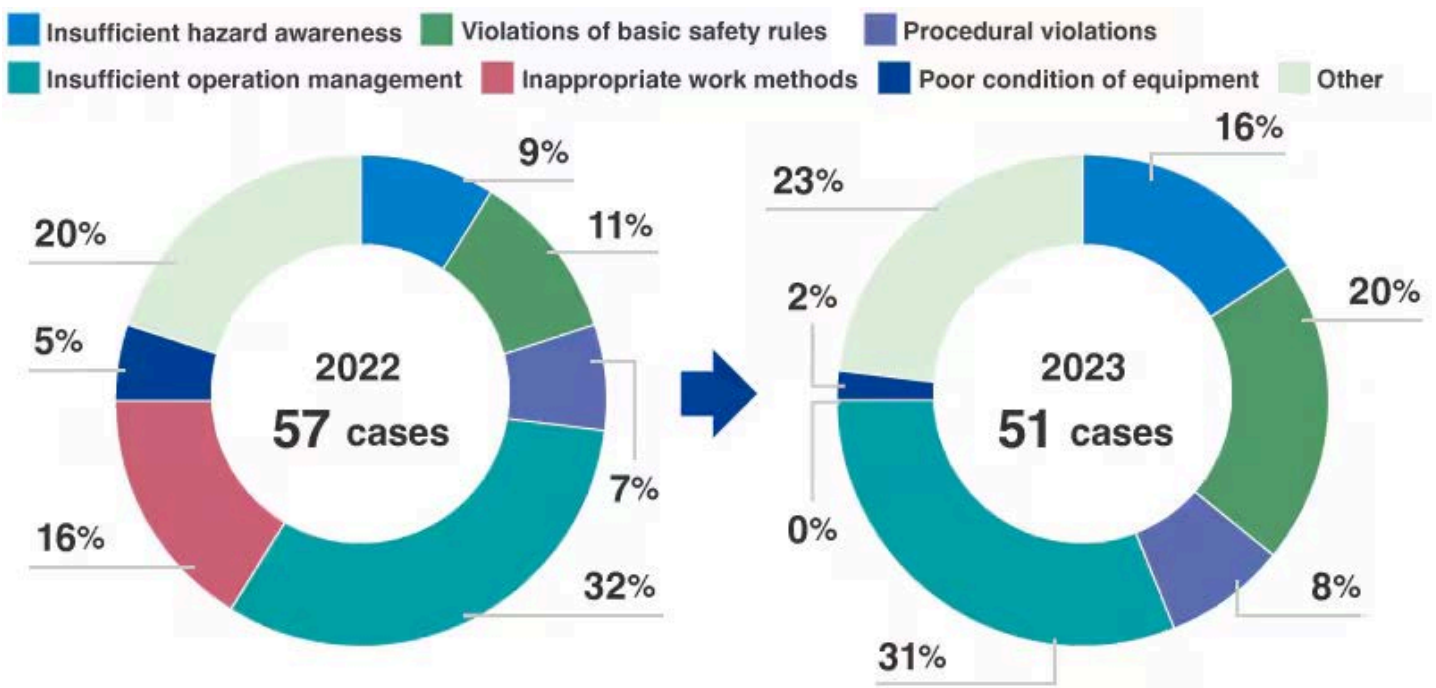
2. Accident investigation

In the event of an occupational accident, the emergency response review meeting and the countermeasure meeting are convened to clarify the chain of events leading up to the accident, identify the cause, and decide on and execute countermeasures. In addition, information about the accident is shared throughout the Group and measures taken to prevent a reoccurrence.

3. Prioritized risk reduction activities

Among the main causes of workplace accidents within Toray Group in 2022, 11% were due to violations of basic safety rules that everyone must follow, while 7% were attributed to procedural violations. These are situations where tasks were not performed according to the standard operating procedures, often due to carelessness. In 2023, the Group focused on eliminating accidents caused by both basic safety rule and procedural violations. Initiatives were launched to eliminate ambiguous rules, and provide manager-led training on rule adherence. Rule awareness activities were also carried out to help employees understand what can happen if rules are not followed and the purpose of the rules. In 2023, 20% of accidents were due to violations of basic safety rules and 8% were due to procedural violations. As a result of the 2023 activities, however, there were no accidents caused by basic safety rule or procedural violations in the first half of 2024, indicating that the initiatives have been effective. In 2024, the Group will continue to analyze the accidents that occurred in 2023 from various perspectives and promote improvement activities aimed at eliminating accidents, by utilizing the plan-do-check-act (PDCA) cycle method.

Causes of Occupational Accidents (Both Requiring and Not Requiring Work Absence) at Toray Group in 2022 / 2023



Enhancing Safety and Accident-Prevention Training

CSR Roadmap 2025
Main Initiatives (1)(2)(3)(4)

As part of their safety and accident prevention training, Toray Group companies and plants provide workshops and hands-on simulations to sensitize employees to dangers and hazards. Safety simulators enable workers to experience the dangers of electrocution, residual pressure, and getting caught in rollers. Virtual reality (VR) technology is also used to realistically simulate accidents at worksites. In the area of accident prevention, the Group conducts simulation training to teach employees about the risk of fires and explosions, and provides training on the fundamentals of accident prevention.

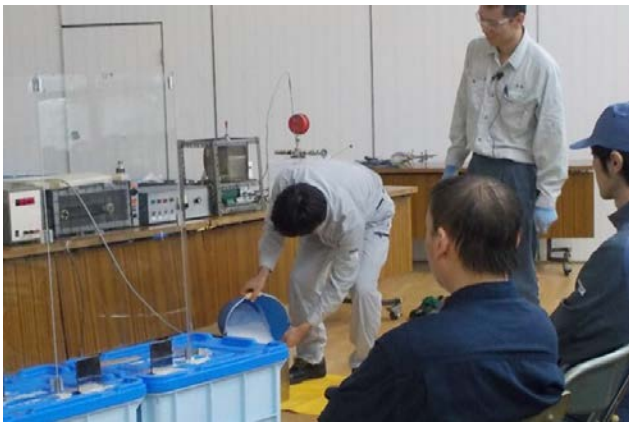
Additionally, the Group publishes on familiar topics regarding safety and accident prevention in its in-house magazine, People, in an effort to spread understanding of the fundamentals of accident prevention.



Simulation training at Mishima Plant (Toray Industries, Inc.)



Simulation training at Nagoya Plant (Toray Industries, Inc.)



Demonstrating the danger of fires and explosions at Gifu Plant
(Toray Industries, Inc.)

Implementing Safety Management Together with Subcontractors

CSR Roadmap 2025
Main Initiatives (1)(2)(3)

Toray Industries implements uniform safety activities for its own work as well as subcontracted work that is subcontracted to on-site Toray affiliates³ and Group companies. Monthly occupational health and safety committees and regular safety and liaison meetings are used to discuss the implementation status of safety activities and enhance communication with subcontractors, to ensure that all parties are aligned in the implementation of safety activities. Employees conduct on-site monitoring of operations in practice such as those involving forklifts and sharp-edged objects and use the results to generate recommendations for necessary improvements that enhance safety and ease of work. Subcontractors also submit their requests for work and equipment improvements, to increase physical safety.

³ Toray affiliates: Toray Industries' subsidiaries that provide ancillary services for plant operations



On-site monitoring of actual work (Toray Coms Nagoya Co., Ltd.)



Onsite forklift safety training session attended by 21 participants from seven group and partner companies involved in forklift operations (Toray Industries Inc. Ehime Plant)

Safety Management Implemented by Subcontractors

CSR Roadmap 2025
Main Initiatives (1)(2)(3)

Toray Group recognizes its duty to ensure the safety of the many subcontractors working at its sites. As colleagues working in the same workplace, subcontractors are made aware of, and expected to comply with, Toray Group rules. Subcontractors also participate in monthly meetings of occupational safety and health committees. Regular safety and liaison meetings are conducted to gain input from subcontractors and are used to communicate the Group's policies and to make sure all measures are implemented. In addition, the Group educates subcontractors who work on a short-term basis about Toray Group rules before work commences and manages safety thoroughly. At plants, Toray and subcontractors work together on safety initiatives, including safety posters, slogan contests and safety suggestions.



Safety meeting at Ishikawa Plant (Toray Industries, Inc.)

Preparing for Accidents through Fire-Prevention Drills

CSR Roadmap 2025
Main Initiatives (4)

All companies and plants in Toray Group are making efforts to improve their accident-prevention capabilities by carrying out fire-fighting drills specifically intended for fires and explosions. These drills include practice using water hoses, rescuing the injured, responding to a chemical leak, and giving emergency notification to authorities and local residents.

Since 2012, Group companies and plants have been conducting annual drills on setting up a company-wide emergency headquarters in response to a large-scale earthquake. The drills also involve checking on employees and monitoring facilities damage and supply chains. In 2023, the Group conducted a training exercise based on the scenario of not being able to set up the company-wide emergency headquarters at the Tokyo Head Office. This scenario presumed a catastrophic earthquake comparable to the Great East Japan Earthquake together with a major earthquake centered in the Tokyo metropolitan area. The exercise involved setting up the company-wide emergency headquarters in the Kansai region (Osaka Head Office, Shiga Plant) to manage the situation. In addition to conducting drills for the initial response to a large-scale earthquake, Group plants in seaside locations conduct drills of the evacuations that would be needed if a tsunami were triggered by a large-scale earthquake.



Fire prevention training (Maruichi Fiber Co., Ltd.)



Firefighting training (Ogaki Fuso Spinning Co., Ltd.)



Disaster prevention training at the Aichi Prefecture
Petrochemical Complex (Toray Industries, Inc. Tokai Plant)



Fire hose deployment training conducted by the division first
response firefighting team (Toray Industries, Inc. Okazaki Plant)

Initiatives for Improving Fire-Prevention Capabilities

CSR Roadmap 2025
Main Initiatives (4)

Toray Group is further enhancing its disaster prevention capabilities. In 2023, as part of the regularly held activities to strengthen fire prevention for the Fire Prevention Project Part II, Toray Group in Japan conducted certification training for FP⁴ key persons, who play a pivotal role on the frontlines by promoting accident prevention inspections and measures. As a result, a total of 223 individuals were newly certified. Toray Group's internal accident prevention experts provided support and guidance in identifying the root cause and taking countermeasures to prevent reoccurrence of those fire accidents and near misses for which the experts decided onsite audits and investigations were necessary.

The Group's earthquake measures seek to mitigate damage, while placing utmost priority on saving the lives of employees and preventing impacts on local communities. The Toray Group Business Continuity Plan (BCP) for a Large-Scale Earthquake outlines the emergency response to an earthquake and subsequent activities to maintain and restore business operations, as well as the Group's duties and normal readiness. In particular, for critical products, the Group develops BCPs that encompass supply chains and continually works to reduce risks.

⁴ FP : Fire Prevention

Examples of Workplace Initiatives in Fiscal 2023

First Aid and CPR Training

With the support of the Japanese Red Cross Medical Center and local fire departments, Toray Group conducts life-saving training using CPR mannequins and AEDs.



CPR training (Toray Industries Inc. Seta Plant)



Employees listening intently to the experiences of a paramedic [Toray Industries Inc. Basic Research Center (Kamakura)]

Distribution Safety Initiatives

CSR Roadmap 2025
Main Initiatives (1)(4)

Toray Industries is working to ensure safe distribution in its operations. In an effort to manage safety when transporting hazardous substances, the Company concludes security agreements with certain customers, raw material manufacturers, and shipping companies to designate their specific safety responsibilities and roles with regards to safety.

Initiatives to Reduce Health Effects of Chemical Substances on Employees

CSR Roadmap 2025
Main Initiatives (1)(2)(3)(4)

In consideration of the health risks to the Company's employees, including contracted, part-time, and dispatched employees, Toray Group is implementing the following initiatives for the handling of chemical substances.

1. Study the actual handling of chemical substances

Toray Group collects annual data on the volume of chemical substances handled by offices and plants of Group companies and volume in their possession. Furthermore, the Group clearly indicates the danger of mutagenicity for each chemical substance as stipulated in the Industrial Safety and Health Act, and discloses the risks.

2. Implement chemical substance risk assessments

Toray Group implements risk assessments using a variety of tools, which include working environment measurements for the chemical substances that it handles, ECETIOC Targeted Risk Assessment (TRA), CREATE-SIMPLE assessments, and control banding. The risk assessment results are used to protect the health of employees by implementing comprehensive measures to prevent worker exposure to organic solvents and dust where it is required.

3. Conduct follow-up through internal audits

Toray Group conducts an annual safety, health, accident prevention, and environmental audit, to objectively evaluate the methods for handling chemical substances and working conditions. The audit is used to identify any oversights or unattended issues and implement necessary improvements.

4. Other

Toray Group endeavors to maintain and improve working conditions by conducting working environment measurements and on-site monitoring of actual work in accordance with the risk level of handled substances. It also conducts medical checkups to continually follow-up on the health status of employees. To prevent health issues among workers, the Group conducts training on the dangerousness of handled chemicals, and prepares and keeps records of the on-site monitoring of actual work.

Health Effects and Response to Asbestos

CSR Roadmap 2025
Main Initiatives (3)

Toray Group has manufactured and imported building materials containing asbestos in the past. In addition, certain buildings and facilities were constructed using such materials and thermal insulation containing asbestos. Starting in 2005, when asbestos-related health hazards became a social concern in Japan, Toray took action to address the issue of its own asbestos-containing facilities. The health program offers medical examinations to current and former employees who handled even small amounts of asbestos and wish to undergo an examination. Toray Group is working in good faith with individuals diagnosed with asbestos-related health issues by assisting with their applications for workers' compensation and providing an ongoing program of medical examinations. The Group has not been contacted about health issues by residents living near affected plants.

The cumulative health impacts on former and current Toray Group employees as of March 31, 2024 are as follows.

Certified occupational accidents arising from handling asbestos (Toray Group): 130 (111)^{*}

Certified health victims based on Japan's Act on Asbestos Health Damage Relief (Toray Group): 8 (8)^{*}

Medical examination recipients involving asbestos (Toray Group): 4,041

^{*} Figures in parentheses refer to fatalities as of March 2024.

Click [here](#) for the main initiatives for CSR Guideline 3, "Safety, Accident Prevention, and Environmental Preservation" in CSR Roadmap 2025.

CSR Activity Report (CSR Guideline Activity Reports) - Safety, Accident Prevention, and Environmental Preservation

Conserving Energy and Reducing Greenhouse Gas Emissions

Seeking to contribute to a carbon-neutral world, Toray Group pursues initiatives for reducing greenhouse gas emissions. In the Toray Group Sustainability Vision announced in July 2018, the Group set out the target of reducing greenhouse gas emissions¹ from production activities per unit of revenue by 30% compared with the baseline year of fiscal 2013 across the entire Toray Group worldwide as a quantitative target for fiscal 2030. In its CSR Roadmap 2022, the Group set out an interim target of reducing greenhouse gas emissions per unit of revenue¹ Group-wide by 20% by fiscal 2022 compared with fiscal 2013. As a result of efforts to reduce CO₂ emissions during manufacturing by conserving energy with improved manufacturing processes, increasing utilization of renewable energy, and reducing coal consumption, the Group reduced greenhouse gas emissions per unit of revenue by 34.6%² by the end of fiscal 2022.

In March 2023, the target set out in the Toray Group Sustainability Vision for reducing greenhouse gas emissions from production activities per unit of revenue was raised significantly from a 30% reduction compared with the baseline year of fiscal 2013 to a reduction of more than 50%¹. The Group also set a target of reducing absolute greenhouse gas emissions for Toray Group in Japan by at least 40%¹ compared to fiscal 2013, thereby accelerating the Toray response to climate change.

As of the end of fiscal 2023, the Group as a whole achieved a 36.0% reduction in greenhouse gas emissions per unit of revenue, and a 25% reduction in greenhouse gas emissions within Japan.

¹ Scope 1 (direct emissions from plants, offices, and vehicles, etc. owned by the Group) and Scope 2 (indirect emissions resulting from the production of electricity and other energy consumed by the Group) emissions.

² Until fiscal 2022, this was calculated by multiplying the GHG emissions and revenue of individual subsidiaries worldwide by the applicable Toray Industries' equity share. In fiscal 2023 however, the calculation method changed, and the degree of financial control Toray Industries has over the individual subsidiary (not the equity share) is now used, in accordance with the GHG Protocol, the international standard. The reduction is 32.7%.

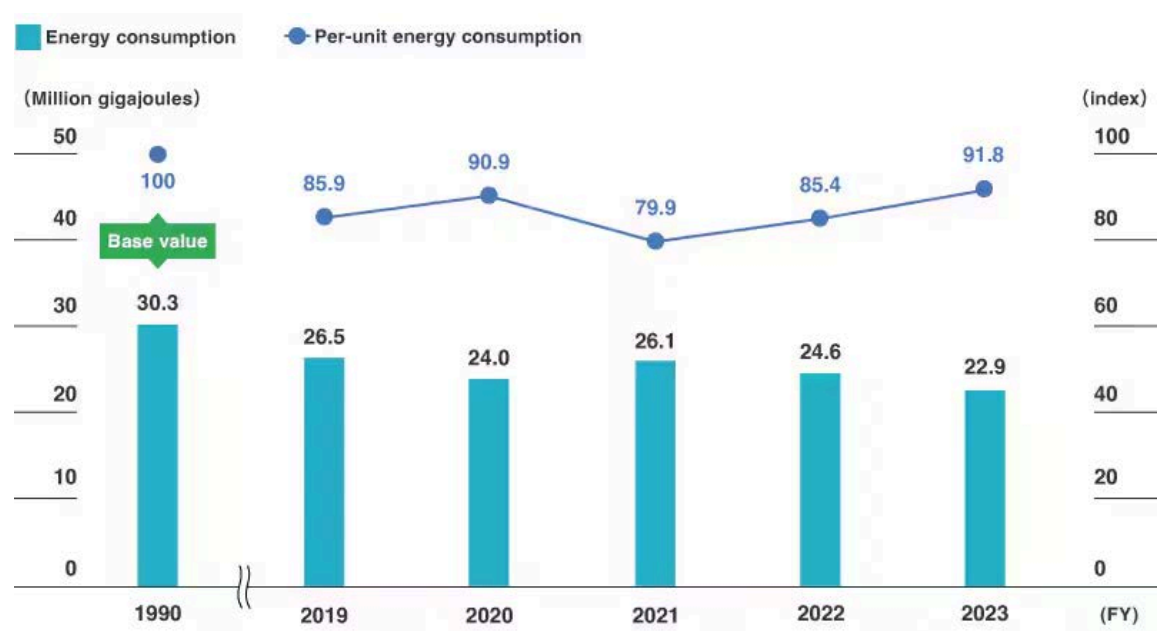
Toray Group sets annual energy-conserving targets for each company and plant and promotes group-wide energy-conserving activities. It also checks the progress of its energy-conserving measures on a monthly basis.

Toray Industries is promoting energy-conserving activities with a goal of reducing its per-unit energy consumption³ by 2% annually.

In fiscal 2023, energy consumption decreased by 6.9% year on year due to more efficient use of energy and efforts to reduce energy waste and loss. However, per-unit energy consumption deteriorated 7.5% year on year due to a 13.0% reduction in production volumes, while improved 8.2% compared to the baseline year of fiscal 1990.

³ Energy consumption per converted production volume

Energy Consumption and Per-unit Energy Consumption Index (Toray Industries, Inc.)⁴



⁴ The energy consumption shown in this graph does not include renewable energy.

As part of its proactive energy-conserving activities, Toray Group organizes teams whose members are familiar with manufacturing processes and facilities to help carry out annual energy-conserving diagnostics at plants in Toray Industries and its group companies around the world to come up with ideas for further energy conservation. In fiscal 2023, these activities were conducted at one of Toray Industries’ plants, and at two group company plants in Japan. As a result, the Group reduced greenhouse gas emissions by about 5,000 tons-CO₂ per year or more equivalent.

Reduction of greenhouse gas emissions per unit of revenue (%)

Result in fiscal 2023

36.0%⁵

■ Reporting scope
Toray Group

■ Target
At least 40% lower than fiscal 2013 (Fiscal 2025)

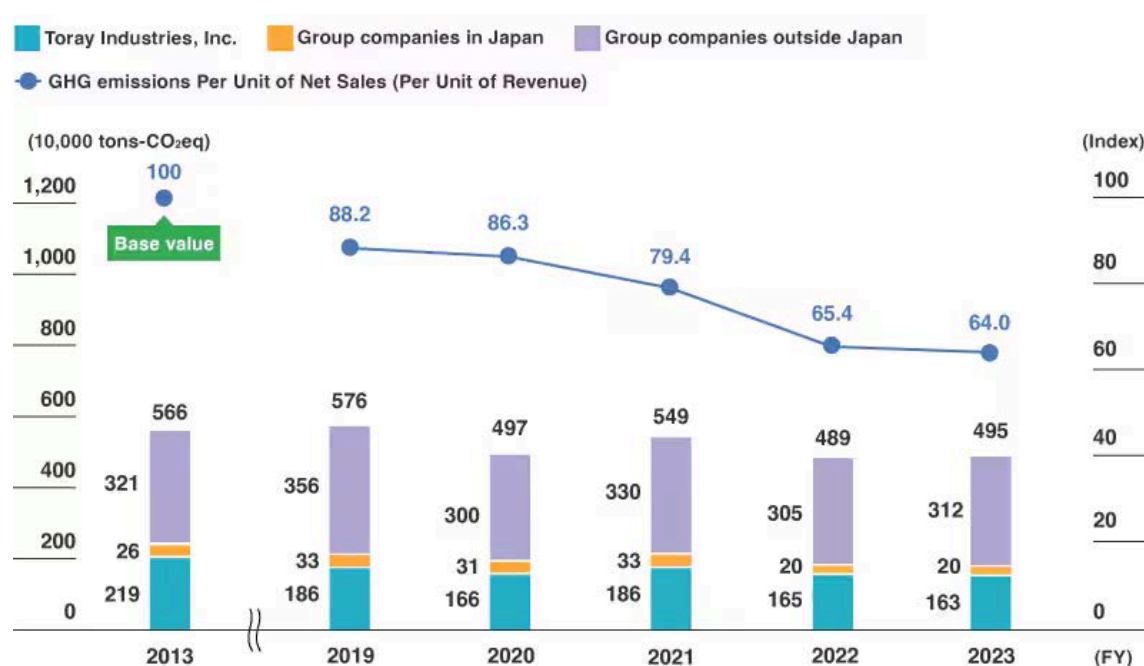
Toray Group's greenhouse gas emissions (Scope 1 and 2) reduction target was established in the CSR Roadmap 2025. The Group as a whole implements systematic reduction measures with the goal of achieving a 40% reduction of greenhouse gas emissions per unit of revenue by fiscal 2025, compared to fiscal 2013.

Overall greenhouse gas emissions (Scope 1 and 2) for Toray Group in fiscal 2023 increased by 1.2% year on year to 4.95 million tons-CO₂ equivalent. In terms of per unit of revenue, the Group reduced emissions by 36.0%⁵ compared to the baseline year of fiscal 2013. In addition to an increase in groupwide sales revenue, the reduction was due to efforts to achieve a maximum reduction of greenhouse gas emissions (such as improving processes to conserve energy, utilizing renewable energy, and reducing coal use at group plants).

⁵ Until fiscal 2022, this was calculated by multiplying the GHG emissions and revenue of individual subsidiaries worldwide by the applicable Toray Industries' equity share.

In fiscal 2023 however, the calculation method changed, and the degree of financial control Toray Industries has over the individual subsidiary (not the equity share) is now used, in accordance with the GHG Protocol, the international standard.

Greenhouse Gas Emissions (Scope 1 and 2) and Greenhouse Gas Emissions Per Unit of Net Sales (Per Unit of Revenue) (Toray Group)



Note: Per unit of net sales until fiscal 2019, as Japanese GAAP was used until then, and per unit of revenue from fiscal 2020 onwards, as International Financial Reporting Standards (IFRS) have been adopted since then.

Figures for the baseline year of fiscal 2013 are recalculated to include companies that joined Toray Group in fiscal 2014 or later.

In addition, the calculation method for the baseline year of fiscal 2013 and fiscal 2023 changed to multiplying greenhouse gas emissions by the degree of financial control Toray Industries has over the individual subsidiary, in accordance with the GHG Protocol, the international standard.

The calculations for fiscal 2019 through fiscal 2022 are based on multiplying greenhouse gas emissions by equity share.

Using the same calculation method as in fiscal 2023, which multiplies by the degree of financial control Toray Industries has over the individual subsidiary, greenhouse gas emissions for fiscal 2022 are 5.12 million tons.

Reduction of Coal Use at Plants Outside of Japan

In April 2024, Indonesian group company P.T. Easterntex ceased coal-fired power generation and switched to purchased power, while also installing gas boilers to generate its steam supply. This change is expected to reduce its CO₂ emissions by 150,000 ton-CO₂ per year.



New gas boilers at P.T. Easterntex

Toray Group Greenhouse Gas Emissions (Scope 3)

In addition to Scope 1 (direct emissions from plants, offices, and vehicles, etc. owned by the Group) and Scope 2 (indirect emissions resulting from the production of electricity and other energy consumed by the Group), Toray Group also calculates Scope 3 emissions (other indirect emissions).

Toray Group Scope 3 Emissions

(10,000 tons-CO₂eq)

Category 1: Purchased goods and services	859.7
Category 2: Capital goods	51.8
Category 3: Fuel and energy related activities	95.6
Category 4: Upstream transportation and distribution	18.4
Category 5: Waste generated in operations	0.9
Category 6: Business travel	0.6
Category 7: Employee commuting	2.1
Category 8: Upstream leased assets	0.4
Category9: Transportation and delivery (downstream)	3.0

Category10: Processing of sold products	—
Category11: Use of sold products	274.6
Category12: End-of-life treatment of sold products	447.5
Category13: Leased assets (downstream)	1.1
Category14: Franchises	0.0
Category15: Investments	—
Total	1,755.6

Calculation Method for Scope 3 Categories

Category ⁶	Calculation Method
1. Purchased goods and services	Calculated by multiplying the volume of purchased products and services (physical and monetary data) by the emission factor for each item. (See Inventory Database for Environmental Analysis (IDEA) [Ver. 2.3] and Emission Factor Database for Calculating Greenhouse Gas Emissions of Organizations Through the Supply Chain [Ver. 3.4] and emission factors provided by suppliers.)
2. Capital goods	Calculated by multiplying the amount of payment for purchased capital goods by the emission factor. (See Emission Factors for Calculating Greenhouse Gas Emissions of Organizations Through the Supply Chain [Ver. 3.4].)
3. Fuel and energy related activities	Fuel Calculated by multiplying the amount of purchased fuel by the emission factor for the fuel type. (See IDEA [Ver. 2.3].) Electricity and Steam Electricity: Calculated by multiplying the input data of electricity procured from power companies by the average emission factor of all power sources. (See Emission Factors Database for Calculating Greenhouse Gas Emissions of Organizations Through the Supply Chain [Ver. 3.4].) Steam (heat): Calculated by multiplying the input data of procured heat by its emission factor. (See Emission Factors for Calculating Greenhouse Gas Emissions of Organizations Through the Supply Chain [Ver. 3.4].)

Category ⁶	Calculation Method
4. Upstream transportation and distribution	Raw Materials Emissions for transportation are calculated by multiplying weight and distance by emission factors for each type of transportation. (See Shippers' Guide to Energy Conservation Promotion, 7th Edition, Ministry of Economy, Trade and Industry.) Also, emission impacts from storage and loading/unloading are minimal and therefore not included. Products Emissions for transportation are calculated by multiplying weight, distance, and loading rate by emission factors for each type of transportation. (See Emission Factors for Calculating Greenhouse Gas Emissions of Organizations Through the Supply Chain [Ver. 3.4].) Also, emission impacts from loading/unloading are minimal and therefore not included.
5. Waste generated in operations	Calculated by multiplying the amount of waste for each type of waste by the emission factor applicable to type of waste. (See Emission Factors for Calculating Greenhouse Gas Emissions of Organizations Through the Supply Chain [Ver. 3.4].)
6. Business travel	Calculated by multiplying the total number of employees by the emission factor. (See Emission Factors for Calculating Greenhouse Gas Emissions of Organizations Through the Supply Chain [Ver. 3.4].)
7. Employee commuting	Calculated by multiplying the total number of employees and the average number of days of operation by the emission factor. (See Emission Factors for Calculating Greenhouse Gas Emissions of Organizations Through the Supply Chain [Ver. 3.4].)
8. Upstream leased assets	Calculated by multiplying floor area of relevant building by the emission factor per unit of floor area. (See Emission Factors for Calculating Greenhouse Gas Emissions of Organizations Through the Supply Chain [Ver. 3.4].)
9. Transportation and delivery (downstream)	Calculated by taking the emissions related to upstream transportation and distribution (Category 4) and factoring in the emission shares based on whether Toray or a third party is the shipper. Only emissions related to transportation and distribution up to the first sales destination are included in the calculation.
10. Processing of sold products	Toray Group primarily sells a wide variety of materials and substances as intermediate goods for various applications. It is difficult for the Group to ascertain how its materials and substances are processed into final products, making it impossible to reasonably estimate the corresponding emissions. Accordingly, this category has been excluded from the Group's emissions calculations.

Category ⁶	Calculation Method
11. Use of sold products	For products that generate emissions during the direct use stage, emissions are calculated by multiplying the sales volume in the reporting year by the product's estimated lifetime emissions (estimated using a standard scenario established by Toray Group for each product concerned). The main products that generate emissions during the direct use stage include manufacturing plants, equipment, devices, and machines provided by Toray Engineering Co., Ltd., as well as dialysis-related and blood purification devices from Toray Medical Co., Ltd.
12. End-of-life treatment of sold products	Calculated by multiplying the sales volume of products sold by Toray Group to third parties by the waste emission factors associated with each product (assuming complete combustion and incineration)
13. Leased assets (downstream)	Calculated by multiplying the floor area of relevant buildings by the emission factor per unit of floor area. (See Emission Factors for Calculating Greenhouse Gas Emissions of Organizations Through the Supply Chain [Ver. 3.4].)
14. Franchises	Considered to be zero, as the Toray Group does not have any franchises
15. Investments	Not calculated, due to low relevance to Toray Group

⁶ The number of companies included in the calculations differs by category.

Related Information

Toray Industries has obtained third-party assurance of its greenhouse gas emissions from LRQA Limited for Scope 1 and 2 emissions for Toray Industries and group companies outside of Japan, as well as for Scope 3 emissions (categories 1, 2, 3, 4, 5, 6, 7, and 8) for the entire Toray Group.

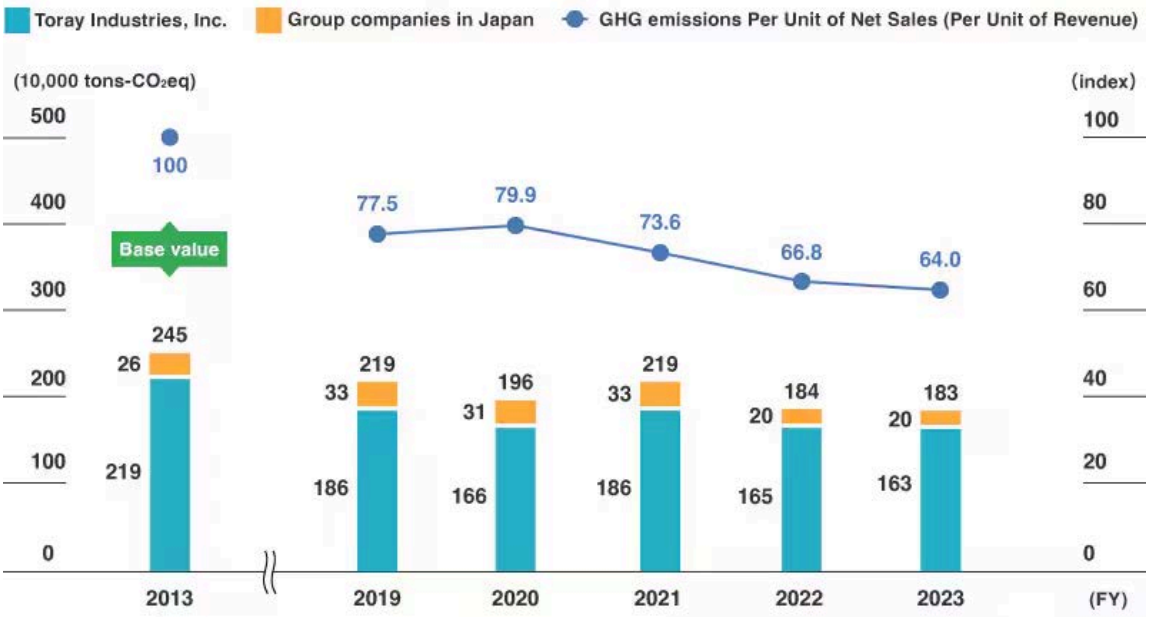
> [Third-Party Assurance](#)

Greenhouse Gas Emissions (Scope 1 and 2) for Toray Industries and Its Group Companies in Japan

CSR Roadmap 2025
Main Initiatives (6)

In fiscal 2023, greenhouse gas emissions (Scope 1 and 2) at Toray Industries and its group companies in Japan decreased by 0.8% compared to the previous fiscal year. Greenhouse gas emissions per unit of revenue improved by 4.2% compared to the previous fiscal year, due to efforts to reduce emissions and an increase in sales revenue. This resulted in a 36.0% reduction compared to fiscal 2013.

Greenhouse Gas Emissions and Greenhouse Gas Emissions Per Unit of Net Sales (Per Unit of Revenue) (Toray Group in Japan)



Note: Per unit of net sales until fiscal 2019, as Japanese GAAP was used until then, and per unit of revenue from fiscal 2020 onwards, as International Financial Reporting Standards (IFRS) have been adopted since then.

Figures for the baseline year of fiscal 2013 are recalculated to include companies that joined Toray Group in fiscal 2014 or later.

In addition, the calculation method for the baseline year of fiscal 2013 and fiscal 2023 changed to multiplying greenhouse gas emissions by the degree of financial control Toray Industries has over the individual subsidiary, in accordance with the GHG Protocol, the international standard.

The calculations for fiscal 2019 through fiscal 2022 are based on multiplying greenhouse gas emissions by equity share.

Greenhouse Gas Emissions (Scope 1 and 2) (Toray Industries, Inc.)



Increase in solar power generation capacity (%)

■Reporting scope	■Target
Toray Group	At least 10% higher than fiscal 2022 (Fiscal 2025)

Result in fiscal 2023

101%

Under its CSR Roadmap 2025, Toray Group has set the rate of increase for solar power generation capacity as a KPI and is focused on the adoption of renewable energy systems. In fiscal 2023, the installation of solar power systems at the Toray Industries Shiga Plant and at group company plants in China and Hungary resulted in a 101% increase in capacity. Going forward, the Group will continue to promote the installation of solar power systems.

In addition, the Tokai Plant of Toray Industries began co-combusting sludge fuel, which is carbon neutral, as boiler fuel from fiscal 2017.



Solar power generation system at Toray Industries Shiga Plant

Renewable energy generated in fiscal 2023

100,770 MWh

Toray Group has installed solar power generation facilities at the following plants:

Toray Industries, Inc.	• Shiga Plant • Seta Plant • Ehime Plant • Okazaki Plant • Mishima Plant • Nasu Plant • Basic Research Center (Kamakura)
------------------------	--

Group companies in Japan	• Toray Textiles, Inc. • Toray Plastics Precision Co., Ltd. • Toray KP Films Inc. • Toray Advanced Film Co., Ltd. • Soda Aromatic Co., Ltd. • Toray Fine Chemicals Co., Ltd. • Toray Carbon Magic Co., Ltd. • Toray Engineering Co., Ltd. • Toray Engineering West Co., Ltd. • Toray Engineering Central Co., Ltd. • Toray Construction Co., Ltd. • Toray Precision Co., Ltd. • Toyo Jitsugyo Co., Ltd.
---------------------------------	---

Group companies outside Japan	
America	
United States	• Toray Resin Co. • Toray Plastics (America) , Inc. • Toray Membrane USA, Inc.
Europe	
Italy	• Delta-Tech S.p.A.
Hungary	• Zoltek Zrt.
Asia	
East Asia	• Toray Fibers (Nantong) Co., Ltd. • Toray Polytech (Foshan) Co., Ltd. • Toray Polytech (Nantong) Co., Ltd. • Toray Sakai Weaving & Dyeing (Nantong) Co., Ltd. • Toray Plastics (Suzhou) Co., Ltd. • Toray Plastics Precision (Zhongshan) Ltd • Toray Film Products (Zhongshan) Ltd. • Yihua Toray Polyester Film Co., Ltd. • Toray Membrane (Foshan) Co.,Ltd. • TAK Advanced Film (Nantong) Co., Ltd. • Toray Advanced Materials Korea Inc.
Southeast Asia	• Thai Toray Synthetics Co., Ltd. • Penfabric Sdn. Berhad

Substantial Use of Renewable Electricity at Toray Industries

Toray Industries signed a green power supply service⁷ agreement with Mitsui Fudosan Co., Ltd. for the Toray head office located in Tokyo's Nihonbashi Mitsui Tower.

By utilizing, through Mitsui Fudosan, the environmental value of the wind power facilities that Electric Power Development Co., Ltd. operates, Toray's head office has effectively used 100% renewable energy since April 2022. On a global basis, the estimated annual reduction in greenhouse gas emissions should be around 1,500 tons-CO₂. In April 2023, the Nagoya Branch of Toray Industries, which is located in the Nagoya Mitsui New Building, introduced a Green Power Supply Service, allowing it to effectively procure renewable energy. This same step was taken by the Osaka Head Office, which is located in the Nakanoshima Mitsui Building, in April 2024.

⁷ Green power supply service: A unique service developed by Mitsui Fudosan that uses non-fossil fuel energy certificates to provide electricity to the tenants of its office buildings, which is effectively generated using 100% renewable energy.

Initiatives Under the Fukushima Zero Carbon Declaration Project (Toray Advanced Film Co., Ltd.)

Toray Film Processing Co., Ltd. received the Excellence Award in the Intermediate Level category of the manufacturing division at the Fukushima Zero Carbon Challenge Awards Ceremony. The company was recognized for efforts by its Fukushima Plant as part of the Fukushima Zero Carbon Declaration Project.



Fukushima Governor (center) and Fukushima Plant Manager (second from the right)

Energy-Saving and Equipment Efficiency Initiatives (Toray Advanced Materials Korea Inc.)

Toray Advanced Materials Korea Inc. was recognized for contributing to the development of the regional energy industry through energy savings, improved recycling rates, and efficient and stable facility management. They were awarded the North Gyeongsang Province Governor's Prize at the 2023 North Gyeongsang Province Energy Award Ceremony.



Leader of Power Team 1 (left) receiving the award with colleagues

Initiatives to Protect the Ozone Layer

Toray Industries ceased using chlorofluorocarbons (CFCs) in all manufacturing processes and stopped purchasing CFCs for use in refrigeration equipment in 1994. The Company finished upgrading refrigeration equipment using CFCs in fiscal 2019.

Related Information

For disclosure of information related to climate change in line with the recommendations of the Task Force on Climate-related Financial Disclosures (TCFD), refer to [Toray Group's Approach to Climate Change](#).

Click [here](#) for the main initiatives for CSR Guideline 3, "Safety, Accident Prevention, and Environmental Preservation" in CSR Roadmap 2025.

CSR Activity Report (CSR Guideline Activity Reports) - Safety, Accident Prevention, and Environmental Preservation

Chemical Management

Compliance Status Regarding Worldwide Chemical Substance Regulations

All business divisions of Toray Industries Inc., as well as its group companies in and outside Japan, have chemical substance management systems in place for securing compliance with relevant regulations worldwide. The Company does this by registering relevant chemical substances while managing and reporting on the quantities it produces and imports, and by confirming that no prohibited or restricted substances are used. Toray is also working to substitute safer product substances for those of which the concern for negative impact on humans and the environment is very high (such as SVHC, substances of very high concern, under REACH).

In fiscal 2023, the following key activities were conducted:

- Registration and notification of chemical substances in compliance with country-specific regulations
- Revision of its Safety Data Sheets (SDS) in response to Japan's revised Industrial Safety and Health Act
- Substitution of polyamide 12 fine particles, which are banned under the EU's restriction of intentionally added microplastics, with polyamide 4 fine particles that are marine-biodegradable
- Development of PFAS-free materials, including water-repellent textiles, polyimide materials, and electrolyte membranes
- Development of new wavelength conversion sheets using cadmium-free materials

Management of Chemicals in Products (CiP)

Toray Industries has established the Toray Green Procurement Guidelines (established June 2004, latest revision June 2022) with the aim of reducing the impact on the global environment of the entire cycle from product development, manufacturing, distribution, use, to disposal. The guidelines address the following legally regulated substances by identifying them as either banned or controlled substances. In addition, the company identifies and manages controlled substances according to the relevant laws and regulations for each business.

Banned Substances

- Class I specified chemical substances regulated under the Japanese Act on the Regulation of Manufacture and Evaluation of Chemical Substances
- Substances banned under the Japanese Industrial Safety and Health Act

Controlled Substances

- 10 restricted substances under the EU RoHS Directive
- Azo compounds that form specified amines under the Japanese Act on Control of Household Products Containing Harmful Substances
- Ozone depleting substances under the Japanese Act on the Protection of the Ozone Layer
- Radioactive substances

Controlled substances other than those listed above are designated primarily in accordance with the laws and regulations pertaining to chemSHERPA¹.

¹ chemSHERPA: Information-sharing scheme for chemical substances, managed by the Joint Article Management Promotion-consortium (JAMP) (<https://chemsherpa.net/english>)

The Group provides information on the chemical components in all chemical products using Safety Data Sheets (SDS), regardless of whether they are classified as hazardous under the Globally Harmonized System (GHS) of Classification and Labelling of Chemicals. Additionally, for materials such as yarn and film, the Group also provides customers with information on the chemical substances they contain in a format similar to the SDS.

Further Improving Chemical Management in Toray Group

To better respond to increasingly stricter regulations worldwide, Toray Group is working to enhance its chemical management by utilizing IT systems and improving in-house training. The Toray Chemicals Management System (TCMS), which began operating in fiscal 2019, is used to reliably and promptly confirm the registration status of chemical substances and regulations in destination countries, as well as to issue SDS compliance with specific countries' laws and regulations.

In addition, the Group also established a new in-house education system to raise awareness and increase the knowledge levels of employees in charge of chemical management. In fiscal 2023, Toray Industries conducted training for Group employees who wished to participate on six topics, including chemical management systems in China and the EU's proposed PFAS restrictions. A total of 1,462 employees took part in the training sessions.

CSR Activity Report (CSR Guideline Activity Reports) - Safety, Accident Prevention, and Environmental Preservation

Initiatives to Prevent Air and Water Pollution

Toray Group works continuously on environmental conservation measures at its production sites. It is working to prevent air pollution caused by volatile organic compounds (VOCs), sulfur oxides (SOx), nitrogen oxides (NOx), and dust emissions, as well as to prevent water pollution by reducing biochemical oxygen demand (BOD) and chemical oxygen demand (COD). Given that Toray Group processes involve many organic chemicals, reduction of atmospheric VOC emissions has been identified as a top priority. Under the Group's CSR Roadmap 2025, covering fiscal years 2023 to 2025, KPIs have been established to drive this initiative. Going forward, the Group will continue efforts to reduce VOCs and other air pollutants by installing recovery systems and switching fuels. It will also keep decreasing BOD and COD through stable operation and expansion of wastewater treatment facilities.

Reduction of Atmospheric VOC Emissions

CSR Roadmap 2025
Main Initiatives (9)

Reduction of atmospheric VOC emissions (%)

■Reporting scope
Toray Group

■Target in fiscal 2023
At least 70% lower than fiscal 2000

Result in fiscal 2023

72.5%

In fiscal 2023, Toray Group's atmospheric VOC emissions were 1,092 tons, down 5.6% (65 tons) compared to the previous fiscal year.

The emissions were 72.5% below the base year of fiscal 2000, achieving the CSR Roadmap 2025 target of a 70% reduction compared to the base year.

Going forward, as it works on business expansion, the Group will keep striving to achieve the KPI set under the CSR Roadmap 2025, namely, an annual reduction target of 72% or more compared to fiscal 2000. To achieve this goal, the Group will designate companies with high VOC atmospheric emissions as companies subject to supervision and work with these companies to further reduce emissions.

Atmospheric VOC Emissions



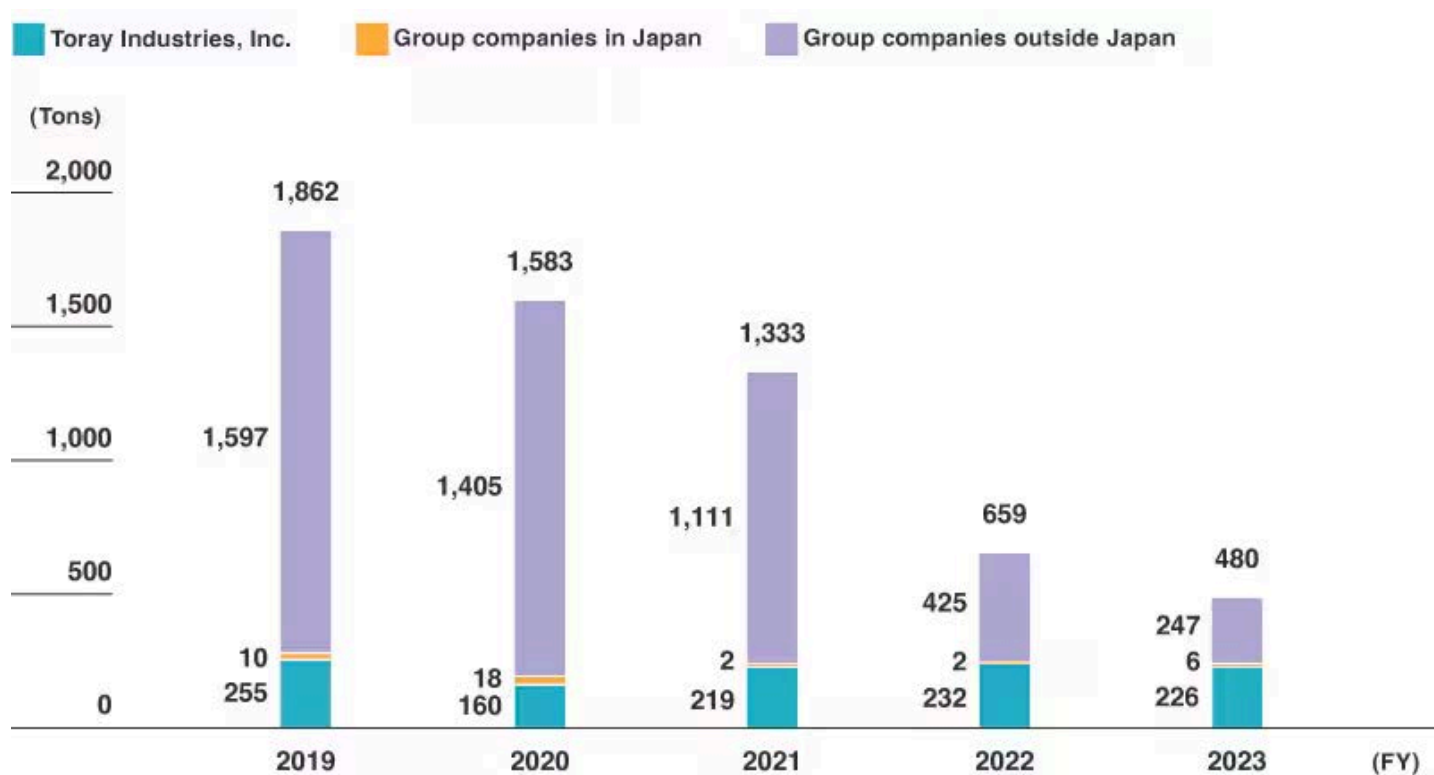
The Group will also keep voluntarily reducing atmospheric emissions of substances subject to the PRTR Act, which include chemicals of concern due to potential health impacts, while closely monitoring regulatory trends in each country or region where its production sites are located.

In fiscal 2023, total atmospheric emissions of PRTR-regulated substances across the Toray Group amounted to 924 tons. This represented a 64.8% reduction compared to the base year of fiscal 2000.

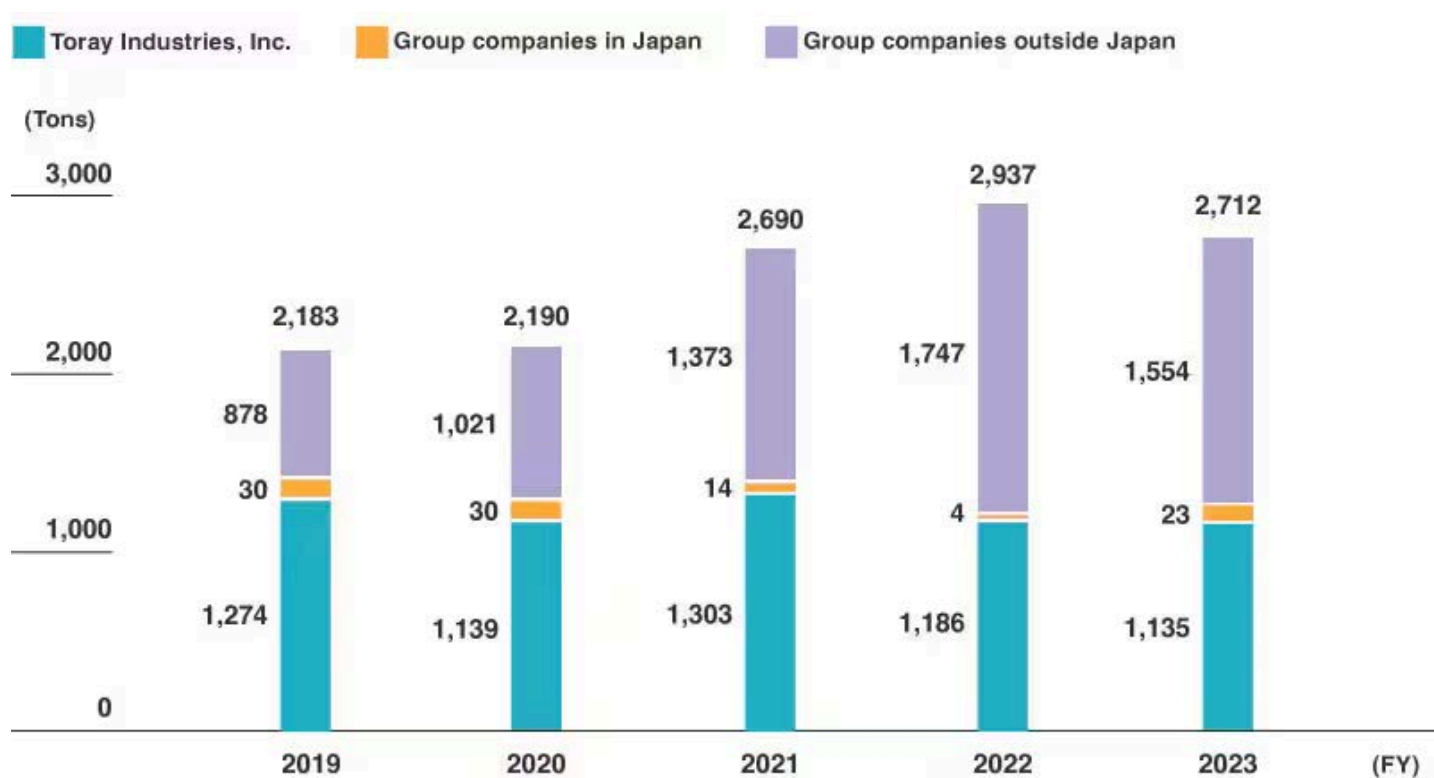
Air Emission Management (Fiscal 2023 Result)

In fiscal 2023, Toray Group recorded 480 tons of SO_x emissions (down 27% year on year), 2,712 tons of nitrogen oxide (NO_x) emissions (down 8% year on year), and 632 tons of dust emissions (up 21% year on year). The year-on-year reduction in SO_x and NO_x emissions was due to the downsizing of coal-fueled boilers at group companies outside of Japan. The year-on-year increase in dust emissions was due to changes in fuel type.

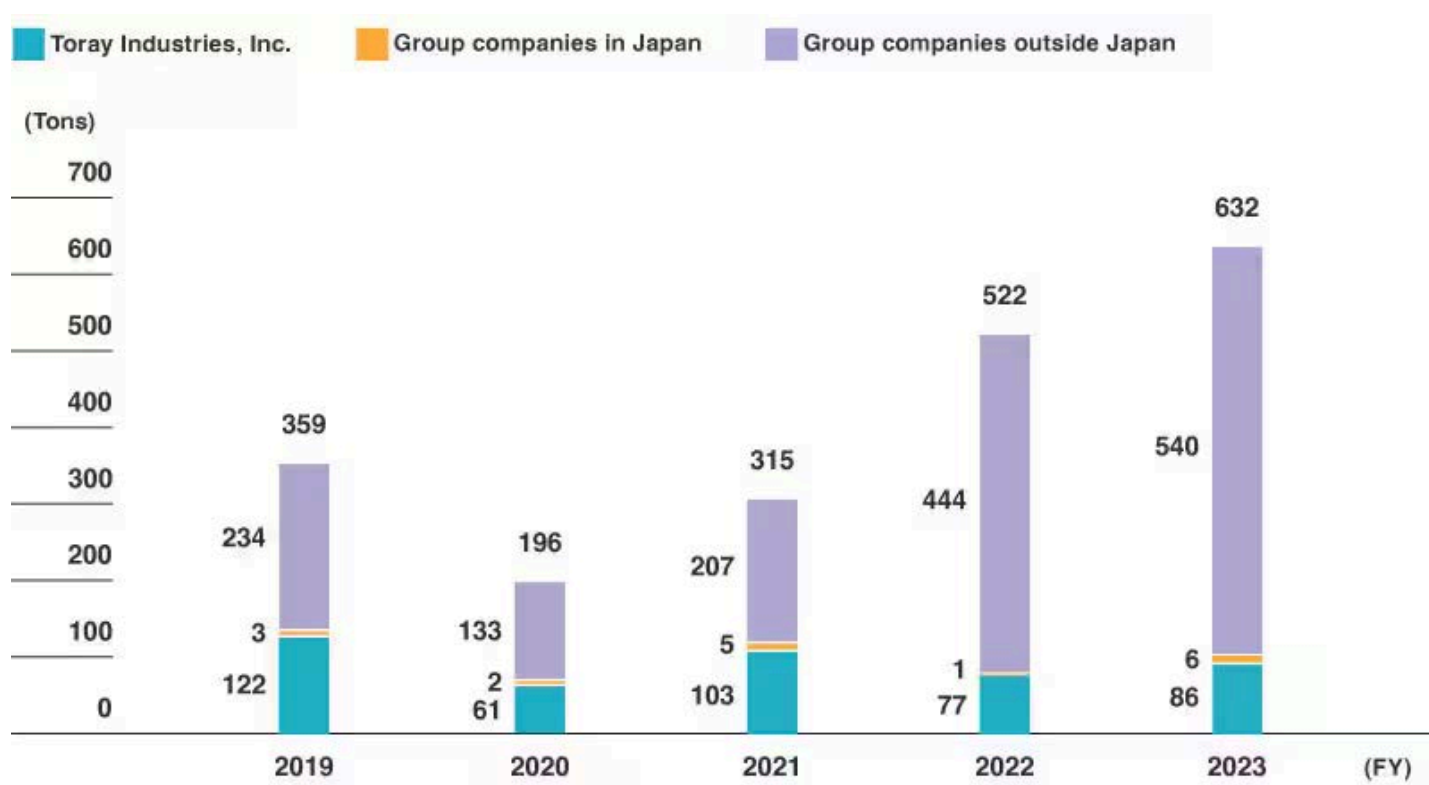
Atmospheric Emissions (SOx)



Atmospheric Emissions (NOx)



Atmospheric Emissions (Dust)



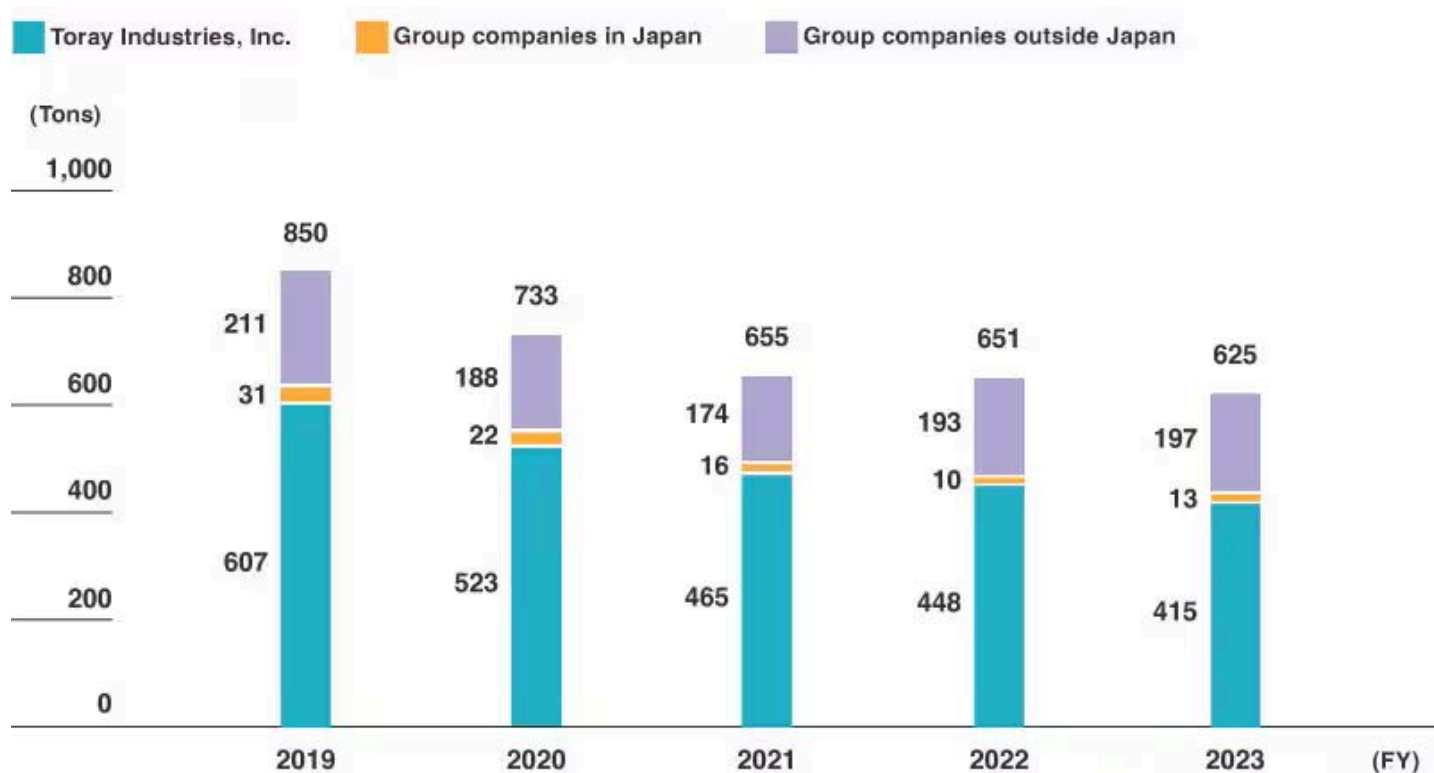
Wastewater Quality Management (Fiscal 2023 Result)

Toray Group monitors and complies with regulations concerning BODs, CODs, and nitrogen in countries and regions where it operates plants and implements water quality management for plant wastewater. Plants with high effluent loads are reducing effluents by installing wastewater treatment facilities (activated sludge method) that utilize the activated sludge method and other techniques. The Group is committed to remaining in compliance with regulations through everyday facilities operation management and regular self-testing of water quality.

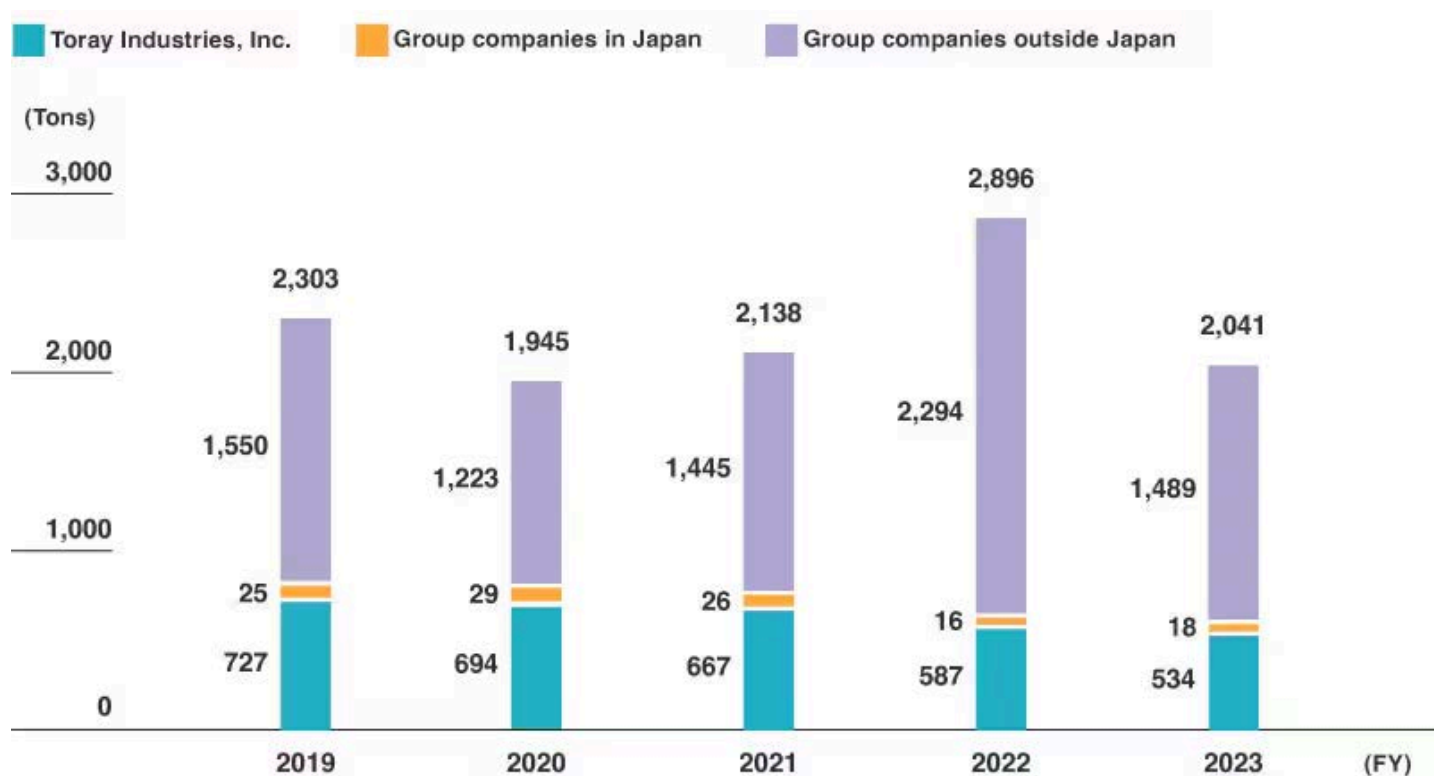
In fiscal 2023, Toray Group recorded 625 tons of BOD emissions (down 4% year on year) and 2,041 tons of COD emissions (down 30% year on year). BOD and COD emissions improved from the previous year due to enhancement of wastewater treatment process efficiency and other efforts.

Moving forward, Toray Industries will further strengthen the technical support provided to group companies to achieve greater reduction of effluent loads.

Water Emissions (BOD)



Water Emissions (COD)



The Group brings together wastewater managers every year to share and discuss strategies for enhancing wastewater management at production sites. The fiscal 2023 meeting was attended by 42 persons from Toray Industries' plants and 33 persons from group companies in Japan.

The Toray Industries Ehime Plant uses the activated sludge method to treat and detox wastewater before discharge, as it contains chemical substances from each production process.

Previously, excess sludge was either composted or disposed of after fermentation treatment. However, based on an idea from the wastewater treatment team, the plant launched a Blooming Flowers Project in August 2023, and began using its excess sludge and treated water to grow flowers.

If antimicrobial agents and detergents are not effectively removed from the plant's wastewater, they can cause the flowers to wither, so water quality management is now even more rigorous. By cultivating flowers, employees can visually confirm the treated water's safety, which also enhances water quality management. Utilizing excess sludge in this way has helped reduce the plant's industrial waste by approximately three tons per year.

This initiative was recognized with the Group's First Step Award in 2023. The award program seeks to encourage individual employees to take on new challenges.



Wastewater treatment using the activated sludge method



Blooming Flowers Project zone next to the water treatment facility

Related Information

- > [Communication with Employees](#)
- > [Toray owned media \(in Japanese only\)](#)

Click [here](#) for the main initiatives for CSR Guideline 3, "Safety, Accident Prevention, and Environmental Preservation" in CSR Roadmap 2025.

CSR Activity Report (CSR Guideline Activity Reports) - Safety, Accident Prevention, and Environmental Preservation

Initiatives for Managing Water Resources

Toray Group is working to provide solutions to water resources problems around the world, based on the following policies. In its own operations, the Group effectively uses and recycles water and properly manages water resources.

1. Toray Group recognizes that water is one of the most important resources for humanity, and that people are confronting problems related to water resources in many areas of the world.
2. Toray Group is committed to helping to solve global water resources problems through its products, technologies and services.
3. Toray Group continuously monitors the state of regional water resources, and conducts appropriate management of water resources, such as avoiding excessive water withdrawal so as to share these precious resources with the local communities where the Group operates.

Toray Group operates a variety of businesses around the world, and depending on the location, it may be greatly affected by water withdrawal restrictions. Its assessment, therefore, is that the Group faces a large risk regarding limits on water usage.

Accordingly, Toray Group uses the Aqueduct Water Risk Atlas, a water risk assessment tool provided by the World Resources Institute (WRI), to identify locations of high stress through water stress surveys in regions around the world where the Group's manufacturing sites and offices are located. In addition, the amount of water used in business activities in each region is monitored annually using a questionnaire from Toray Industries. Toray Group has determined that approximately 4.4% of its entire water withdrawals at all sites, including plants and offices, comes from regions where water stress is assessed to be high or extremely high.

As stated in the Toray Group Sustainability Vision, a target has been set for reducing water usage per-unit of revenue by 2030. The Group understands the effects of water stress and promotes the 3Rs (reduce, reuse, recycle) for water resources through improvement of manufacturing processes, water-saving activities, and utilization of recycled water.

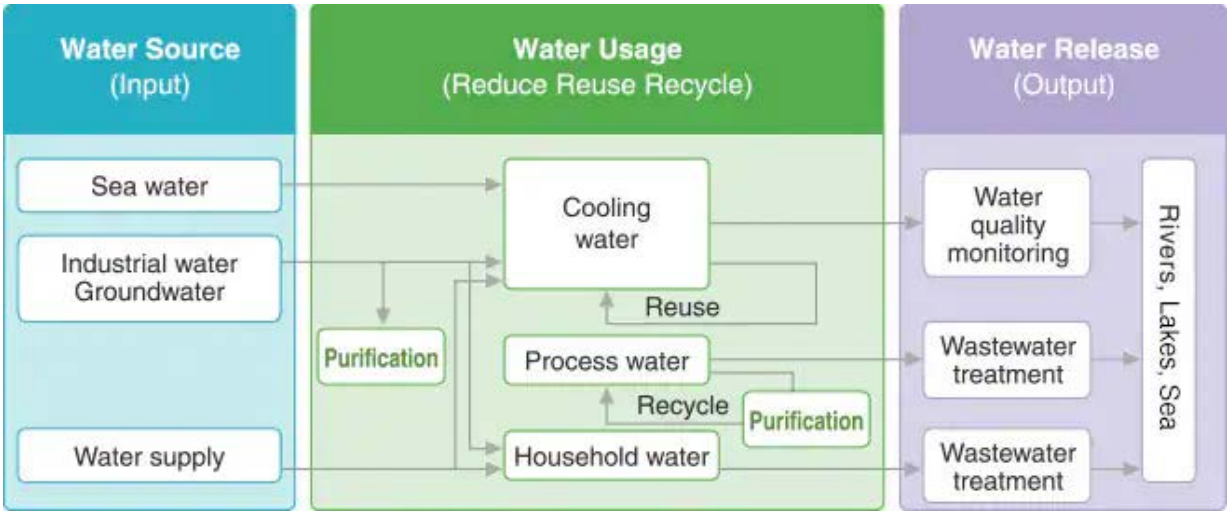
As a medium-term objective, under the CSR Roadmap 2025 (fiscal 2023-2025), the Group has also set a KPI to reduce water use per unit of revenue.

The Group fully understands local regulations regarding effluent and constantly monitors water quality, such as COD, before releasing effluent from its plants into public bodies of water. For example, Toray Sakai Weaving & Dyeing (Nantong) Co., Ltd., located in Nantong, China, recycles all water used for its looms and, additionally, purifies approximately 1,300 tons/day of effluent from the dyeing process using Toray reverse osmosis membrane water treatment technology before the effluent is drained. In this manner, group companies overseas reuse cooling water and recycle wastewater in an effort to reduce the amount of new water withdrawals taken from outside as industrial water.



Dyeing effluent is reused at Toray Sakai Weaving & Dyeing (Nantong) Co., Ltd. utilizing Toray reverse osmosis membranes.

Water Resource Management by Toray Group



Related Information

See the following page for information on how Toray Group handles water hazard risks (floods, storm surges, etc.).

> [Business Continuity Plan Initiatives](#)

Reduction of water usage per unit of revenue (%)

■Reporting scope

Toray Group

■Target

At least 40% lower than fiscal 2013 (Fiscal 2025)

Result in fiscal 2023

35.3%¹

In fiscal 2023, Toray Group used 207 million tons of water, approximately 7 million tons less than the previous fiscal year. Compared to the amount used per unit of revenue in fiscal 2013, set to an index value of 100, usage in fiscal 2023 was 64.7 points, down 3.4 points from the previous fiscal year. In fiscal 2023, the total volume of water used decreased and water usage per unit of revenue improved, thanks to the reuse of cooling water and effluent in the manufacturing process.

¹ The calculation of the figure for the baseline of FY 2013 includes data for companies that joined the Toray Group in FY 2014 or later.

Related Information

> [Environmental Data \(Water Usage\)](#)

Comparative Water Usage Per Unit of Net Sales (Per Unit of Revenue)² (Toray Group)

FY	2017	2018	2019	2020	2021	2022	2023
Comparative Water Usage Per Unit of Net Sales (Per Unit of Revenue)	82.5	77.9	77.1	82.4	71.7	68.1	64.7

² Per unit of net sales until fiscal 2019, as Japanese GAAP was used until then, and per unit of revenue from fiscal 2020 onwards, as International Financial Reporting Standards (IFRS) have been adopted since then.

Click [here](#) for the main initiatives for CSR Guideline 3, "Safety, Accident Prevention, and Environmental Preservation" in CSR Roadmap 2025.

CSR Activity Report (CSR Guideline Activity Reports) - Safety, Accident Prevention, and Environmental Preservation

Initiatives to Reduce Waste

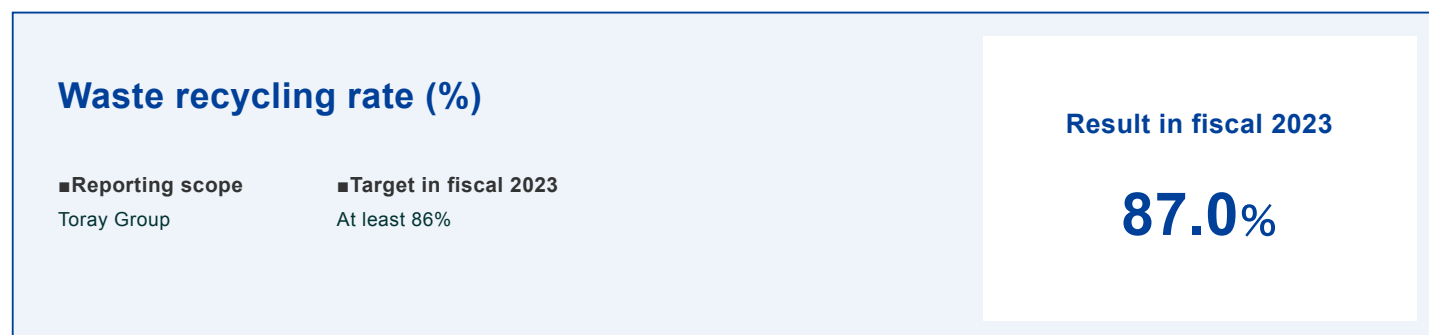
Toray Group is making effective use of resources as it works toward the realization of a sustainable, recycling-based world. Under its CSR Roadmap 2025, which covers fiscal 2023-2025, the Group has set a specific waste recycling rate¹ as a KPI and is actively working toward achieving it. In particular, intensive efforts are being made to reduce the number of group companies and plants with low recycling rates and to follow up on progress being made.

¹ Waste recycling rate = (recycled resources + resources with monetary worth) / (total waste + resources with monetary worth)

Results in Fiscal 2023

CSR Roadmap 2025
Main Initiatives (8)

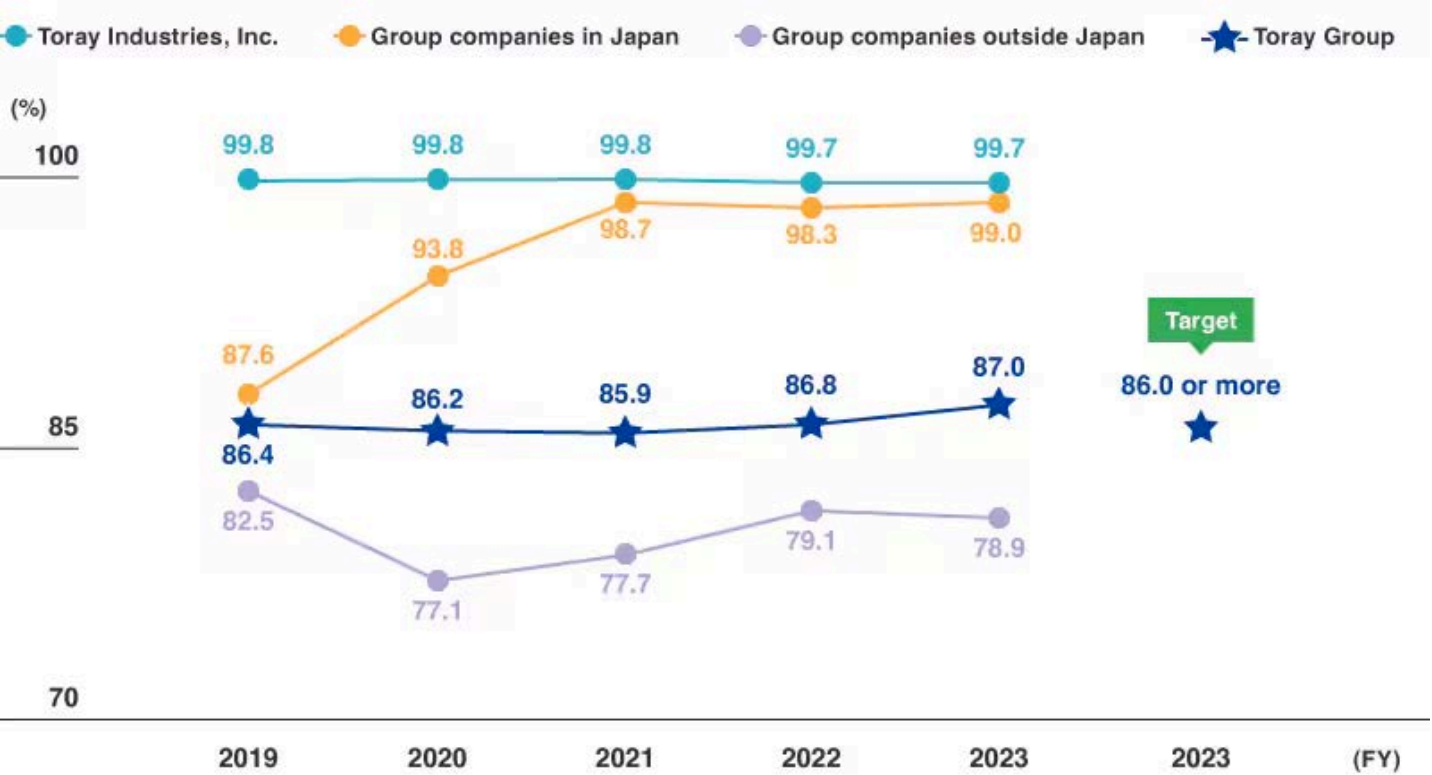
Recycling Rate



The Toray Group recycling rate in fiscal 2023 was 87.0%, up by 0.2 percentage points year on year, thanks to efforts to promote stable operation of sludge drying equipment at relevant group companies. As a result, the Group achieved its target of 86% or higher.

Going forward, Toray will continue efforts to achieve the waste recycling rate KPI set in the CSR Roadmap 2025. It has designated companies with low recycling rates as target companies and is promoting waste reduction and reuse (including conversion to valuable resources), as it strives for further reductions.

Recycling Rate (Toray Group)



Click [here](#) for the main initiatives for CSR Guideline 3, “Safety, Accident Prevention, and Environmental Preservation” in CSR Roadmap 2025.

CSR Activity Report (CSR Guideline Activity Reports) - Safety, Accident Prevention, and Environmental Preservation

Environmental Risk Management

Number of environmental accidents

■Reporting scope
Toray Group

■Target in fiscal 2023
0

Result in fiscal 2023

4

Compliance with Environmental Laws and Accidents in Fiscal 2023

CSR Roadmap 2025
Main Initiatives (5)

In fiscal 2023, four environmental accidents occurred within Toray Group, some of which were minor. These were all accidents in which chemicals leaked into the ground, or wastewater emissions exceeded administrative and agreed standards for water quality. After promptly contacting the local governments, the plants involved confirmed, through analytical investigations and reviews of the surroundings based on internal rules, that the impact on the environment was extremely minor.

The causes of these accidents included incorrect valve operation, which allowed chemicals to enter a wastewater line, and deterioration of a containment pit, which resulted in partial chemical leakage into the ground. To prevent recurrences, Toray will take thorough measures such as implementing modifications to wastewater lines and repairing containment structures group-wide, as well as strengthening the management of wastewater within factories.

The Group received three complaints from residents near its facilities concerning noise, which were seriously examined and addressed by implementing improvements.

Environmental Accidents in Fiscal 2023 (Toray Group)

Administrative disposition due to violations of laws or ordinances ¹	0
¹ Serious environmental accidents resulting in improvement orders	
Accidents (environmental accidents, etc.) ²	0
² Environmental accidents for which improvement guidance and recommendations are issued	

Slight but temporary exceeding of standard values ³ ³ Environmental accidents for which improvement guidance and recommendations are not issued by local government	4
Complaints/requests (noise, odor, etc.)	3

Environmental Assessment

CSR Roadmap 2025
Main Initiatives (5)(6)(8)(9)(10)

Toray Industries conducts product safety reviews before launching new products on the market. As part of these reviews, a prescribed checklist is used for environmental assessment. The Environment & Safety Department confirms and evaluates the measures taken for each stage of the new product's life cycle, from raw material procurement, manufacturing, packaging and distribution, to product use, recycling, and disposal.

<Evaluation Checklist Items (excerpt)>

- Does the product comply with the Toray Green Procurement Guidelines? (e.g. Is it free from prohibited substances?)
- To help protect biodiversity, do the operational emissions exceed the standard values for regulated substances?
- Is recycling used within the processes and are waste heat and unused energy utilized effectively?
- Have the amounts of exhaust gas and noise generated during product use been reduced?
- Have measures been taken to reduce the environmental impact, such as by preventing the generation of harmful gases during incineration and by avoiding the leaching of hazardous substances during landfilling?

Preventing Soil and Groundwater Pollution

CSR Roadmap 2025
Main Initiatives (5)

Toray Group constructs protective embankments around its facilities and storage tanks for hazardous chemicals, and takes precautions to ensure that none of these dangerous substances leak or discharge into the surrounding area or contaminate the soil onsite. In fiscal 2023, remediation using wells to clean up groundwater pollution continued at Toray Monofilament Co., Ltd., and remediation to address soil pollution continued at Toray Industries' Nagoya Plant. Toray Group will continue these ongoing remediation efforts and voluntary surveys to monitor soil and groundwater pollution.

Click [here](#) for the main initiatives for CSR Guideline 3, "Safety, Accident Prevention, and Environmental Preservation" in CSR Roadmap 2025.

CSR Activity Report (CSR Guideline Activity Reports) - Safety, Accident Prevention, and Environmental Preservation

Environmental Accounting

Fiscal 2023 Environmental Accounting Report (Toray Industries, Inc.)

Toray Industries, Inc. has been practicing environmental accounting since 1999, to track investments and gauge their cost effectiveness.

In fiscal 2023, the Company's environment-related investment amounted to 1.8 billion yen, up 0.31 billion yen compared to the previous year, reflecting an increase in investments in energy-saving initiatives. Cost totaled 9.7 billion yen, up 0.44 billion yen compared to the previous year, due to soaring fuel prices and other factors.

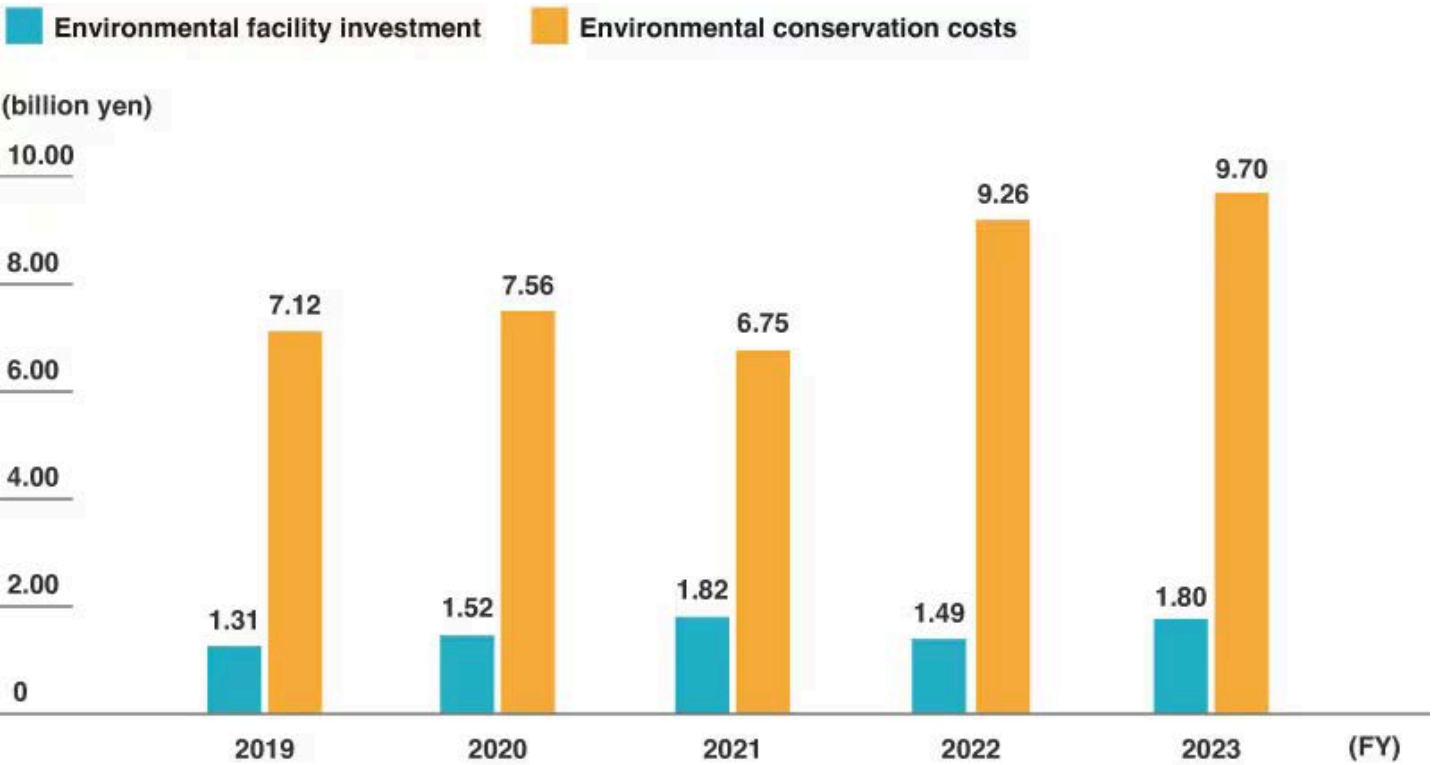
Fiscal 2023 Environmental Accounting Report (Toray Industries, Inc.)

Expenses				
Item		Subcategory and description	Investment (million yen)	Cost (million yen)
Business area costs	Pollution prevention costs	Air (including CFC countermeasures)	108	4,283
		Water quality	561	2,485
		Noise and vibration	17	13
		Greening	0	238
		Odors and other	103	228
	Global environment conservation costs	Energy conservation and combating global warming	349	63
	Resource recycling costs	Industrial waste reduction, recycling, disposal, and PCB waste disposal services	170	1,138
Upstream and downstream costs		Product recycling	494	326
		Container and package recycling	0	0

Expenses			
Item	Subcategory and description	Investment (million yen)	Cost (million yen)
Management activity costs	Indirect labor costs, ISO certification and maintenance, environmental communications, and education	0	612
Social initiative costs	Regional initiatives, support for organizations, etc.	0	156
Environmental remediation costs	SOx fines, soil purification, etc.	0	154
Total		1,801	9,697

Effectiveness		
Item		Amount (million yen)
Financial effects	Reduction in energy costs	63
	Reduction in industrial waste disposal costs	44
	Sale of valuable recycled resources with monetary value	744
Quantitative environmental effects	Reduction of greenhouse gas emissions	2,200 tons-CO ₂ eq

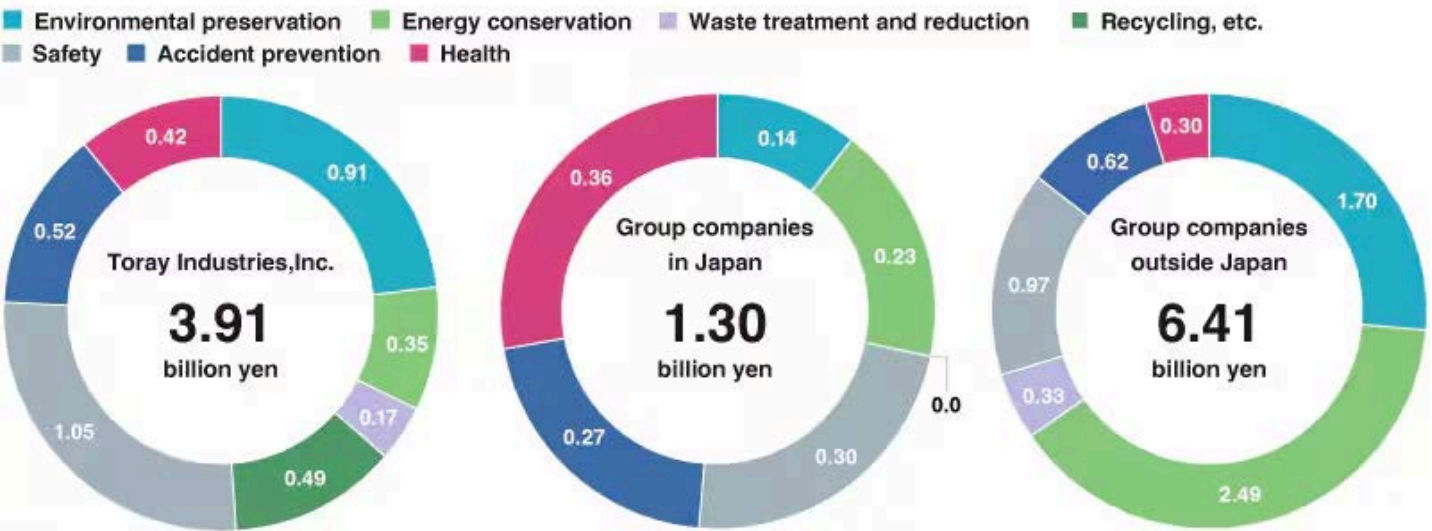
Environmental Facility Investment and Environmental Conservation Costs (Toray Industries, Inc.)



Facility Investment in Safety, Health, Accident Prevention, and Environmental Preservation Projects (Toray Group)

Toray Group reports on facility investments relating to safety, health, accident prevention, and environmental preservation projects. The Group continues to invest in safety improvements to facilities. As part of its environmental conservation efforts, the Group has invested in the expansion of exhaust gas emissions and wastewater treatment facilities and additional instrumentation to enhance wastewater management.

Fiscal 2023 Facility Investment in Safety, Health, Accident Prevention, Environmental Preservation, and Energy Conservation Projects (Toray Group)



Toray Industries Environmental Accounting Standards

- Some categories were changed based on the Ministry of the Environment's Guidelines for FY 2005.
- Only economic effects that can be determined with a high degree of certainty are included in the calculation. Presumed effects are not included.
- Capital investment also includes facility investments for which environmental preservation is not the main objective. Capital investment resulting from leases is also included. Expenses include labor costs and depreciation. However, internal labor costs related to local volunteer activities are not included.
- Energy cost reduction figures show the amount of reduction for the 12 months after the completion of an energy saving facility. Expenses are not recorded as they are deducted when the effect is calculated.
- Waste disposal cost reduction figures show the amount of reduction achieved through waste reduction efforts and resource recycling for 12 months after the measures are undertaken.
- Effects of reducing greenhouse gas emissions are measured over a 12-month period following the completion of measures or facilities to save energy.

CSR Activity Report (CSR Guideline Activity Reports) – Safety, Accident Prevention, and Environmental Preservation

Biodiversity Initiatives

Next to the issue of climate change, the issue of biodiversity preservation has been a major focus of the international community in recent years. Biodiversity forms the basis of natural capital such as water, air, plants, animals, and minerals that are indispensable to human society. Climate change caused by human activities, depletion of natural resources, ecosystem destruction, and species extinction are causing biodiversity loss to occur at an alarming rate, making it a serious problem facing humankind. This has sparked an international discussion about the importance of taking a nature positive approach to stopping and reversing biodiversity loss.

Toray Group views conservation of biodiversity as a critical global environmental issue that is of equal importance to reducing greenhouse gas emissions. Toray is contributing to biodiversity conservation and the nature positive approach through its business activities. This includes water treatment technology to produce reliably safe drinking water, water conservation through the reuse of treated wastewater, and air purification using fiber filter-related materials.

The Group also uses environmental assessment checklists to conduct safety reviews for all products and to carry out environmental risk investigations before making capital investment. The checklists enable the Group to ensure that it is not exceeding legal limits on regulated substances contained in exhaust gas, wastewater, and waste from manufacturing. Before utilizing land for the first time, Toray also uses the checklist to confirm any biodiversity-related factors such as regulations for production sites, the need for surveys of rare organisms, and any concerns from citizen groups. Through these efforts, Toray strives to assess its impact on biodiversity and help build a sustainable world.

Toray Group Biodiversity Basic Policy Established December 2010

Basic Approach

Toray Group appreciates the gifts of nature that biodiversity provides and strives to realize the conservation and sustainable use of biodiversity. The Group contributes to society through the development and dissemination of products and technologies which advance conservation of biodiversity.

Action Guidelines

1. We take into consideration the impact of our business activities on biodiversity and strive to realize the conservation and sustainable use of biodiversity.
2. We endeavor to develop environmentally friendly technologies and products and contribute to the conservation of biodiversity by making them available for use.
3. We practice fair use of genetic resources on the basis of relevant international agreements.
4. We recognize the influence of biodiversity within the supply chain and pursue coexistence with nature.

5. We strive to raise employee awareness on biodiversity and contribute to the building of a society that nurtures biodiversity through our communication with stakeholders.

Note: Toray Group respects Nippon Keidanren's Declaration of Biodiversity (Guide to Action Policies) and the Japanese Ministry of the Environment's Guidelines for Private Sector Engagement in Biodiversity.

The Group is a promotion partner of Nippon Keidanren's Declaration of Biodiversity. The policies and details of Toray Group's initiatives are outlined in the Initiative based on the [Declaration of Biodiversity by Keidanren](#).

Toray Industries Inc. has also participated in the 30 by 30 Alliance for Biodiversity since its launch by Japan's Ministry of the Environment on April 8, 2022.

With the goal of halting and reversing biodiversity loss (nature positive approach) by 2030, the Alliance was established by the Ministry of the Environment as a voluntary coalition of industry groups, government agencies, and private companies. Its aim is to help achieve the worldwide initiative for conserving 30% or more of Earth's land and ocean area as healthy ecosystems by 2030.



Working Group Initiatives for Biodiversity

In 2010, Toray Group launched a cross-organizational working group to develop biodiversity initiatives, which have been prioritized and implemented under the guidance of the Toray Group Biodiversity Basic Policy.

In 2023, the team was renamed the Nature Positive (NP) Subcommittee, and some of its functions were updated.

In 2024, the entire framework for promoting initiatives aimed at realizing the Toray Group Sustainability Vision was also revised.

[TCFD Report Ver.2.1](#) [PDF](#)

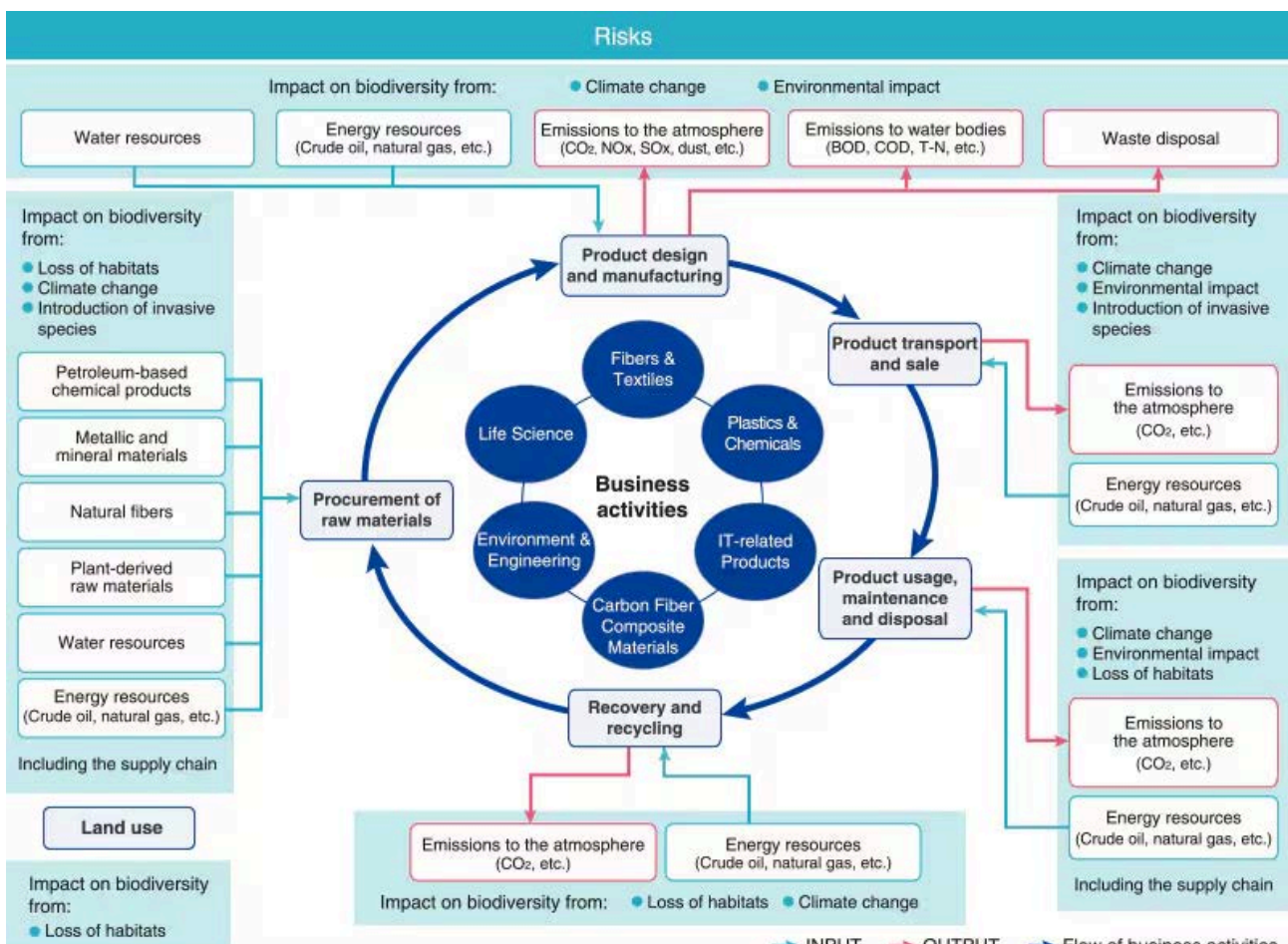
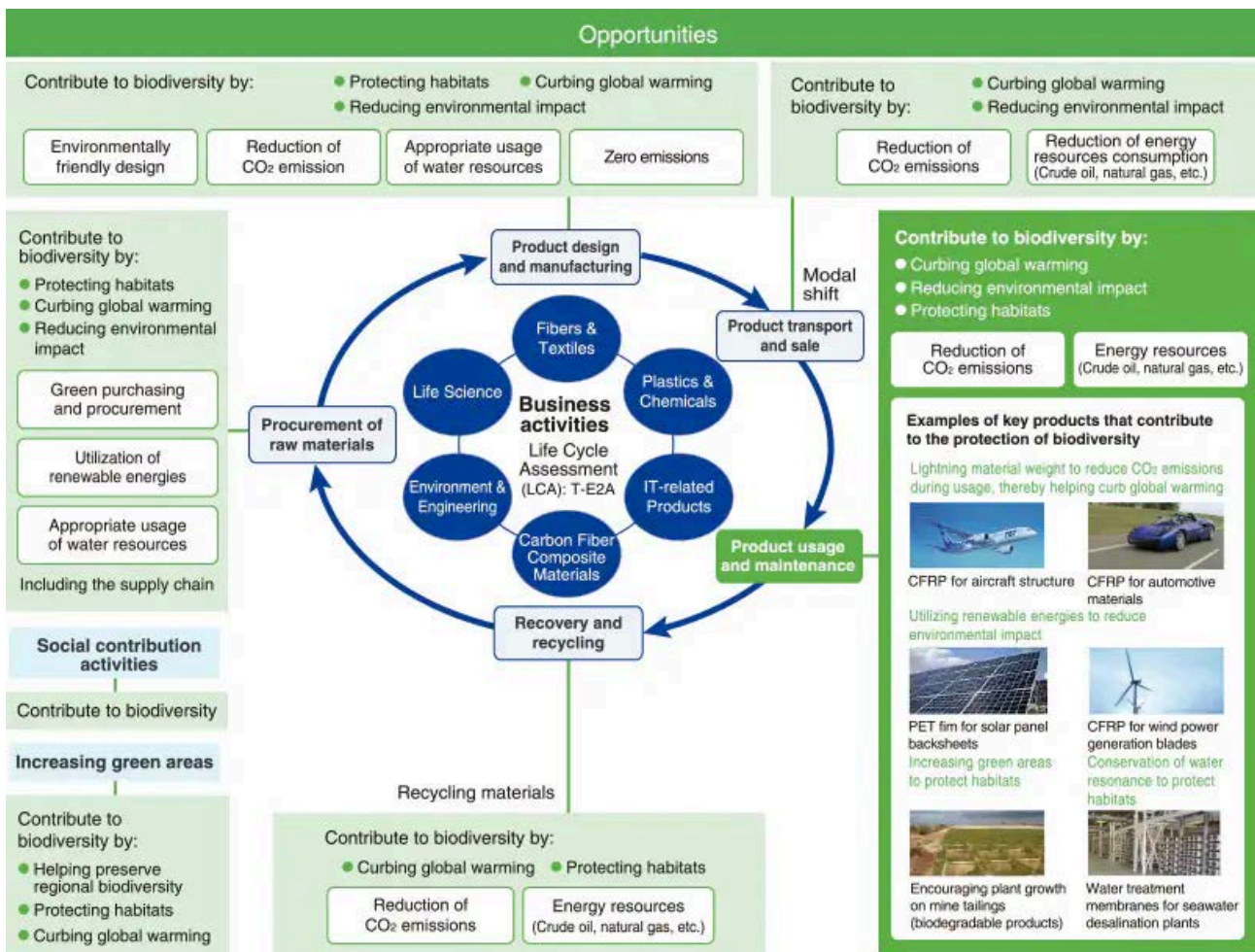
> [Disclosure Based on TNFD Recommendations](#)

Analysis of Biodiversity-related Opportunities and Risks Across the Toray Group Supply Chain

The Group conducted an analysis of the biodiversity opportunities and risks relating to its business activities, namely, upstream raw material procurement, water and energy resource use, product and service design, operational emissions, and land use for operations, as well as downstream product use, disposal, collection, and recycling.

On the opportunity side, business activity effects on biodiversity include contribution to CO₂ emissions reduction by offering products that reduce the weight of parts for aircraft and other equipment as well as protecting forests and habitats by offering products that maintain green areas and protect water resources. On the risk side, activity effects include the reduction of natural capital due to the use of water and energy resources, as well as impact on climate change and the environment resulting from emissions into the atmosphere and water bodies.

The two diagrams below show the biodiversity-related opportunities and risks across Toray Group's supply chain.



Note: These diagrams were produced based on the Map of Corporate Activities and Biodiversity[®] published by the Japan Business Initiative for Biodiversity.

Toray Group Strategy

Established in 2018, the Toray Group Sustainability Vision outlines a range of goals to be achieved by 2050. These include helping to create a net zero emissions world, where greenhouse gas emissions are completely offset by absorption (in other words, a net zero emissions, carbon-neutral world), a world where resources are sustainably managed, and a world with a restored natural environment, with clean water and air for everyone. The Group has been promoting initiatives to achieve these goals.

In May 2020, the Long-Term Corporate Vision TORAY VISION 2030 was announced with the aim of achieving sound, sustainable growth and creating social value by fiscal 2030. Then in March 2023, the three-year Project AP-G 2025 was launched with the title, Innovation and Resilience Management—Value Creation for New Momentum. As part of this effort, the Group has been promoting its Green Innovation businesses, which help solve global environmental problems and resource/energy issues, along with its Life Innovation businesses, which promote better medical care, health maintenance and longevity, public health, and human safety, including disaster and extreme weather response measures. Recently, the Green Innovation businesses and Life Innovation businesses were combined and renamed as Sustainability Innovation businesses. By expanding the products supplied by these businesses, Toray Group aims to provide essential solutions to solve global issues through nature-positive approaches.

Green Initiatives as Part of Business Activities (Products and Technologies)

Business activities that serve as green initiatives include the use of water treatment technology to produce clean and reliable drinking water, water resource conservation through the reuse of sewage and wastewater, and air purification using textile materials for filters. They also include the recycling of plastic products, switching to bio-based raw materials, and transitioning to clean energy and hydrogen fuel. Through its business activities, Toray is working to help preserve biodiversity and adopt a nature positive approach.

Related Information

- [Webpage: Four Perspectives of the World as Envisioned by the Toray Group in 2050—A world with a restored natural environment, with clean water and air for everyone](#)
- [Realizing a Circular Economy](#)

Production Activity Initiatives

CSR Roadmap 2025
Main Initiatives (10)

Initiatives to reduce the impact of emissions during operations, etc.

Toray is working on the effective use and appropriate management of water resources through water recycling and reuse. While reducing volatile organic compounds (VOCs), sulfur oxides (SOx) and nitrogen oxides (NOx), the Group is preventing air and water pollution by reducing biological oxygen demand (BOD) and chemical oxygen demand (COD) through reliable operation and enhancement of wastewater treatment facilities. It is also working to reduce waste through recycling and reuse.

Related Information

- > [Initiatives for Managing Water Resources](#)
- > [Initiatives to Prevent Air and Water Pollution](#)
- > [Initiatives to Reduce Waste](#)

Increasing Green Areas

Toray Group's Basic Policy for Increasing Green Areas Established June 2012

- A. Toray Group contributes to the preservation of the natural environment by promoting tree planting using planting methods suitable for the biodiversity of local habitats.
- B. Toray Group aims to surround its production plants with greenery by giving priority to tree planting in areas at the boundaries of factory sites.
- C. Toray Group sets goals for making each of its production plants greener while considering how to attain harmony with the surrounding environment as well as regulations concerning green space ratios in each respective country or region.

Plants at Toray Industries and its group companies in Japan are operating greenery policies and plans, guided by the Toray Group Basic Policy for Increasing Green Areas¹. The plans encompass initiatives to conserve green areas, including natural forests² that have been protected since the plants began operating. Sustainable greenery conservation initiatives also help to conserve the environment for communities.

Efforts to increase green areas by creating environmental conservation forests around Toray Industries' plants began in the autumn of 1973, when about 4,000 employees went to temples and shrines (which in Japan are usually surrounded by greenery) and mountains to collect tree seeds that had fallen there. Under the guidance of the late Professor Akira Miyawaki, who researched plant ecology at Yokohama National University, the seeds were grown into seedlings at each workplace, and employees painstakingly planted them one by one.

Nearly 50 years have passed since then, and the trees grown from seeds, including laurel, camphor, and oak, now cover over 10,000 m² around the Mishima Plant at Toray Industries.

It is still working to conserve the environment by increasing green areas. Altogether, Toray Industries has created green areas covering approximately 200,000 m² at 12 plants, including Mishima Plant and the Basic Research Laboratories (now the Basic Research Center) through the shrine forest method³.

¹ Toray Group Basic Policy on Increasing Green Areas was established in 2012, evolving out of greenery policies that were first established in 1973.

² Natural groves or forestation by species based on potential native vegetation

³ Modeled after traditional forestry techniques used by Japanese shrines, this greening method reproduces green spaces in a state close to natural forests by using trees that are native to the area. In order to create forests with local genes, Toray employees collected seeds from shrines and forests near plants, grew them into seedlings, and planted the seedlings to create forests at the plants.

Toray Industries, Inc. (Mishima Plant)



Immediately after planting (1973)



Current state (photo taken in 2023)

Toray Industries, Inc. (Tokai Plant)



Tree planting (1976)



Current state (photo taken in 2023)

Created through coordinated efforts by 12 companies, including Toray Industries (Tokai Plant), the Chita Peninsula Greenbelt was officially recognized in October 2023 as a “nature symbiosis site” by the Ministry of the Environment. This designation aims to help realize the government’s nature positive goals by recognizing areas of the country where biodiversity conservation is being promoted through private sector initiatives. This recognition acknowledges corporate efforts to not only maintain and manage green spaces, but to also help enhance biodiversity in the surrounding areas. The determination was partially based on Toray’s collaborative efforts with local governments, university students, experts, and NPOs. Other recognized efforts include the continuous development of waterfront biotopes and wildlife mounds, which have confirmed the presence of species that once lived in traditional countryside landscapes.

As a result of its greening efforts, the Tokai Plant of Toray Industries was certified in 2022 as “Excellent Stage 2” in the OMA (Operation, Management and Active use) category of the Social and Environmental Green Evaluation System (SEGES). This green certification program is provided by Japan's Organization for Landscape and Urban Green Infrastructure. The plant has also been recognized under the Aichi Biodiversity Corporate Certification Program run by Aichi Prefecture.

Supply Chain Initiatives

As one of its biodiversity conservation initiatives, Toray Group conducts a regular survey of products to determine the usage of bio-based raw materials in product manufacturing. The Group has also developed rules for checking the biodiversity impacts of products and applies the rules to all products from the development stage.

Among them, palm oil is a key raw material for follow-up action. Since fiscal 2020, the Group has been surveying relevant suppliers to find out whether raw materials are made with palm oil that uses certified palm nuts. Toray also surveys suppliers about the possibility of switching from non-certified palm oil to certified palm oil.

Going forward, Toray Group will continue to promote the use of palm oil that is environmentally friendly and ensures respect for human rights.

In addition, the Toray Group CSR Procurement Guidelines include requirements for biodiversity conservation and for minimizing environmental impact. Suppliers are asked to comply with these guidelines.

The Group is also promoting the collection and reuse of the packaging materials that come with Toray products.

Related Information

- [Establishing Sustainable Supply Chain](#)
- [Toray Group Distribution Initiatives](#)

Social Contribution Initiatives

CSR Roadmap 2025
Main Initiatives (10)

Toray Group carries out biodiversity conservation through social contribution activities as a good corporate citizen. The Group is promoting various initiatives, including the creation of a group plant waterside biotope with the help of local students. In collaboration with municipalities and NPOs, Toray employees are also engaged in volunteer cleanup activities along rivers and beaches, as well as tree planting.

Please see the following page for more information.

Related Information

- [Social Contribution Activities as a Good Corporate Citizen Activities Carried Out in Fiscal 2023](#)

Responding to Deforestation

Rapid deforestation worldwide is believed to have significant impacts on the global environment and human lives, contributing to wildlife extinction, accelerating climate change, and spreading infectious diseases.

To help address this issue, Toray Group follows the first of its Ten Basic Environmental Rules, namely, “prioritize environmental preservation.” This means complying with all relevant laws, regulations, and agreements throughout its business activities. As a result, the Group is compelled to prioritize environmental preservation, while taking biodiversity into account for every stage of its product lifecycles, including manufacture, handling, use, sales, transport, and disposal. The Group conducts its business activities while placing utmost importance on protecting forests.

Examples of Toray Group Activities

- For its “[Message to Shareholders \(in Japanese only\)](#)” publication, the Group uses paper made from wood harvested from responsibly managed forests, based on the standards of the Forest Stewardship Council (FSC).
- The Group promotes green procurement, actively purchasing and using recycled paper.
- The Group reduces its usage of paper supplies such as paper cups and copy paper.
- Each group plant and company makes efforts to [preserve nearby green spaces](#).
- Employee tree planting activities are conducted as part of social contribution initiatives.

Disclosure Based on TNFD Recommendations

In January 2024, Toray Industries expressed its support for the recommendations of the Taskforce on Nature-related Financial Disclosures (TNFD), released in September 2023, and the Company was recognized as a TNFD early adopter.

It has also joined the TNFD Forum, an organization supporting TNFD discussions.

Currently, Toray is conducting investigation and analysis based on the TNFD’s LEAP approach. The results, along with details of Toray Group’s initiatives, will be compiled and published as the “Toray Group TNFD Report” (tentative title).



Materiality of Environmental Restoration

In June 2023, Toray Group identified 11 issues related to CSR materiality.

As part of its CSR materiality, Toray Group includes contributing to the restoration of the natural environment by taking a nature-positive approach. It addresses this issue by providing environmentally friendly products including those that promote cleaner water and air, and by promoting efforts for green space conservation and proper management of chemicals.

> [Materiality](#)

Corporate governance structure

Initiatives related to biodiversity and natural capital are interrelated with initiatives on climate change and resource circulation.

Therefore, under Toray Group’s Climate Change Action Project, which promotes environmental impact reduction efforts such as lowering greenhouse gas emissions, it established a Nature Positive (NP) Subcommittee. This subcommittee drives group-wide initiatives and devises comprehensive strategies to reduce impacts on biodiversity and natural capital.

The NP Subcommittee coordinates with other subcommittees promoting climate change and circular economy initiatives to identify, assess, and prioritize Toray Group’s dependencies, impacts, opportunities, and risks related to biodiversity and natural capital. Additionally, key issues within the NP Subcommittee’s activities are periodically

reviewed by Toray's Executive Committee, which serves as a consultative body for the Board of Directors. Progress made on the NP Subcommittee's activities and the results of Executive Committee deliberations are reported to the Board of Directors at least once a year. The board monitors these reports and incorporates biodiversity and natural capital issues as key elements in business decisions, ensuring oversight and comprehensive decision-making.



Investigation and analysis based on the LEAP approach

To identify priority areas such as business sectors, activities, value chains, and regions that could have significant relationships with Toray Group's dependencies, impacts, opportunities, and risks related to biodiversity and natural capital, the Group conducted an investigation using [ENCORE](#), a recommended analysis tool.

The analysis revealed that Toray Group's business activities are heavily dependent on groundwater and surface water. There could also be significant impacts on water use, air pollutants, and solid waste.

Further investigation and analysis are currently underway.

Click [here](#) for the main initiatives for CSR Guideline 3, "Safety, Accident Prevention, and Environmental Preservation" in CSR Roadmap 2025.

CSR Activity Report (CSR Guideline Activity Reports) - Safety, Accident Prevention, and Environmental Preservation

Environmental Impact Overview

Environmental Impact Overview Fiscal 2023

	Toray Industries, Inc.					Group companies in Japan					Group companies outside Japan				
	2020	2021	2022	2023	Compared to previous year (%)	2020	2021	2022	2023	Compared to previous year (%)	2020	2021	2022	2023	Compared to previous year (%)
INPUT															
Energy (1,000,000 gigajoules) ¹	25.3	27.3	25.6	24.2	94.5	5.3	5.8	5.4	5.1	94.1	50.9	63.4	61.3	64.0	104.4
Derived from non-renewable energy sources	24.0	26.1	24.6	22.9	93.2	5.3	5.8	5.0	5.1	101.5	50.7	63.2	61.1	63.6	104.1
Derived from renewable energy sources	1.2	1.2	1.1	1.3	113.7	0.0	0.0	0.4	0.0	2.0	0.2	0.1	0.3	0.4	145.0
Water usage (1,000,000 tons) ¹	165.7	171.8	166.2	160.9	96.8	11.5	11.5	8.6	8.2	95.2	37.6	40.5	39.1	37.7	96.4
Industrial water	129.9	130.9	127.1	122.5	96.4	3.5	3.7	1.1	1.9	169.7	16.5	20.4	14.1	18.8	133.5
Public water	0.2	0.2	0.2	0.2	96.8	0.3	0.3	0.4	0.3	64.4	10.3	10.1	16.5	8.7	52.8
Seawater	6.2	9.5	8.2	8.4	102.9	1.3	1.5	0.7	0.9	133.2	4.0	0.0	0.0	0.0	—
Groundwater	23.4	25.2	24.6	23.2	94.3	6.3	5.9	6.4	5.1	79.3	2.0	4.8	4.2	4.0	95.4
Others	6.0	6.0	6.1	6.6	108.3	0.1	0.1	0.1	0.1	56.7	4.8	5.2	4.2	6.1	146.3
OUTPUT															
GHG (10,000 tons CO₂eq)¹⁻³															
6 gases including CO ₂	165.7	186.2	164.7	162.6	98.7	30.7	33.3	19.5	20.1	103.0	300.5	329.8	305.1	312.4	102.4
Scope1 ⁴	140.3	157.9	137.3	136.7	99.6	4.1	5.5	3.4	3.2	93.1	137.3	140.9	113.1	109.3	96.6
CO ₂	132.6	148.4	129.3	129.6	100.3	4.1	5.1	3.2	3.2	98.8	137.3	140.9	113.1	109.3	96.6
CH ₄	0.3	0.3	0.3	0.3	103.6	0.0	0.0	0.0	0.0	—	—	—	—	—	—
N ₂ O	7.3	8.9	7.7	6.8	87.9	0.0	0.4	0.2	0.0	0.9	—	—	—	—	—
Other gases (HFCs, PFCs, SF ₆)	0.0	0.3	0.0	0.0	—	0.0	0.0	0.0	0.0	—	—	—	—	—	—
Scope2	25.5	28.3	27.4	25.9	94.6	26.6	27.7	16.1	16.9	105.1	163.1	188.8	192.0	203.2	105.8
PRTR Law-specified substances (tons)⁵															
Atmospheric emissions	211.0	183.3	145.1	153.0	105.4	104.4	89.8	111.3	120.6	108.4	480.6	442.8	564.2	650.3	115.3

	Toray Industries, Inc.					Group companies in Japan					Group companies outside Japan				
	2020	2021	2022	2023	Compared to previous year (%)	2020	2021	2022	2023	Compared to previous year (%)	2020	2021	2022	2023	Compared to previous year (%)
Water emissions	22.2	26.5	28.0	13.5	48.1	3.1	0.0	0.0	2.7	—	0.7	3.7	3.1	0.3	9.7
Waste transfers	577.4	499.1	733.4	1,396.5	190.4	2,468.9	957.4	917.5	969.0	105.6	4,276.9	4,611.1	5,287.7	1,033.7	19.5
Air pollutants (tons)¹															
SOx	160.1	219.4	232.0	226.2	97.5	17.9	2.4	1.6	6.1	382.6	1,404.7	1,111.3	425.1	247.3	58.2
NOx	1,139.2	1,302.6	1,186.0	1,135.0	95.7	29.7	14.3	4.2	23.3	554.4	1,020.7	1,372.9	1,746.7	1,553.8	89.0
Dust	60.9	102.6	77.0	86.0	111.7	1.5	4.7	1.0	6.1	611.8	133.3	207.4	443.5	539.8	121.7
VOC	309.2	266.1	361.0	306.9	85.0	172.2	136.4	52.7	134.6	255.3	557.8	485.9	743.5	650.7	87.5
Industrial wastewater (million tons)¹															
	150.1	154.4	143.9	139.1	96.7	7.7	8.2	5.6	5.3	94.7	24.3	25.7	29.1	23.9	82.3
Total water consumed (million tons)															
Note: Calculated by subtracting industrial wastewater from water withdrawn															
	15.6	17.4	22.2	21.8	98.3	3.8	3.3	3.0	2.9	96.1	13.2	14.8	10.0	13.7	137.4
Water pollutants (tons)															
BOD	523.5	464.7	447.9	415.3	92.7	21.6	16.3	10.2	12.8	125.2	188.3	174.0	193.0	196.8	102.0
COD ¹	694.0	666.6	586.7	534.3	91.1	28.8	25.9	15.6	18.1	115.9	1,222.6	1,445.4	2,294.0	1,488.9	64.9
Nitrogen	340.4	405.8	389.3	357.9	91.9	8.6	7.6	4.1	8.9	216.0	—	—	—	—	—
Phosphorus	18.7	19.0	31.7	31.9	100.7	0.6	0.7	0.4	0.8	207.0	—	—	—	—	—
Waste (1,000 tons)¹															
Recycled	27.0	27.6	26.7	23.7	88.6	12.3	11.3	10.8	9.4	86.7	84.3	99.7	100.6	73.2	72.8
Incinerated and other	0.1	0.4	0.2	0.1	65.7	2.0	0.3	0.7	0.4	60.0	11.5	15.7	32.0	28.3	88.4
Direct landfill Diposal	0.0	0.0	0.0	0.0	—	0.9	0.3	0.3	0.2	57.8	17.7	19.2	19.1	15.8	82.6
Coal ash (1,000 tons)¹															
Recycled	66.6	69.0	67.5	62.3	92.3	—	—	—	—	—	12.5	15.8	11.6	8.0	69.1
Direct landfill Diposal	1.3	1.5	1.2	1.4	114.8	—	—	—	—	—	0.3	0.3	0.4	0.4	112.3
Hazardous waste (1,000 tons)^{1&6}															
Hazardous waste	2.1	2.3	0.9	1.7	184.4	2.8	2.7	2.0	2.2	109.4	—	0.0	0.0	0.0	—
Non-hazardous waste	25.0	25.7	26.0	22.2	85.3	12.5	9.2	9.8	7.8	79.3	—	134.6	151.7	117.3	77.3

¹ Toray Industries' fiscal 2023 energy consumption, water use, greenhouse gas emissions (Scope 1 and 2), air emissions (Sox, NOx, dust, and VOC), wastewater, chemical oxygen demand (COD) and industrial waste, as well as overseas group companies' energy consumption, greenhouse gas emissions (Scope 1 and 2), and industrial waste, has been verified by a third party, LRQA Limited.

² CO₂-equivalent emissions are calculated from the conversion factor for each gas.

³ Until fiscal 2022, this was calculated by multiplying the GHG emissions and revenue of individual subsidiaries worldwide by the applicable Toray Industries' equity share. In fiscal 2023 however, the calculation method changed, and the degree of financial control Toray Industries has over the individual subsidiary (not the equity share) is now used, in accordance with the GHG Protocol, the international standard.

⁴ CO₂ is aggregated for group companies outside Japan.

⁵ In fiscal 2023, the Group's PRTR-regulated substances, including those handled outside Japan, have been updated to align with the new legal requirements.

⁶ Data corresponding to "industrial waste subject to special control," as defined in Japan's Waste Disposal and Public Cleansing Act, is recorded as hazardous waste generated.

GHG Emissions in Toray's Supply Chain (Scope3)

	(10,000 tons CO ₂ eq)			
	Toray Industries, Inc. ⁷		Toray Group ⁸	
	2020	2021	2022	2023
Category 1: Purchased goods and services	—	231.5	898.0	859.7
Category 2: Capital goods	10.2	9.2	39.6	51.8
Category 3: Fuel and energy related activities	63.1	19.0	94.5	95.6
Category4: Upstream transportation and distribution	3.8	4.3	21.0	18.4
Category5: Waste generated in operations	—	2.0	1.1	0.9
Category6: Business travel	—	1.3	0.6	0.6
Category7: Employee commuting	—	0.2	2.2	2.1
Category8: Upstream leased assets	—	—	0.2	0.4
Category9: Transportation and delivery (downstream)	—	—	—	3.0
Category10: Processing of sold products	—	—	—	—
Category11: Use of sold products	—	—	—	274.6
Category12: End-of-life treatment of sold products	—	—	—	447.5
Category13: Leased assets (downstream)	—	—	—	1.1
Category14: Franchises	—	—	—	0.0
Category15: Investments	—	—	—	—
Total	77.1	267.5	1,057.1	1,755.6

⁷ Figures for fiscal 2020 and 2021 are aggregated for Toray Industries. Figures for categories 2, 3, and 4 have been verified by a third party, LRQA Limited.

⁸ Figures for fiscal 2022 onward are totals for Toray Group. Figures for categories 1, 2, 3, 4, 5, 6, 7, and 8/Figures for all categories have been verified by a third party, LRQA Limited.

Index of Environmental Impact Per Unit of Sales⁹

	Toray Industries, Inc.					Group companies in Japan					Group companies outside Japan				
	2020	2021	2022	2023	Year-on-year comparison (points)	2020	2021	2022	2023	Year-on-year comparison (points)	2020	2021	2022	2023	Year-on-year comparison (points)
GHG emissions	59.8	57.0	48.5	46.7	-1.8	74.2	75.1	53.7	40.5	-13.2	58.4	50.1	44.4	40.8	-3.6
PRTR atmospheric emissions	41.0	30.2	22.0	23.6	1.6	11.0	8.9	12.9	10.7	-2.2	34.1	24.4	28.6	31.0	2.4
SOx emissions	3.2	3.7	3.6	3.6	0.0	38.5	4.8	3.8	11.0	7.2	6.8	4.2	1.5	0.8	-0.7
Water usage volume	84.3	74.2	66.0	65.2	-0.8	66.4	64.9	93.0	41.2	-51.8	37.6	31.7	37.6	25.4	-12.2
BOD emissions	40.8	30.7	27.3	25.9	-1.4	22.0	15.5	11.3	10.9	-0.4	14.2	10.3	40.3	10.0	-30.3
Landfilled waste volume	0.9	0.9	0.6	1.4	0.8	31.5	7.0	10.5	4.6	-5.9	35.3	29.9	27.2	21.1	-6.1

⁹ The amounts per unit of sales shown in the table are referenced to an index value of 100 set for the base year of fiscal 2001.

Aggregate Environmental Impact Data by Company Type and Location

	Toray Industries, Inc.	Group companies in Japan	Group companies outside Japan
GHG	All 13 plants and 1 research laboratory	47 plants at 27 companies	85 plants at 66 companies
PRTR Law-specified substances	All 13 plants and 1 research laboratory	42 plants at 25 companies	85 plants at 66 companies
SOx, NOx, dust	All 13 plants and 1 research laboratory	39 plants at 25 companies	85 plants at 66 companies
BOD	All 13 plants and 1 research laboratory	39 plants at 25 companies	85 plants at 66 companies
COD ¹⁰	All 13 plants and 1 research laboratory	39 plants at 25 companies	85 plants at 66 companies
Nitrogen and phosphorus	All 13 plants and 1 research laboratory	39 plants at 25 companies	—
Waste	All 13 plants and 1 research laboratory	42 plants at 25 companies	85 plants at 66 companies

¹⁰ COD figures for Toray, group companies in Japan and Korea are given in CODmn (using the potassium permanganate method). Other group companies outside Japan are given in CODcr (using the potassium dichromate method).

CSR Activity Report (CSR Guideline Activity Reports) - Safety, Accident Prevention, and Environmental Preservation

Chemical Substance Emissions and Transfer Data

PRTR Law-Specified Substance¹ Emissions and Transfer Data for Fiscal 2023

Toray Industries, Inc. ²	Tons (dioxins: mg-TEQ)			
Substance name	Atmospheric emissions	Water emissions	Soil emissions / company landfill	Waste transfers
Methyl acrylate	0.3	0.4	0.0	0.0
Acrylonitrile	8.7	3.8	0.0	223.0
Acetaldehyde	1.7	0.0	0.0	0.0
Antimony and its compounds	0.0	0.0	0.0	0.4
Asbestos	0.0	0.0	0.0	3.2
4,4'-Isopropylidenediphenol (Bisphenol A)	1.7	0.0	0.0	7.8
Xylene	2.0	0.0	0.0	0.0
Chlorobenzene	0.1	0.0	0.0	2.5
Chloroform	1.0	0.0	0.0	10.9
Cobalt and its compounds	0.0	0.8	0.0	2.7
4,4'-diaminodiphenyl ether	0.0	0.0	0.0	0.3
Inorganic cyanide compounds (except for complex salts and cyanates)	24.2	0.0	0.0	0.0
1,4-Dioxane	0.1	2.7	0.0	0.0
3-(3,4-Dichlorophenyl)-1,1-dimethylurea (Diuron)	0.0	0.0	0.0	0.4
Dichlorobenzene	10.7	0.0	0.0	0.5
Dichloromethane	37.1	0.0	0.0	3.6
2,6-Di-tert-butyl-4-cresol (BHT)	0.0	0.0	0.0	0.1
N, N-dimethylacetamide	3.9	0.0	0.0	415.2
N, N-dimethylformamide	6.0	0.0	0.0	105.5
Styrene	5.1	0.0	0.0	1.3
Terephthalic acid	0.0	0.0	0.0	12.4
Dimethyl terephthalate	0.0	0.0	0.0	3.4
Trichloroethylene	1.7	0.0	0.0	5.4
Toluene	1.0	0.0	0.0	43.2
Nickel	0.0	0.0	0.0	9.1

Toray Industries, Inc. ²	Tons (dioxins: mg-TEQ)			
Substance name	Atmospheric emissions	Water emissions	Soil emissions / company landfill	Waste transfers
Nitrobenzene	0.0	0.0	0.0	13.7
Biphenyl	0.1	0.0	0.0	6.0
Phenylenediamine	0.0	0.0	0.0	49.4
Phenol	0.0	2.0	0.0	0.6
Bromomethane	27.4	0.0	0.0	0.0
Hexamethylenediamine	0.0	0.8	0.0	0.3
Hexane	0.0	0.0	0.0	0.2
Benzene	2.7	0.7	0.0	0.0
Poly(oxyethylene) alkyl ether (limited to those the alkyl group is C=12-15 and mixture thereof)	0.5	0.0	0.0	9.6
Poly(oxyethylene) alkylphenyl ether (limited to those the alkyl group is C=8)	0.0	0.0	0.0	0.9
Manganese and its compounds	0.0	0.2	0.0	1.0
Methyl methacrylate	3.2	0.0	0.0	16.1
Methylenebis (4,1-phenylene) diisocyanate	0.0	0.0	0.0	55.5
Octamethylcyclotetrasiloxane (D4)	0.0	0.0	0.0	0.1
Cyclohexane	11.9	2.0	0.0	0.0
Tetrahydrofuran (THF)	0.1	0.0	0.0	0.0
1,3,5-Triazine-2,4,6-triamine (Melamine)	0.0	0.0	0.0	8.9
2-Tert-Butoxyethanol	0.0	0.0	0.0	5.2
Acetic anhydride	0.0	0.0	0.0	34.2
Methyl isobutyl ketone (MIBK)	0.1	0.0	0.0	2.7
N-Methyl-2-pyrrolidone (NMP)	1.5	0.0	0.0	341.0
Dioxins	0.0	0.0	0.0	0.0
Total	152.9	13.5	0.0	1,396.2

Group companies in Japan ³	Tons (dioxins: mg-TEQ)			
Substance name	Atmospheric emissions	Water emissions	Soil emissions / company landfill	Waste transfers
Butyl acrylate	0.1	0.0	0.0	204.0
Allyl alcohol	0.1	0.0	0.0	3.1
Ethylbenzene	32.2	0.0	0.0	35.4
Epichlorohydrin	0.0	0.0	0.0	24.1
Xylene	25.0	0.0	0.0	20.0
N, N-dimethylformamide	0.0	0.0	0.0	0.2
1,2-Dichloroethane (Ethylene dichloride)	0.0	0.0	0.0	2.3
N, N-dimethylacetamide	13.1	0.0	0.0	124.7
N, N-dimethylformamide / DMF	9.9	0.0	0.0	85.5
Triethylamine	0.1	0.0	0.0	2.9

Group companies in Japan ³	Tons (dioxins: mg-TEQ)			
Substance name	Atmospheric emissions	Water emissions	Soil emissions / company landfill	Waste transfers
Toluene	18.4	0.0	0.0	122.4
Zinc bis(N,N-dimethyldithiocarbamate) (synonym: Ziram)	0.0	0.0	0.0	0.2
Hydrazine	0.0	0.0	0.0	0.2
Hydroquinone	0.0	0.0	0.0	0.6
Pyridine	0.1	0.0	0.0	2.1
Hexane	1.9	0.0	0.0	69.1
Poly(oxyethylene) alkyl ether (limited to those the alkyl group is C=12-15 and mixture thereof)	0.0	2.7	0.0	38.7
Formaldehyde	0.1	0.0	0.0	0.1
Methacrylate acid	0.0	0.0	0.0	15.3
Methyl methacrylate	0.1	0.0	0.0	0.0
Methylnaphthalene	4.7	0.0	0.0	0.0
Molybdenum and its compounds	0.0	0.0	0.0	1.8
Di-2-ethylhexyl adipate (DEHA)	0.0	0.0	0.0	0.2
Ethylene glycol monobutyl ether (Butyl cellosolve)	0.0	0.0	0.0	3.0
Cyclohexane	0.4	0.0	0.0	2.4
Silicon carbide	0.0	0.0	0.0	3.5
Tetrahydrofuran (THF)	1.6	0.0	0.0	81.2
Paraformaldehyde	0.0	0.0	0.0	0.0
n-Heptane	5.6	0.0	0.0	12.9
Acetic anhydride	6.7	0.0	0.0	4.6
Methyl isobutyl ketone (MIBK)	0.4	0.0	0.0	1.1
N-Methyl-2-pyrrolidone (NMP)	0.1	0.0	0.0	106.8
Dioxins	0.0	0.0	0.0	0.0
Total	120.6	2.7	0.0	968.4

¹ Chemical substances designated Class 1 under the April 2023 revision of Japan's PRTR Law

² The list shows emissions and transfers of 46 substances (out of Toray Industries' 67 PRTR Law-specified substances) exceeding 50 kg and dioxins.

³ The list shows emissions and transfers of 32 substances (out of the 56 PRTR Law-specified substances for group companies in Japan) exceeding 50 kg and dioxins.

CSR Activity Report (CSR Guideline Activity Reports) - Safety, Accident Prevention, and Environmental Preservation

Sites with ISO 14001 Certification

Sites with ISO 14001 Certification (as of May 2024)

Toray Industries, Inc. : All 13 plants	
Shiga, Seta, Ehime, Nagoya, Tokai, Aichi, Okazaki, Mishima, Chiba, Tsuchiura, Gifu, Ishikawa, Nasu	
Group companies in Japan: 32 plants at 23 companies¹	
• Ichimura Sangyo Co., Ltd. • Sowa Textile Co., Ltd. [Hakui]² • Toray Opelontex Co., Ltd. • Toray Coatex Co., Ltd. [Kyoto, Chemical Products] • Toray Textiles, Inc. [Tokai] • Du Pont-Toray Co., Ltd. [Tokai] • Toray Hybrid Cord, Inc. • Toray Monofilament Co., Ltd. • Toray Plastics Precision Co., Ltd. [Mishima, Koriyama] • Toray PEF Products Inc. [Konan] • Toray Celanese Co., Ltd. • Toray KP Films Inc. • Toray Advanced Film Co., Ltd. [Takatsuki, Fukushima, Nakatsugawa] • Soda Aromatic Co., Ltd. [Noda, Koriyama, Okayama Chemicals] • DuPont Toray Specialty Materials Kabushiki Kaisha • Toray Fine Chemicals Co., Ltd. [Moriyama, Matsuyama, Tokai, Chiba] • Toray Carbon Magic Co., Ltd. • Suido Kiko Kaisha, Ltd. • Toray Engineering Co., Ltd. [Numazu] • Toray Building Materials Co., Ltd. [Fukushima] • Toray Medical Co., Ltd. • Toray International, Inc. • Chori Co., Ltd.	
Group companies outside Japan: 68 plants at 50 companies	
America : 9 plants at 7 companies	
United States	• Toray Fluorofibers (America), Inc. • Toray Resin Co. • Toray Plastics (America), Inc. [Rhode Island, Virginia] • Toray Composite Materials America, Inc. [Decatur, Tacoma] • Toray Membrane USA, Inc.

Mexico	• Toray Advanced Textile Mexico, S.A. de C.V. • Toray Resin Mexico, S.A. de C.V.
Europe : 12 plants at 11 companies	
United Kingdom	• Toray Textiles Europe Ltd. • Toray Advanced Composites UK Ltd.
Germany	• Euro Advanced Carbon Fiber Composites GmbH • Greenerity GmbH
France	• Toray Films Europe S.A.S. • Toray Carbon Fibers Europe S.A. [Abidos, Lacq]
Italy	• Alcantara S.p.A. • Composite Materials (Italy) s.r.l.³ • Delta-Tech S.p.A.
Czech Republic	• Toray Textiles Central Europe s.r.o.
Hungary	• Zoltek Zrt. (ZHU)
MiddleAsia_Africa : 1 plant at 1 company	
Saudi Arabia	• Toray Membrane Middle East LLC
Asia : 46 plants at 31 companies	
East Asia	• Toray Fibers (Nantong) Co., Ltd. • Toray Fibers & Textiles Research Laboratories (China) Co., Ltd. • Toray Polytech (Nantong) Co., Ltd. • Toray Sakai Weaving & Dyeing (Nantong) Co., Ltd. • Toray Plastics (Chengdu) Co., Ltd. • Toray Plastics (Suzhou) Co., Ltd. • Toray Plastics Precision (Zhongshan) Ltd. • Toray Plastics (Shenzhen) Ltd. • Toray Film Products (Zhongshan) Ltd. • Toray BlueStar Membrane Co., Ltd. • Toray Medical (Qingdao) Co., Ltd. • Toray Advanced Materials Research Laboratories (China) Co., Ltd. • Toray Advanced Film Kaohsiung Co., Ltd. • Cangzhou Toray Fine Chemicals Co., Ltd. • Toray Advanced Materials Korea Inc. [M1, M2, M3, M4, M5, Anseong, Yugu, Gunsan, Advanced Materials Research Center] • Toray BSF Coating Korea Limited • Toray Battery Separator Film Korea, Limited • STEMCO, Ltd.
Southeast Asia	• P.T. Acryl Textile Mills • P.T. Century Textile Industry Tbk • P.T. Easterntex • P.T. Indonesia Synthetic Textile Mills • P.T. Indonesia Toray Synthetics • P.T. Toray Polytech Jakarta • Toray Textiles (Thailand) Public Company Limited [NPT, M1, M2, M3] • Thai Toray Synthetics Co., Ltd. [Bangkok, Ayutthaya, Nakhonpathom] • Toray BASF PBT Resin Sdn. Berhad • Toray Plastics (Malaysia) Sdn. Berhad • Penfabric Sdn. Berhad [M2, M4] • Penfibre Sdn. Berhad [Fiber, film]
South Asia	• Toray Industries (India) Private Limited

¹ In addition, 12 plants at 10 companies received certification as affiliated companies on Toray Industries' sites.

² Information in brackets refers to the names of the plants.

³ A company that newly acquired ISO 14001 certification in fiscal 2023.

CSR Activity Report (CSR Guideline Activity Reports) - Safety, Accident Prevention, and Environmental Preservation

Environmental Data for Toray Industries and Principal Group Companies

Environmental Data for 13 Toray Industries' Plants and Principal Group Companies

	Emission Volume														Principal manufactured products
	GHG emissions	PRTR				Gas emissions			Water emissions			Waste			
		Emissions			Waste transfers	SOx	NOx	Dust	BOD	COD	Effluent	Recycled	Simple incineration	Landfill disposal	
		Air	Water	Soil & landfill	Waste										
		10,000 tons CO ₂ /year	tons/year	tons/year	tons/year										
Shiga Plant	6.3	0.8	0.0	0.0	140.3	0.0	20.4	1.0	28.9	31.0	11.3	3,265.6	5.4	0.0	• Base material of Ultrasuede™ man-made suede • TOPTICAL™ color filter • TORAYVINO™ home water purifier
Seta Plant	0.2	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	100.3	0.0	0.0	• TORAYLON™ acrylic fiber • Medical devices (Inoue Balloon catheters, ANTHRON™ P-U catheters)
Ehime Plant	60.9	41.0	5.7	0.0	500.1	221.0	702.0	77.7	96.9	88.5	30.5	4,697.1	0.0	0.0	• TORAY TETORON™ polyester staple fiber • TORAYCA™ carbon fiber • ROMEMBRA™ reverse osmosis membrane module • TORAYCON™ PBT resin

	Emission Volume														Principal manufactured products
	GHG emissions	PRTR				Gas emissions			Water emissions			Waste			
		Emissions			Waste transfers	SOx	NOx	Dust	BOD	COD	Effluent	Recycled	Simple incineration	Landfill disposal	
		Air Water	Water	Soil & landfill	Waste										
		10,000 tons CO ₂ /year	tons/year	tons/year	tons/year	tons/year	tons/year	tons/year	tons/year	tons/year	tons/year	million m ³ /year	tons/year	tons/year	
Nagoya Plant	7.8	11.3	0.8	0.0	21.0	0.0	45.1	1.7	42.9	85.6	23.4	2,922.7	12.0	12.0	• AMILAN™ nylon resin • TORAYCON™ PBT resin • Various fine chemicals
Tokai Plant	53.2	44.2	7.0	0.0	150.4	5.2	245.2	3.3	203.3	214.6	19.4	4,181.1	33.3	0.0	• Caprolactam • Tereph-thalic acid • TORAY TETORON™ polyester chips • TORELINA™ PPS resin
Aichi Plant	1.7	0.0	0.0	0.0	15.0	0.0	1.1	0.1	0.0	0.0	1.5	165.8	0.2	0.0	• Nylon filament yarn • RAYTELA™ plastic optical fiber
Okazaki Plant	7.0	7.5	0.0	0.0	479.8	0.0	31.0	1.2	9.3	29.3	7.1	3,396.5	10.6	10.6	• Nylon filament yarn • TORAY WATERLESS PLATE™ printing plate • Filtryzer™ hemodialyzers • TORAYVINO™ home water purifier
Mishima Plant	9.5	2.3	0.0	0.0	18.2	0.0	52.3	0.0	17.5	15.5	31.0	864.9	1.4	0.0	• LUMIRROR™ polyester film • TORAY TETORON™ polyester filament yarn • DORNER™ oral administration prostacyclin PGI2 derivative • FERON™ natural interferon-β preparation
Chiba Plant	1.7	9.7	0.0	0.0	1.5	0.0	9.9	0.0	5.8	61.2	4.6	1,712.7	12.0	6.0	• TOYOLAC™ ABS resin
Tsuchiura Plant	1.9	0.0	0.0	0.0	0.0	0.0	3.6	0.1	1.4	1.4	0.3	374.4	0.0	0.0	• TORAYFAN™ BO polypropylene film

	Emission Volume														Principal manufactured products
	GHG emissions	PRTR				Gas emissions			Water emissions			Waste			
		Emissions			Waste transfers	SOx	NOx	Dust	BOD	COD	Effluent	Recycled	Simple incineration	Landfill disposal	
		Air Water	Water	Soil & landfill	Waste										
		10,000 tons CO ₂ /year	tons/year	tons/year	tons/year	tons/year	tons/year	tons/year	tons/year	tons/year	tons/year	million m ³ /year	tons/year	tons/year	
Gifu Plant	6.0	1.8	0.0	0.0	27.9	0.0	20.8	0.2	8.9	6.7	10.0	1,009.5	4.7	0.5	• Ultrasuede™ man-made suede • LUMIRROR™ polyester film • TORELINA™ PPS film
Ishikawa Plant	4.1	0.6	0.0	0.0	42.5	0.0	0.0	0.0	0.0	0.0	0.0	838.3	4.9	3.0	• TORAY TETORON™ polyester filament yarn • Nylon filament yarn • TORAYCA™ prepreg
Nasu Plant	1.4	33.8	0.0	0.0	0.0	0.0	2.7	0.7	0.1	0.0	0.1	35.0	44.6	0.2	• Lithium-ion rechargeable battery
Toray Hybrid Cord, Inc.	1.1	2.5	0.0	0.0	0.2	0.1	1.2	0.0	2.6	3.4	0.3	682.2	2.8	1.3	• Tire cord • Carpet pile fiber
Toray Fine Chemicals Co., Ltd. [Chiba]	2.3	2.1	0.0	0.0	103.5	3.6	16.5	5.8	0.0	0.0	0.0	1,546.9	15.6	12.8	• DMSO and DMS • Functional acrylic resin
Malaysia Penfibre Sdn. Berhad [Fibers & Textiles]	2.3	0.0	0.0	0.0	0.0	0.3	26.6	2.6	0.4	6.3	0.1	85.4	51.1	49.2	• TORAY TETORON™ polyester staple fiber
France Toray Films Europe S.A.S.	2.5	0.0	0.0	0.0	3.1	0.0	9.0	0.0	2.4	7.7	0.8	1,685.7	601.1	447.7	• LUMIRROR™ polyester film

CSR Activity Report (CSR Guideline Activity Reports) - Safety, Accident Prevention, and Environmental Preservation

Third-Party Assurance



LRQA Independent Assurance Statement

Relating to TORAY INDUSTRIES, INC.'s Environmental and Social Data for the fiscal year 2023 within its CSR Report 2024

This Statement has been prepared for TORAY INDUSTRIES, INC. in accordance with our contract.

Terms of Engagement

LRQA Limited ("LRQA") was commissioned by TORAY INDUSTRIES, INC. ("the Company") to provide independent assurance on its environmental and social data for the fiscal year 2023¹ within its CSR Report 2024 ("the report"), against the assurance criteria below to a limited level of assurance and at the materiality of the professional judgement of the verifier using ISAE 3000 (Revised) and ISO 14064-3:2019 for Greenhouse gas ("GHG") emissions.

Our assurance engagement covered the operations and activities relating to the Company, its consolidated subsidiaries, and its affiliated companies in Japan and overseas and specifically the following requirements:

- Verifying conformance with the Company's reporting methodologies;
- Evaluating the accuracy and reliability of data for the selected environmental and social indicator listed below;

Environmental²

- Scope 1 GHG emissions (tCO₂e)³
- Scope 2 GHG emissions [market-based and location-based] (tCO₂e)³
- Scope 3 GHG emissions [Categories 1 ~ 8] (tCO₂e)³
- Energy consumption (GJ)³
- The amount of Industrial Waste⁴, Water Use, Waste Water, SOx, NOx, Dust, VOC, COD (tonnes)⁵

Social

- Lost Time Injury Frequency Rate⁶
- Tier-1 Process Safety Events⁷

Our assurance engagement excluded the data and information of the Company's suppliers, contractors and any third-parties mentioned in the report.

LRQA's responsibility is only to the Company. LRQA disclaims any liability or responsibility to others as explained in the end footnote. The Company's responsibility is for collecting, aggregating, analysing and presenting all the data and information within the report and for maintaining effective internal controls over the systems from which the report is derived. Ultimately, the report has been approved by, and remains the responsibility of the Company.

LRQA's Opinion

Based on LRQA's approach nothing has come to our attention that would cause us to believe that the Company has not, in all material respects:

- Met the requirements above
- Disclosed accurate and reliable environmental and social data which is summarised in Table 1 below.

The opinion expressed is formed on the basis of a limited level of assurance⁸ and at the materiality of the professional judgement of the verifier.

¹ Environmental data covers 1 April 2023 to 31 March 2024; however, for overseas affiliated companies, from January 1, 2023 to December 31, 2023. Social data covers 1 January 2023 to 31 December 2023.
² GHG quantification is subject to inherent uncertainty.
³ The scope of energy and GHG emissions is covered the head Office of the Company, 13 factories and other 10 operating sites in Japan and overseas affiliate companies. The contractors worked in Japan is also included. Scope 3 also cover domestic affiliate companies.
⁴ Industrial Waste cover breakdown type.
⁵ The scope is covered 13 factories of the Company in Japan.
⁶ The scope is covered the Company, its 42 consolidated subsidiaries, 10 affiliated companies in Japan and overseas 51 affiliate companies.
⁷ The contractors worked in Japan is also included.
⁸ The scope is covered the Company, its 42 consolidated subsidiaries, 10 affiliated companies in Japan and overseas 51 affiliate companies.
⁹ The extent of evidence gathering for a limited assurance engagement is less than for a reasonable assurance engagement. Limited assurance engagements focus on aggregated data rather than physically checking source data at sites. Consequently, the level of assurance obtained in a limited assurance engagement is lower than the assurance that would have been obtained had a reasonable assurance engagement been performed.

Page 1 of 3

(PDF : 512KB)

[PDF](#)



Table 1. Summary of Toray's Environmental and Social data in 2023

Scope		
Scope 1 GHG emissions ¹	2,685,584	tCO ₂ e
GHG emissions relating supply to external organizations	225,965	tCO ₂ e
GHG emissions after deduction	2,459,619	tCO ₂ e
Scope 2 GHG emissions ² (Market-based)	2,403,940	tCO ₂ e
GHG emissions relating supply to external organizations	113,252	tCO ₂ e
GHG emissions after deduction	2,290,688	tCO ₂ e
Scope 2 GHG emissions ² (Location-based)	2,459,650	tCO ₂ e
GHG emissions relating supply to external organizations	111,568	tCO ₂ e
GHG emissions after deduction	2,348,081	tCO ₂ e
Scope 3 GHG emissions ³ (Categories 1, 2, 3, 4, 5, 6, 7, 8)	10,294,017	tCO ₂ e
1. Purchased Goods and Services	8,596,874	tCO ₂ e
2. Capital goods	517,923	tCO ₂ e
3. Fuel- and energy-related activities not included in Scope 1 or Scope 2	956,125	tCO ₂ e
4. Upstream Transportation and Distribution	183,697	tCO ₂ e
5. Waste Generated in Operations	8,560	tCO ₂ e
6. Business Travel	6,006	tCO ₂ e
7. Employee Commuting	21,308	tCO ₂ e
8. Upstream Leased Assets	3,524	tCO ₂ e
Energy consumption ³	88,223,134	GJ
Industrial waste ^{4,5}		
Disposal amount	28,410	tonnes
Recycled amount	96,781	tonnes
Total amount of industrial waste	125,191	tonnes
The amount of industrial hazardous waste	1,660	tonnes
The amount of coal ash	72,118	tonnes
Water Use ⁶	160,874	K-t
Waste Water	139,088	K-t
NOx	1,135	tonnes
SOx	226	tonnes
VOC	307	tonnes
Dust	86	tonnes
COD	534	tonnes
Lost Time Injury and Occupational Illness Frequency Rate ⁶		
TORAY INDUSTRIES, INC.	0.19	
Affiliated companies	0.0	
Consolidated subsidiaries in Japan	0.11	
Overseas consolidated subsidiaries	0.04	
Entire the scope	0.40	
Contractors in Japan ⁷	0.0	
Number of fatalities	0	s
Tier-1 Process Safety Events ⁸	0	

LRQA's Approach

LRQA's assurance engagements are carried out in accordance with ISAE3000 (Revised) and ISO14064-3:2019 for GHG emissions. The following tasks though were undertaken as part of the evidence gathering process for this assurance engagement:

- Auditing the Company's data management systems to confirm that there were no significant errors, omissions or mis-statements in the report. We did this by reviewing the effectiveness of data handling procedures, instructions and systems, including those for internal verification.
- Interviewing with those key people responsible for compiling the data and drafting the report.

Page 2 of 3

(PDF : 523KB)

[PDF](#)



- Sampling datasets and tracing activity data back to aggregated levels;
- Verifying the historical environmental and social data / records for the fiscal year 2022¹; and
- Verification for confirming the effectiveness of its data management system of Toray Mishima Factory was conducted by site visit and Toray Plastics Malaysia Sdn Bhd was conducted by ICT.

Observations

The Company should continue efforts for implementing quality assurance and quality control (QA/QC) systems for the effective management of environmental and social data. This is particular to ensure effective internal verification processes at both the corporate and member company levels.

LRQA's Standards, Competence and Independence

LRQA implements and maintains a comprehensive management system that meets accreditation requirements for ISO 14065 Greenhouse gases – Requirements for greenhouse gas validation and verification bodies for use in accreditation or other forms of recognition and ISO/IEC 17021-1 Conformity assessment – Requirements for bodies providing audit and certification of management systems – Part1: Requirements that are at least as demanding as the requirements of the International Standard on Quality Control 1 and comply with the Code of Ethics for Professional Accountants issued by the International Ethics Standards Board for Accountants.

LRQA ensures the selection of appropriately qualified individuals based on their qualifications, training and experience. The outcome of all verification and certification assessments is then internally reviewed by senior management to ensure that the approach applied is rigorous and transparent.

LRQA is the certification body of ISO9001 and IATF16949 for the Company and as such does not compromise our independence or impartiality.

Signed

Dated: 02 August 2024

Takahiro Iio

LRQA Lead Verifier

On behalf of LRQA Limited

10th Floor, Queen's Tower A, 2-3-1 Minatomirai, Nishi-ku, Yokohama, JAPAN

LRQA reference: YKA005148

LRQA, its affiliates and subsidiaries, and their respective officers, employees or agents are, individually and collectively, referred to in this clause as 'LRQA'. LRQA assumes no responsibility and shall not be liable to any person for any loss, damage or expense caused by reliance on the information or advice in this document or howsoever provided, unless that person has signed a contract with the relevant LRQA entity for the provision of this information or advice and in that case any responsibility or liability is exclusively on the terms and conditions set out in that contract.

The English version of this Assurance Statement is the only valid version. LRQA assumes no responsibility for versions translated into other languages.

This Assurance Statement is only valid when published with the Report to which it refers. It may only be reproduced in its entirety.

Copyright © LRQA, 2024.



LRQA Independent Assurance Statement

Relating to TORAY INDUSTRIES, INC.'s Environmental and Social Data for the fiscal year 2023 within its CSR Report 2024

This Statement has been prepared for TORAY INDUSTRIES, INC. in accordance with our contract.

Terms of Engagement

LRQA Limited ("LRQA") was commissioned by TORAY INDUSTRIES, INC. ("the Company") to provide independent assurance on its environmental and social data for the fiscal year 2023¹ within its CSR Report 2024 ("the report"), against the assurance criteria below to a limited level of assurance and at the materiality of the professional judgement of the verifier using ISAE 3000 (Revised) and ISO 14064-3:2019 for Greenhouse gas ("GHG") emissions.

Our assurance engagement covered the operations and activities relating the Company, its consolidated subsidiaries, and its affiliated companies in Japan and overseas and specifically the following requirements:

- Verifying conformance with the Company's reporting methodologies;
- Evaluating the accuracy and reliability of data for the selected environmental and social indicator listed below;

Environmental²

- Scope 1 GHG emissions (tCO₂e)³
- Scope 2 GHG emissions [market-based and location-based] (tCO₂e)³
- Scope 3 GHG emissions (Categories 1~8) (tCO₂e)³
- Energy consumption (GJ)³
- The amount of Industrial Waste^{3,4}, Water Use, Waste Water, SO_x, NO_x, Dust, VOC, COD (tonnes)⁵

Social

- Lost Time Injury Frequency Rate⁶
- Tier-1 Process Safety Events⁷

Our assurance engagement excluded the data and information of the Company's suppliers, contractors and any third-parties mentioned in the report.

LRQA's responsibility is only to the Company. LRQA disclaims any liability or responsibility to others as explained in the end footnote. The Company's responsibility is for collecting, aggregating, analysing and presenting all the data and information within the report and for maintaining effective internal controls over the systems from which the report is derived. Ultimately, the report has been approved by, and remains the responsibility of the Company.

LRQA's Opinion

Based on LRQA's approach nothing has come to our attention that would cause us to believe that the Company has not, in all material respects:

- Met the requirements above
- Disclosed accurate and reliable environmental and social data which is summarised in Table 1 below.

The opinion expressed is formed on the basis of a limited level of assurance⁸ and at the materiality of the professional judgement of the verifier.

¹ Environmental data covers 1 April 2023 to 31 March 2024 (However, for overseas affiliated companies, from January 1, 2023 to December 31, 2022).

Social data covers 1 January 2023 to 31 December 2023.

² GHG quantification is subject to inherent uncertainty.

³ The scope of energy and GHG emissions is covered the head Office of the Company, 13 factories and other 10 operating sites in Japan and overseas affiliate companies. The contractors worked in Japan is also included. Scope 3 also cover domestic affiliate companies.

⁴ Industrial Waste cover breakdown type.

⁵ The scope is covered 13 factories of the Company in Japan.

⁶ The scope is covered the Company, its 42 consolidated subsidiaries, 10 affiliated companies in Japan and overseas 91 affiliate companies. The contractors worked in Japan is also included.

⁷ The scope is covered the Company, its 42 consolidated subsidiaries, 10 affiliated companies in Japan and overseas 91 affiliate companies.

⁸ The extent of evidence-gathering for a limited assurance engagement is less than for a reasonable assurance engagement. Limited assurance engagements focus on aggregated data rather than physically checking source data at sites. Consequently, the level of assurance obtained in a limited assurance engagement is lower than the assurance that would have been obtained had a reasonable assurance engagement been performed.

Table 1. Summary of Toray's Environmental and Social data in 2023

Scope		
Scope 1 GHG emissions ³		2,685,584 tCO₂e
GHG emissions relating supply to external organizations		225,965 tCO₂e
GHG emissions after deduction		2,459,619 tCO₂e
Scope 2 GHG emissions ³ (Market-based)		2,403,940 tCO₂e
GHG emissions relating supply to external organizations		113,252 tCO₂e
GHG emissions after deduction		2,290,688 tCO₂e
Scope 2 GHG emissions ³ (Location-based)		2,459,650 tCO₂e
GHG emissions relating supply to external organizations		111,568 tCO₂e
GHG emissions after deduction		2,348,081 tCO₂e
Scope 3 GHG emissions ³ (Categories 1, 2, 3, 4, 5, 6, 7, 8)		10,294,017 tCO₂e
1. Purchased Goods and Services		8,596,874 tCO₂e
2. Capital goods		517,923 tCO₂e
3. Fuel- and energy-related activities not Included in Scope 1 or Scope 2		956,125 tCO₂e
4. Upstream Transportation and Distribution		183,697 tCO₂e
5. Waste Generated in Operations		8,560 tCO₂e
6. Business Travel		6,006 tCO₂e
7. Employee Commuting		21,308 tCO₂e
8. Upstream Leased Assets		3,524 tCO₂e
Energy consumption ³		88,223,134 GJ
Industrial waste ^{4,5}		
Disposal amount		28,410 tonnes
Recycled amount		96,781 tonnes
Total amount of industrial waste		125,191 tonnes
The amount of industrial hazardous waste		1,660 tonnes
The amount of coal ash		72,118 tonnes
Water Use s		160,874 K-t
Waste Water		139,088 K-t
NOx		1,135 tonnes
SOx		226 tonnes
VOC		307 tonnes
Dust		86 tonnes
COD		534 tonnes
Lost Time Injury and Occupational Illness Frequency Rate ⁶		—
TORAY INDUSTRIES, INC.		0.19
Affiliated companies		0.0
Consolidated subsidiaries in Japan		0.11
Overseas consolidated subsidiaries		0.64
Entire the scope		0.40
Contractors in Japan ⁷		0.0
Number of fatalities		0 s
Tier-1 Process Safety Events ⁸		0

LRQA's Approach

LRQA's assurance engagements are carried out in accordance with ISAE3000 (Revised) and ISO14064-3:2019 for GHG emissions. The following tasks though were undertaken as part of the evidence gathering process for this assurance engagement:

- Auditing the Company's data management systems to confirm that there were no significant errors, omissions or mis-statements in the report. We did this by reviewing the effectiveness of data handling procedures, instructions and systems, including those for internal verification.
- Interviewing with those key people responsible for compiling the data and drafting the report.



- Sampling datasets and tracing activity data back to aggregated levels;
- Verifying the historical environmental and social data / records for the fiscal year 2022¹; and
- Verification for confirming of the effectiveness of its data management system of Toray Mishima Factory was conducted by site visit and Toray Plastics Malaysia Sdn Bhd was conducted by ICT.

Observations

The Company should continue efforts for implementing quality assurance and quality control (QA/QC) systems for the effective management of environmental and social data. This is particular to ensure effective internal verification processes at both the corporate and member company levels.

LRQA's Standards, Competence and Independence

LRQA implements and maintains a comprehensive management system that meets accreditation requirements for ISO 14065 *Greenhouse gases – Requirements for greenhouse gas validation and verification bodies for use in accreditation or other forms of recognition* and ISO/IEC 17021-1 *Conformity assessment – Requirements for bodies providing audit and certification of management systems – Part1: Requirements* that are at least as demanding as the requirements of the International Standard on Quality Control 1 and comply with the *Code of Ethics for Professional Accountants* issued by the International Ethics Standards Board for Accountants.

LRQA ensures the selection of appropriately qualified individuals based on their qualifications, training and experience. The outcome of all verification and certification assessments is then internally reviewed by senior management to ensure that the approach applied is rigorous and transparent.

LRQA is the certification body of ISO9001 and IATF16949 for the Company and as such does not compromise our independence or impartiality.

Signed

Dated: 02 August 2024

Takahiro Iio

LRQA Lead Verifier

On behalf of LRQA Limited

10th Floor, Queen's Tower A, 2-3-1 Minatomirai, Nishi-ku, Yokohama, JAPAN

LRQA reference: YKA4005148

LRQA, its affiliates and subsidiaries, and their respective officers, employees or agents are, individually and collectively, referred to in this clause as 'LRQA'. LRQA assumes no responsibility and shall not be liable to any person for any loss, damage or expense caused by reliance on the information or advice in this document or howsoever provided, unless that person has signed a contract with the relevant LRQA entity for the provision of this information or advice and in that case any responsibility or liability is exclusively on the terms and conditions set out in that contract.

The English version of this Assurance Statement is the only valid version. LRQA assumes no responsibility for versions translated into other languages.

This Assurance Statement is only valid when published with the Report to which it refers. It may only be reproduced in its entirety.

Copyright © LRQA, 2024.

CSR Activity Report (CSR Guideline Activity Reports)

Product Quality and Safety

Provide safe, highly reliable products by striving to enhance management systems for product quality assurance and safety, and disclose appropriate information.



Basic Approach

To live up to its “quality first” and “customer first” commitments, Toray Group has established policies on quality assurance and product safety, respectively, and an organizational framework to pursue both in an integrated manner.

Additionally, Toray Group supplies product safety information in accordance with the characteristics of the product or service. The Group is fundamentally committed to respecting the Eight Basic Consumer Rights and strives to secure the quality and safety of its products throughout its business activities.

The Medium-Term Management Program, Project AP-G 2025, directs Toray Group to achieve sound, sustainable growth along with innovation and resilience management, and this hinges on securing product safety and quality. Accordingly, the Group continued to address individual areas for improvement and execute product safety measures in fiscal 2023.

Related Policies

Toray Group Quality Policy Revised June 2007

We give top priority to the product quality offered to our customers as well as to safety and to the environment in our corporate activities. We work on quality assurance with the stance of "Customer First."

1. We make our best efforts to meet our customers' expectations with products and services of high satisfaction.
2. We commit ourselves to abide by the "Quality First" principle, and to improve the quality and reliability of our products, in all our divisions, including sales, manufacturing and research and development.
3. We meet quality requirements at the stage of design and development, and ensure and enhance these in the manufacturing process.
4. We continuously strive to organize, maintain and improve our quality management system.

Product Safety Management Basic Policy Established January 1992

1. We shall place priority on the various measures required to ensure product safety.
2. We shall conduct adequate safety evaluations prior to marketing a new product.
3. For products already on the market, we shall take note of feedback from customers and the general public and always remain attentive to safety.

Related Information

See the following page for information on chemical management.

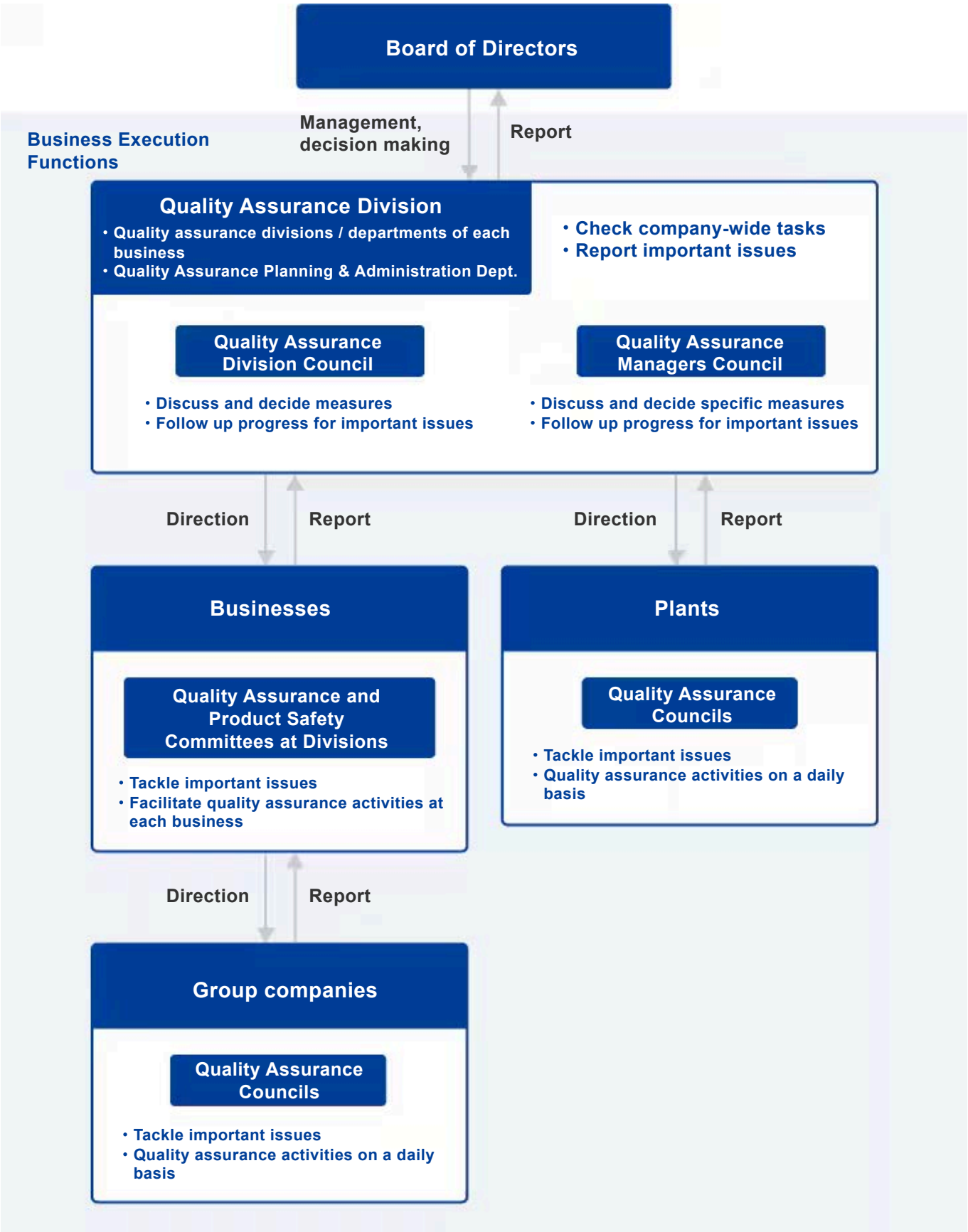
> [Chemical Management](#)

Structure

Framework for Quality Assurance

The quality assurance framework of Toray Industries, Inc. is shown in the diagram below. The Quality Assurance Division submits reports on its activities to the Board of Directors, and based on the board's instructions, the Quality Assurance Planning & Administration Department devises appropriate measures. These are then communicated and promoted by the Quality Assurance Division Council, which meets monthly, and the Quality Assurance Managers Council, which meets twice a year. Quality assurance and product safety committees at divisions further examine the company-wide issues that have been identified by the Quality Assurance Division Council and Quality Assurance Managers Council, breaking them down into action items that are designated every year for implementation. Quality assurance, production, technology, and sales departments cooperate to tackle quality assurance issues and raise the level of activities.

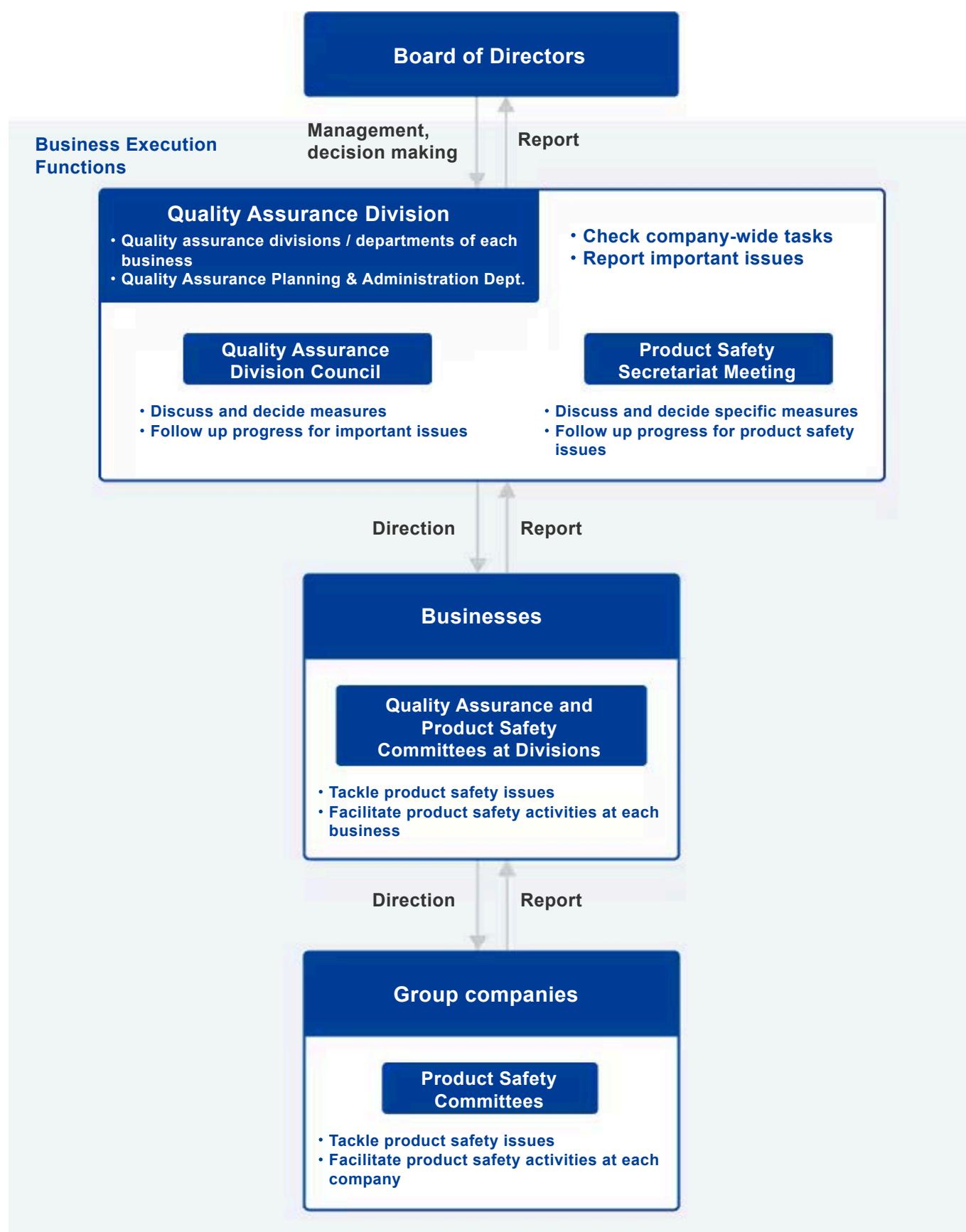
Framework for Quality Assurance



Framework for Product Safety

Toray Industries' product safety framework is shown in the diagram below. The Quality Assurance Division submits reports on its activities to the Board of Directors, and based on the board's instructions, the Quality Assurance Planning & Administration Department devises appropriate measures. The Product Safety Secretariat Meeting then communicates and promotes the annual measures. Quality assurance and product safety committees at the divisions further examine the group-wide tasks that have been identified by the Product Safety Secretariat Meeting, breaking them down into action items that are designated every year for implementation. The action items are executed in cooperation with quality assurance, production, technology, and sales organizations at the departmental and divisional levels, to ensure thorough management of product safety and continue raising the level of management. Toray Group has been centrally tracking statistics on product accidents and the execution of product safety reviews since fiscal 2011.

Framework for Product Safety



Self-Inspections to Ensure Quality Assurance and Product Safety

Since fiscal 2016, Toray Group companies have been implementing self-inspections across a wide range of control categories using the C-MOS internal control monitoring online system, along with self-inspections for quality assurance and product safety. Any issues that are identified through the self-inspections are corrected to ensure

that improvements are made. The self-inspections are conducted on a three-year cycle to ensure that the basic frameworks for quality assurance and product safety are in place. For the first three-year cycle, Toray Industries was inspected in fiscal 2016, followed by group companies in Japan in fiscal 2017, and group companies outside Japan in fiscal 2018.

For the second three-year cycle implemented in fiscal 2019, Toray Group assigned inspection items to verify the effectiveness of improvements, and self-inspections were conducted. For the third three-year cycle implemented in fiscal 2022, confirmation items for UL and other certifications were assigned, and in fiscal 2023, self-inspections were conducted by group companies in Japan.

CSR Roadmap 2025 Targets

CSR Roadmap goals

1. Enhance the group-wide frameworks for quality control, quality assurance, and product safety management
2. Achieve zero product accidents

Main Initiatives and Key Performance Indicators

	KPI
(1) Ensure that quality assurance compliance education is being fully implemented	4-①
(2) Enhance the auditing function to ensure improvement and continuity of Toray Group's overall quality assurance framework, and conduct auditing to check its effectiveness	4-②
(3) Expand the use of the quality-related data management system with fraud prevention features across the entire Group	-
(4) Promote the construction of systems in each business to facilitate deliberation, approval, and management related to quality assurance activities	-
(5) Aim for zero product accidents	4-③

Key Performance Indicator (KPI)	Target			Fiscal 2023 Result
	Fiscal 2023	Fiscal 2024	Fiscal 2025	
4-① Quality assurance compliance education (% of people trained)	100%	100%	100%	100%
4-② Quality and product safety audit implementation rate (%)	100%	100%	100%	100%
4-③ Number of product accidents	0	0	0	1 ¹

Reporting Scope: Toray Group

¹ An incident occurred involving air filter media sold by Toray. During processing of the material at a customer facility, a white powder was noticed and multiple line operators experienced skin irritation. However, their symptoms were mild and completely alleviated with over-the-counter ointments. While an investigation by experts did not establish a clear causal relationship between the white powder and the symptoms, Toray treated it as a product safety incident. Accordingly, the group company that manufactures the air filter media was given instructions intended to reduce any occurrence of the white powder during the customer's process. After implementation of these measures, no further symptoms occurred.

Related Materiality for CSR

- Enhancing Product Quality and Safety

* Click [here](#) for the Materiality View of CSR Roadmap 2025 (PDF:392.4KB).

[PDF](#)

Looking to the Future

In fiscal 2024 and beyond, Toray Group will address individual issues related to improving quality assurance and product safety, while continuing to enhance its group-wide management systems for both quality assurance and product safety.

Click [here](#) for the main initiatives and KPIs for CSR Guideline No. 4 "Product Quality and Safety" during the CSR Roadmap 2025 period (fiscal 2023–2025).

[PDF](#)

CSR Activity Report (CSR Guideline Activity Reports) - Product Quality and Safety Initiatives for Quality Assurance and Product Safety

Reinforcing Compliance in Product Quality Assurance

CSR Roadmap 2025
Main Initiatives (1)(2)(3)(4)

Toray Group is pursuing five major tasks to reinforce quality assurance compliance throughout the Group.

1. Implementation of quality assurance systems based on group-wide guideline

Toray Industries and its worldwide business sites and group companies have established quality assurance systems in line with the groupwide Guidelines for Target Conditions for Quality Assurance System, which define the roles each department should play in strengthening their quality assurance systems. The Company is working to maintain and enhance the Group's quality assurance capabilities to reliably meet customer requirements.

2. Enhancing the quality assurance capabilities of the entire Group by strengthening audit functions

To enhance the overall quality assurance capabilities of the Toray Group, audits of worldwide business sites and group companies are regularly conducted by the Quality Assurance Departments responsible for each business division of Toray Industries. Additionally, the deputy general manager of the Quality Assurance Division and the Quality Assurance Planning & Administration Department audit each of the Quality Assurance Departments, and mutual audits between these departments are also carried out.

3. Development of human resources and creation of workplace culture not allowing any misconduct

To coincide with the annual Quality Month¹ in November, since fiscal 2020 the Group has designated the same period as Quality Assurance Compliance Month and has been conducting quality assurance compliance education during this time of year. Toray Industries provides training materials to its business sites and group companies around the world, while individual departments and companies are responsible for providing education for their employees. (A total of 22,503 employees received training in fiscal 2023.)

4. Review and adjustment of actual contracts with customers regarding quality (assurance)

In accordance with Guidelines for Contracts/Agreements with Customers on Product Quality and Product Quality Assurance set forth at the time contracts are agreed, Toray Industries is promoting ongoing efforts to thoroughly inspect and review agreements at its business sites and group companies around the world and is working to optimize the provisions in these contracts.

5. Improvement of quality data management system to not allow any misconduct

Toray Industries and its group companies around the world are developing data management systems that minimize human involvement, such as by automating measurement, transfer of measurement data, and issuance of inspection reports.

¹ This campaign began in Japan in 1960 with the aim of raising quality awareness at production facilities nationwide and designates every November as Quality Month. It is organized by the Quality Month Committee, the Union of Japanese Scientists and Engineers, the Japanese Standards Association, and the Japan Chamber of Commerce.

Education and Training for Quality Assurance and for Product Safety

CSR Roadmap 2025
Main Initiatives (1)

Quality assurance compliance education (% of people trained)

Result in fiscal 2023

100%

■Reporting scope
Toray Group

■Target in fiscal 2023
100%

In addition to quality assurance compliance training conducted during Quality Assurance Compliance Month (November), which targets all employees involved in handling quality data and certification-related tasks, Toray Industries promotes quality assurance and product safety training for newly appointed department and section managers at the Company and its group companies in Japan. It also provides education on quality assurance and product safety activities during company-wide technical training, as well as quality control training for frontline personnel. Toray is working to thoroughly raise awareness of the Group's quality assurance and product safety activities and improve its quality control capabilities. Moreover, since fiscal 2013, all group companies around the world have conducted general training related to product safety, training for specific business operations, and internal rules training.

The implementation rate for quality assurance compliance education conducted during November, Quality Assurance Compliance Month, has been set as a KPI under the CSR Roadmap 2025, and these activities are being actively promoted. In fiscal 2023, the implementation rate was 100%, helping to raise group-wide awareness of quality assurance compliance.

Implementation of Quality Assurance Audits

CSR Roadmap 2025
Main Initiatives (2)

Quality and product safety audit implementation rate (%)

Result in fiscal 2023

100%

■Reporting scope
Toray Group

■Target in fiscal 2023
100%

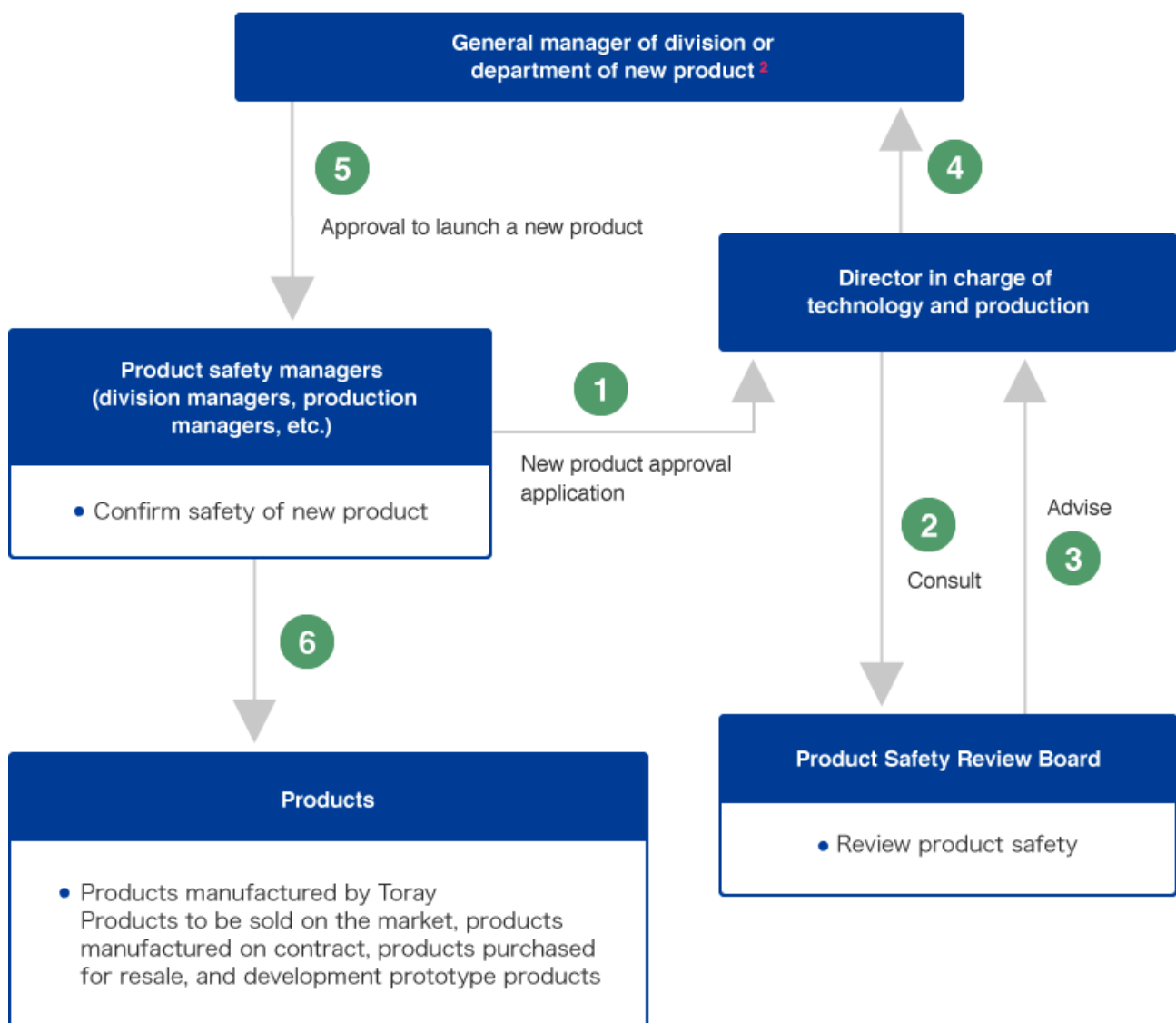
The implementation rate for audits of worldwide business sites and group companies by the Quality Assurance Departments responsible for each business division of Toray Industries has been set as a KPI under the CSR Roadmap 2025, and audits are being promoted accordingly. In fiscal 2023, the audit rate was 100% for worldwide business sites and group companies, thereby helping to enhance the overall quality assurance capabilities of Toray Group.

Enhancing Product Safety Reviews

Toray Industries and its group companies implement product safety reviews for all products. In addition to addressing product safety, the reviews examine the adequacy of information provided to customers via, for instance, safety data sheets (SDS), labeling, and instructions. Products are also assessed for impact on the global environment. Special precautions are taken for new products that are highly original, as well as for products for which the safety considerations have changed significantly from previous products. For these products, a Product Safety Review Board comprised of neutral assessors with specialized knowledge is assembled to review the safety of the product. Toray Group also ensures that newly established group companies rapidly establish a framework for product safety and implement product safety reviews.

Implementing product safety reviews for all products

Product Safety Review Flow Chart (Toray Industries, Inc.)



² At group companies in and outside Japan, this position is held by the president or a director.

Number of product accidents

■Reporting scope
Toray Group

■Target in fiscal 2023
0

Result in fiscal 2023

1³

³ An incident occurred involving air filter media sold by Toray. During processing of the material at a customer facility, a white powder was noticed and multiple line operators experienced skin irritation. However, their symptoms were mild and completely alleviated with over-the-counter ointments. While an investigation by experts did not establish a clear causal relationship between the white powder and the symptoms, Toray treated it as a product safety incident. Accordingly, the group company that manufactures the air filter media was given instructions intended to reduce any occurrence of the white powder during the customer's process. After implementation of these measures, no further symptoms occurred.

Providing Product Safety Information

Toray Group provides customers with product safety information specifically tailored to the product or service.

1. Customer support lines

In its efforts to create a convenient environment for customers, Toray Industries makes available toll-free numbers for customers to call and inquire about its mainstay consumer products such as home water purifiers and contact lenses.

2. Safety data sheets (SDS)

Toray Group designates the duties, management framework, and procedures for SDS on products that are manufactured or sold by the Group, and provides customers with adequate information on the safe handling of Group products. SDS are disclosed online so that they are readily accessible to customers.

3. Product labeling and instructions

Toray Group creates labels and instruction manuals (including catalogs) and provides them to customers only after clarifying the duties and management framework for product labels and instruction manuals, the procedures from creation to distribution, and other key processes.

Respecting the Eight Basic Consumer Rights

In providing products and services, Toray Group is fundamentally committed to respecting the Eight Basic Consumer Rights and strives to secure safety and quality of its products throughout the Group's business activities.

The Eight Basic Consumer Rights advocated by Consumers International

- The right to satisfaction of basic needs
- The right to safety
- The right to be informed
- The right to choose
- The right to be heard
- The right to redress
- The right to consumer education
- The right to a healthy environment

Click [here](#) for the main initiatives for CSR Guideline 4, "Product Quality and Safety" in CSR Roadmap 2025.

CSR Activity Report (CSR Guideline Activity Reports) - Product Quality and Safety

Sites with ISO 9001 Certification

Toray Group has established an appropriate quality management system at each manufacturing site and is working to strengthen its quality assurance system.

Sites with ISO 9001 certification (as of May 2024)

CSR Roadmap 2025
Main Initiatives (2)

Toray Industries, Inc.: All 13 plants
Shiga, Seta, Ehime, Nagoya, Tokai, Aichi, Okazaki, Mishima, Chiba, Tsuchiura, Gifu, Ishikawa, Nasu
Group companies in Japan: 25 companies
• Sowa Textile Co., Ltd. • Toray Amtecs Inc. • Toray Opelontex Co., Ltd. • Toray Coatex Co., Ltd. • Toray Textiles, Inc. • Du Pont-Toray Co., Ltd. • Toray Hybrid Cord, Inc. • Toray Monofilament Co., Ltd. • Toray Plastics Precision Co., Ltd. • Toray PEF Products Inc. • Toray Celanese Co., Ltd. • Toray KP Films Inc. • Toray Advanced Film Co., Ltd. • Soda Aromatic Co., Ltd. • Dow Toray Co., Ltd. • DuPont Toray Specialty Materials Kabushiki Kaisha • Toray Fine Chemicals Co., Ltd. • Toray Carbon Magic Co., Ltd. • Suido Kiko Kaisha, Ltd. • Toray Engineering Co., Ltd. • Toray Building Materials Co., Ltd. • Toray Construction Co., Ltd. • Toray Precision Co., Ltd. • Toray Techno Co., Ltd. • Toray Research Center Inc.

Group companies outside Japan: 48 companies	
America : 5 companies	
United States	• Toray Fluorofibers (America), Inc. • Toray Plastics (America), Inc. • Zoltek Companies, Inc. • Toray Membrane USA, Inc.
Mexico	• Toray Advanced Textile Mexico, S.A. de C.V.
Europe : 12 companies	
United Kingdom	• Toray Textiles Europe Ltd.
Germany	• Euro Advanced Carbon Fiber Composites GmbH • Greenerity GmbH
France	• Toray Films Europe S.A.S. • Toray Carbon Fibers Europe S.A.
Italy	• Alcantara S.p.A. • Composite Materials (Italy) s.r.l. • Delta-Tech S.p.A. • Delta-Preg S.p.A.
Czech Republic	• Toray Textiles Central Europe s.r.o.
Hungary	• LG Toray Hungary Battery Separator Kft
Netherlands	• Toray TCAC Holdings B.V.
MiddleAsia_Africa : 1 company	
Saudi Arabia	• Toray Membrane Middle East LLC
Asia : 30 companies	
East Asia	• Toray Fibers (Nantong) Co., Ltd. • Toray Fibers & Textiles Research Laboratories (China) Co., Ltd. • Toray Polytech (Nantong) Co., Ltd. • Toray Sakai Weaving & Dyeing (Nantong) Co., Ltd. • Toray Plastics (Chengdu) Co., Ltd. • Toray Plastics (Suzhou) Co., Ltd. • Toray Plastics Precision (Zhongshan) Ltd. • Toray Plastics (Shenzhen) Ltd. • Toray Film Products (Zhongshan) Ltd. • Yihua Toray Polyester Film Co., Ltd. • Toray BlueStar Membrane Co., Ltd. • Toray Membrane (Foshan) Co.,Ltd. • Toray Advanced Materials Research Laboratories (China) Co., Ltd. • Toray Advanced Film Kaohsiung Co., Ltd. • Toray Advanced Materials Korea Inc. • Toray Battery Separator Film Korea, Limited • STEMCO, Ltd.
Southeast Asia	• P.T. Acryl Textile Mills • P.T. Century Textile Industry Tbk • P.T. Easterntex • P.T. Indonesia Synthetic Textile Mills • P.T. Indonesia Toray Synthetics • P.T. Toray Polytech Jakarta • Toray Textiles (Thailand) Public Company Limited • Thai Toray Synthetics Co., Ltd. • Toray BASF PBT Resin Sdn. Berhad • Toray Plastics (Malaysia) Sdn. Berhad • Penfabric Sdn. Berhad • Penfibre Sdn. Berhad
South Asia	• Toray Industries (India) Private Limited

Click [here](#) for the main initiatives for CSR Guideline 4, “Product Quality and Safety” in CSR Roadmap 2025.

CSR Activity Report (CSR Guideline Activity Reports)

Risk Management

Under normal conditions, assess and analyze risks, and strive to mitigate and prevent them from materializing; and in the event of a crisis that could have a significant impact on management activities, strive to prevent damage from increasing, by bringing the situation quickly under control and normalizing conditions with a prompt and appropriate response.



Basic Approach

Toray Group regularly identifies potential management risks affecting the Group's management activities in order to mitigate risks and seeks to prevent a crisis. In addition, the Group strives to prevent damage from spreading and to promptly control and normalize the situation by ensuring quick and appropriate responses using the emergency quick response system it has established.

Structure

The risks affecting Toray Group are constantly changing. The Group recognizes the critical importance of reinforcing its system for responding to risks that materialize suddenly due to changes in the surrounding environment and for responding promptly when crises do occur, which is essential for the operation of the business. To this end, Toray Industries, Inc. established a dedicated team within the Corporate Strategic Planning Division to communicate closely with the Board of Directors and top management and to pursue risk management as an integral part of management strategy. This team manages overall risk under normal conditions and ensures a quick response when crises do occur.

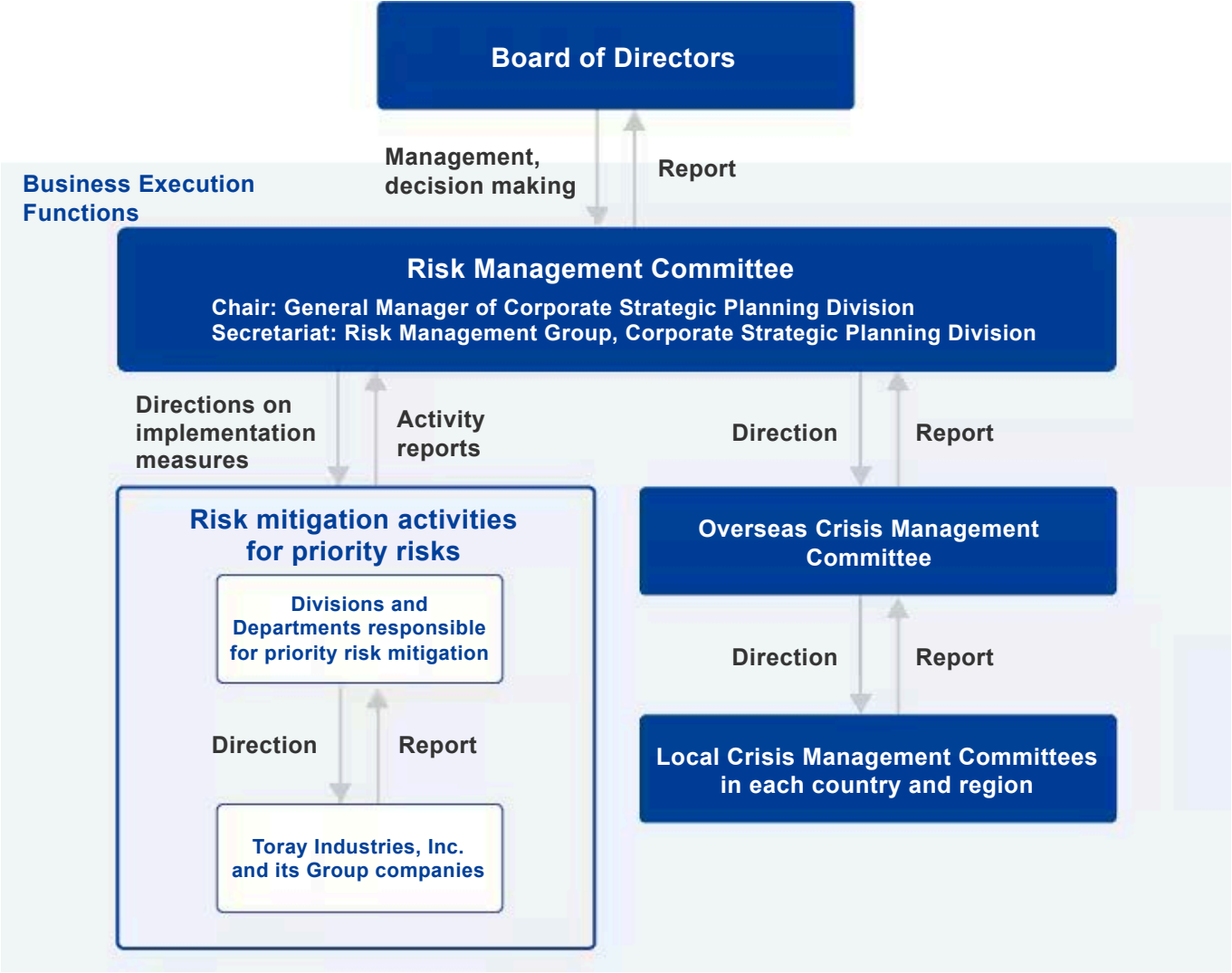
The general manager of the Corporate Strategic Planning Division regularly reports on the status of risk management to the Board of Directors and makes certain to inform the Board when a critical issue or emergency arises. In 2021, a new department to deal with economic security risks was also established within the Corporate Strategic Planning Division. It is working to gather information both in and outside the Company and mitigate risks.

Structure of the Risk Management Committee

Chaired by the general manager of the Corporate Strategic Planning Division¹, the Risk Management Committee is tasked with reviewing, discussing and promoting shared awareness of risk management across the entire Toray Group. This committee primarily carries out mitigation activities for Toray Group Priority Risks as part of regular risk management. In addition, the Overseas Crisis Management Committee and Local Crisis Management Committees, which manage employees’ overseas travel under normal conditions and compile information on overseas risks, have also been made subordinate to the Risk Management Committee.

Discussions and reports from the Risk Management Committee are regularly reported to the Board of Directors. Moreover, the Risk Management Committee has been created in accordance with the Three Lines Model², a global standard for internal control. Specifically, the committee includes representatives of internal organizations representing the first line (i.e. business operation functions such as production, R&D, and sales), the second line (i.e. corporate functions), and the third line (i.e. internal auditing), with each line taking on their respective roles in risk management. This model promotes the efficient alignment of organizational roles and processes to enhance governance and risk management.

Risk Management Committee System

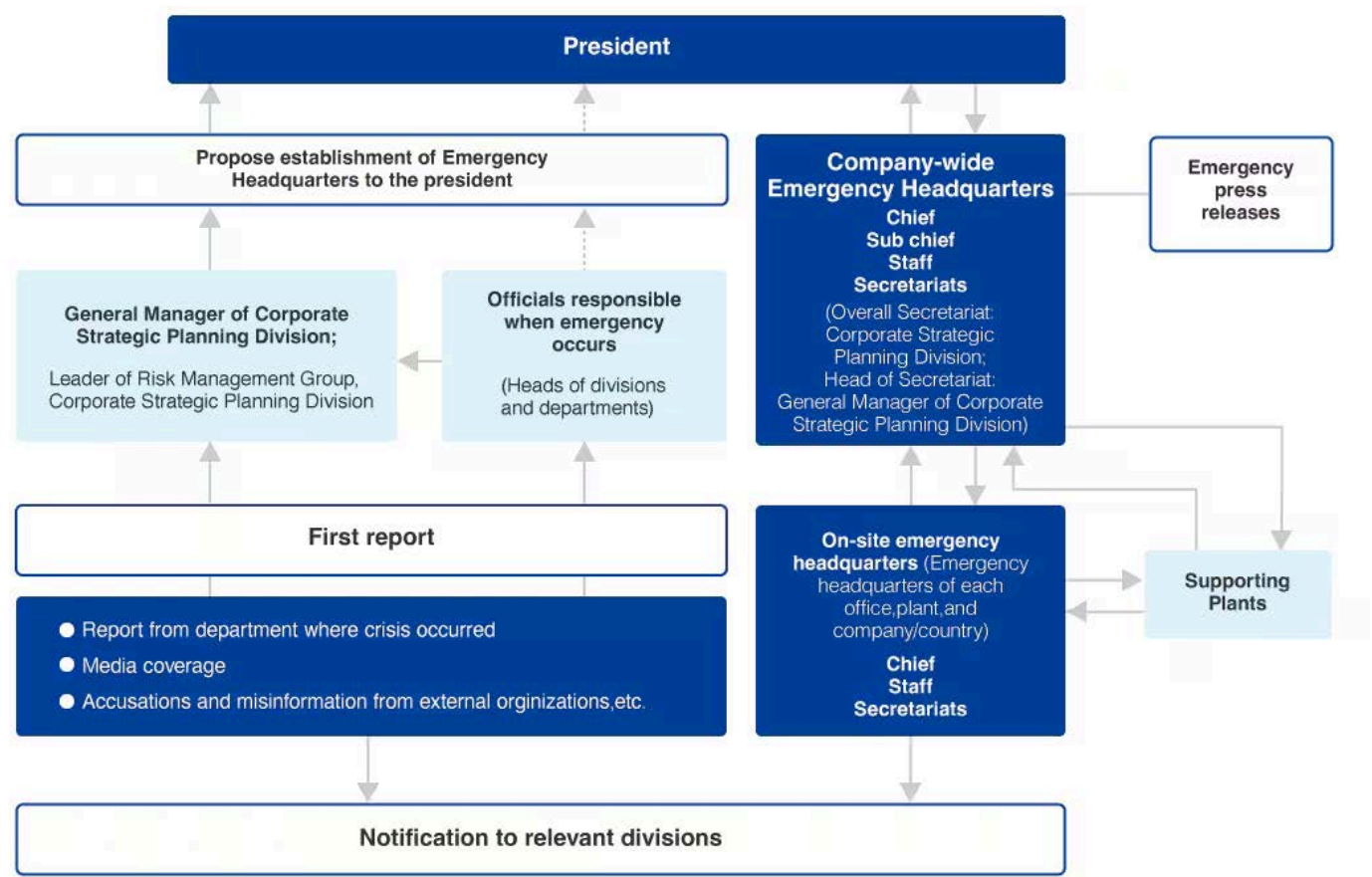


- 1 As of July 2024, a senior vice president (member of the board) serves as the Risk Management Committee Chair.
- 2 Three Lines Model: This is a global standard model for internal control. The role of the first line is to provide products and services to customers and manage risks. The role of the second line is to provide expertise, support, monitoring, and objections on matters related to risk. The third line's role is internal auditing. It provides independent and objective assurance and advice on the appropriateness and effectiveness of governance and risk management. Within the Toray Group, the first line conducts self-assessments across a wide range of control areas, including legal and compliance, product safety, quality assurance, occupational health and safety, and information systems. The second line carries out monitoring and support, while the third line provides assurance and advice.

Emergency Quick Response System

Toray Group has established Risk Management Regulations, a set of clear fundamental principles that form the basis of a company-wide response in the event of a major crisis. The Group works to ensure the thorough implementation of these rules when required. Moreover, the Group reviews the rules as appropriate to prepare for new risks that emerge due to changes in the social environment. In order to ensure quick management decisions especially in the event of a crisis, Toray Group has clarified the reporting channel from a department where a crisis has occurred, covering group companies in and outside of Japan.

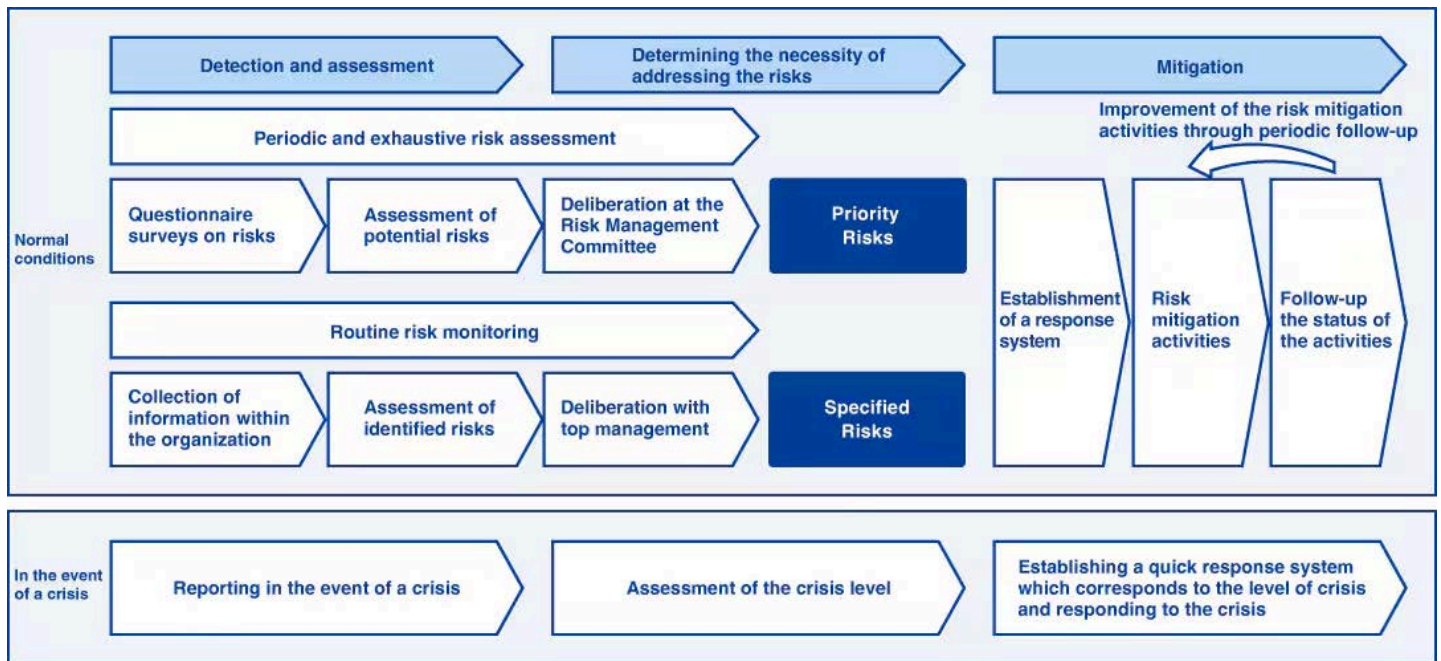
Emergency Quick Response System



Risk Management Activity Process

At Toray Group, the plan-do-check-act (PDCA) cycle method is used for managing Priority and Specified Risks as part of regular risk management activities. The Auditing Department of Toray Industries also conducts regular internal audits of these activities.

Risk Management Activities



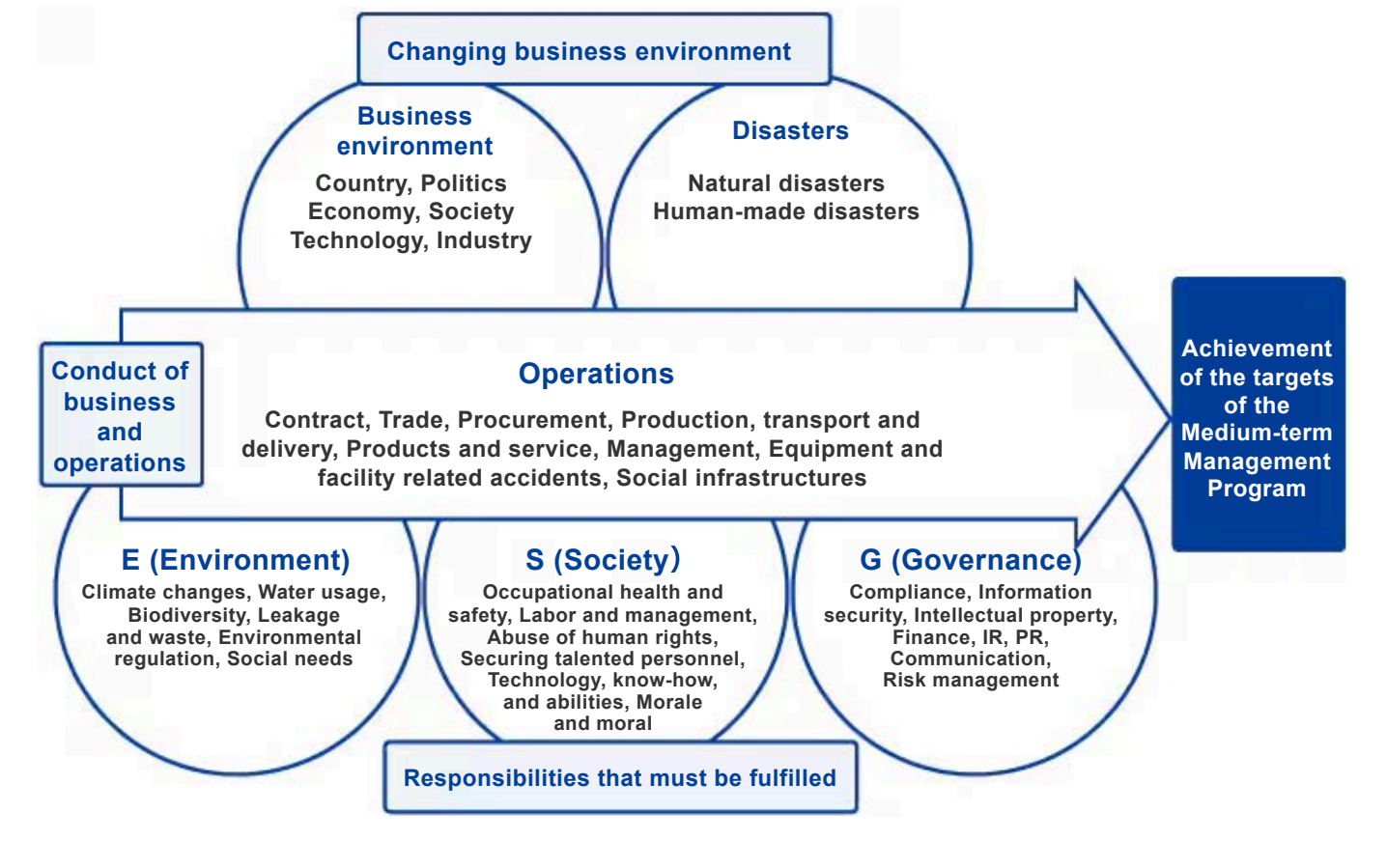
Toray Group Priority Risks are determined comprehensively every three years in conjunction with preparation of each new Medium-Term Management Program. These risks are then prioritized based on a score indicating their potential risk degree, calculated as the probability of occurrence multiplied by the impact. For each Priority Risk, a department is assigned responsibility for leading relevant mitigation efforts.

Specified Risks are determined by a dedicated department in the Corporate Strategic Planning Division that routinely monitors domestic and overseas risk trends, conducts surveys and analyses, identifies and assesses risks that may have a major impact on management, and consults with top management. Specified risks include risks arising in a short period of time, and have a complementary relationship with priority risks, which are three years as one term.

As part of the regular risk identification process, the following steps are carried out.

1. An extensive survey is conducted to assess over 100 categorized risks related to Toray Group's operations and business environment, as well as natural disasters, the environment (E), society (S), and governance (G). This provides an understanding of urgent risk situations and specific concerns across the Group worldwide.
2. After aggregating and analyzing information obtained from the survey, discussions on risk awareness, issues, and countermeasures are held with risk-related departments and top management.
3. The information gathered from the discussions is consolidated with the survey analysis results to propose Priority Risks that require cross-organizational action. The proposed Priority Risks are then deliberated and formalized by the Risk Management Committee, and each business division also identifies the risks they need to mitigate.

Identifying Risks that Inhibit the Achievement of the Targets of the Medium-Term Management Program



Related Information

For more details on Toray Group Priority Risks and other major risks that could have a significant impact on the Group, as well as its mitigation measures, click [here](#) to see the section on Business Risks.

CSR Roadmap 2025 Targets

CSR Roadmap goals

1. Reduce risks by identifying and mitigating risks that affect the resolution of management issues across the Group
2. Enhance internal controls across the Group and raise the level of risk mitigation efforts
3. Instill greater risk management among employees by rolling out risk management education throughout the Toray Group

Main Initiatives and Key Performance Indicators

KPI

(1) Under normal conditions, manage risks by identifying and addressing two main types of risks:	-
① Priority risks for Toray Group, which are established based on periodic assessments every three years	
② Specified risks, which are established based on constant monitoring, investigation and analysis of risk trends in and outside Japan	
(2) In the event of an emergency, respond appropriately in accordance with the Risk Management Regulations	-
(3) Follow up on progress made to address Toray Group's priority risks	-
(4) Follow up on the status of internal control implementation at each group company concerned	5-①
(5) Enhance cooperation with crisis management committees at Group sites outside Japan concerning crisis management under normal conditions	-
(6) Implement risk reduction across the Group for information security risks such as cyberattacks and information leaks	5-②
(7) Provide risk management education	-

Key Performance Indicator (KPI)	Target			Fiscal 2023 Result
	Fiscal 2023	Fiscal 2024	Fiscal 2025	
5-① Group companies implementing self-assessment and results follow-up using the internal control checklist (%)³	35%	70%	100%	35%
5-② Group companies implementing information security evaluation and risk reduction (%)	35%	70%	100%	35%

Reporting scope: Toray Group

3 When the initial KPIs were set, the plan was to conduct self-assessments and results follow-ups each year for approximately one-third of the group companies. However, the approach has since been changed. Self-assessments and results follow-ups are now being carried out for all group companies every year, with the level of these assessments being gradually raised over a three-year period. For the first stage conducted in fiscal 2023, self-assessments and follow-ups were completed to determine whether rules and frameworks for risk management are in place at each group company, and a 35% achievement level was reached. From fiscal 2024 onwards, the second stage will focus on specific risk management activities at group companies. Finally, the third stage will involve evaluating the level of improvement as part of the plan-do-check-act (PDCA) cycle, with plans to be made accordingly for self-assessments and follow-ups.

Related Materiality for CSR

- Strengthening Corporate Governance

* Click [here](#) for the Materiality View of CSR Roadmap 2025 (PDF:392.4KB). [PDF](#)

Looking to the Future

To achieve the goals set out in its CSR Roadmap 2025, Toray Group will continue to periodically and routinely identify potential risks in management activities, prevent and mitigate risks, and prevent crises from ever occurring.

In fiscal 2024, which marks the mid-point of the Medium-Term Management Program, the Group will conduct an interim risk survey targeting site and plant managers, heads of functional departments, as well as presidents of group companies worldwide. The aim is to re-evaluate existing risks and identify any new significant risks affecting Toray Group. Based on the results of this survey, the Group will consider devising new risk mitigation measures and adding to the existing Priority Risks.

Click [here](#) for the main initiatives and KPIs for CSR Guideline No. 5 “Risk Management” during the CSR Roadmap 2025 period (fiscal 2023–2025). [PDF](#)

CSR Activity Report (CSR Guideline Activity Reports) - Risk Management

Risk Management Initiatives

Basic System for Group-Wide Risk Management

CSR Roadmap 2025
Main Initiatives (1)(3)(4)(5)(7)

(1) Periodic risk management (priority risk mitigation activities)

As part of the sixth three-year set of Priority Risks (fiscal 2023–2025), the Group has established two Priority Risk areas: crisis response risks based on the possibility of war, and product supply disruption risks.

The status of initiatives to address each risk area is as follows.

Crisis response risks based on the possibility of war

This risk area was adopted to ensure employee safety while facilitating rapid decision-making and action to ensure business operation continuity in regions affected by war. The Corporate Strategic Planning Division is responsible for promoting initiatives in this risk area. In fiscal 2023, it conducted a risk survey of the countries and regions around the world where Toray Group operates and created crisis response plan templates for each one. Based on the results of the survey, starting in fiscal 2024, the Group is developing crisis response plans for countries selected based on their respective risk scenarios. These plans will be shared across the Group and crisis response training will be carried out in each country concerned.

Product supply disruption risks

This risk area was selected to mitigate raw material disruption risks and ensure product supply continuity. The Purchasing and Logistics Division are responsible for promoting initiatives in this risk area. In fiscal 2023, the Group began identifying raw materials with high procurement risk. In cooperation with each business division, the Purchasing and Logistics Division has been promoting risk mitigation activities such as diversification of procurement sources and stockpiling.

(2) Follow-up on internal control implementation by group companies

In line with the Basic Policy on Internal Control System outlined in Toray's Basic Policy on Corporate Governance, Toray Industries regularly provides guidance on risk management systems to its group companies worldwide and verifies their operational status. In fiscal 2023, the Company looked at 130 companies, selected based on their capital ratios, business scale, and other factors, to confirm whether they had established the fundamental rules and systems for internal control related to risk management. Each company conducted a self-assessment to determine if they had the required rules, systems, responsible personnel, and promotion methods. It was discovered that one company had not yet established such rules, and 38 companies required only minor revisions to their rules (e.g., changes in organizational names), and their self-assessments showed no other issues. By the end of fiscal 2023, Toray had confirmed that all of its group companies had the necessary measures in place.

Group companies implementing self-assessment and results follow-up using the internal control checklist (%)¹

Result in fiscal 2023

35%

■Reporting scope

Toray Group

■Target in fiscal 2023

35%

¹ When the initial KPIs were set, the plan was to conduct self-assessments and results follow-ups each year for approximately one-third of the group companies. However, the approach has since been changed. Self-assessments and results follow-ups are now being carried out for all group companies every year, with the level of these assessments being gradually raised over a three-year period. For the first stage conducted in fiscal 2023, self-assessments and follow-ups were completed to determine whether rules and frameworks for risk management are in place at each group company, and a 35% achievement level was reached. From fiscal 2024 onwards, the second stage will focus on specific risk management activities at group companies. Finally, the third stage will involve evaluating the level of improvement as part of the plan-do-check-act (PDCA) cycle, with plans to be made accordingly for self-assessments and follow-ups.

(3) Crisis management for operations outside Japan

Under its Risk Management Committee, Toray Industries has established an Overseas Crisis Management Committee at its headquarters, as well as Local Crisis Management Committees at various group sites worldwide. As part of its regular activities, the Overseas Crisis Management Committee continuously collects risk-related information from sites worldwide, shares it within the Toray Group, manages overseas travel, and provides risk education to traveling employees. Meanwhile, the Local Crisis Management Committees carry out risk mitigation activities specific to the conditions in their respective locations. The Overseas and Local Crisis Management Committees are strengthening their cooperation by jointly utilizing a system for confirming the safety of personnel during an emergency.

(4) Activities to raise employee awareness

To raise risk management awareness among employees, Toray Group conducted risk management and crisis response training in fiscal 2023. The training was provided to new employees, newly appointed managers, and department heads.

Quick Response to an Emergency or Crisis

CSR Roadmap 2025
Main Initiatives (2)

In the event of a crisis, Toray Industries responds by swiftly establishing a company-wide quick response system (Company-Wide Emergency Headquarters) based on its Risk Management Regulations.

Since the 2011 Great East Japan Earthquake, Toray has conducted an annual exercise for setting up the Company-Wide Emergency Headquarters, as part of preparations for a large-scale earthquake in Japan.

When the Noto Peninsula Earthquake struck in January 2024, the Company-Wide Emergency Headquarters was set up on the same day. It acted quickly to confirm the safety of personnel, assess the damage, and initiate recovery and support efforts.

Related Information

Click [here](#) for more details on Toray’s business continuity plan (BCP) initiatives.

Information Security

CSR Roadmap 2025
Main Initiatives (6)

Toray has established the Toray Group Information Security Steering Committee to centrally manage and improve information security across the entire Group. Under this committee, risk mitigation activities are promoted based on the Toray Group Information Security Basic Policy.

In fiscal 2023, each group company conducted a self-assessment concerning its progress in meeting Toray Group information security standards. In cases where the standards have not been met, the companies concerned created improvement plans and continued to promote risk mitigation activities. Under the CSR Roadmap 2025, Toray Group information security standard achievement rate has been set as a KPI, and progress is monitored by the Toray Group Information Security Steering Committee.

In fiscal 2023, risk mitigation activities were implemented by 39 of the 112 target group companies, resulting in a 35% target achievement.

Group companies implementing information security evaluation and risk reduction (%)

■Reporting scope	■Target in fiscal 2023
Toray Group	35%

Result in fiscal 2023

35%

Related Information

Click [here](#) for more information on Toray’s information security initiatives.

Click [here](#) for the main initiatives for CSR Guideline 5, “Risk Management” in CSR Roadmap 2025.

CSR Activity Report (CSR Guideline Activity Reports) - Risk Management

Business Continuity Plan Initiatives

Ensuring Preparedness for Major Earthquakes and Water Hazard Risks (Floods, Storm Surges, Etc.)

CSR Roadmap 2025
Main Initiatives (2)

Toray Group has continuously maintained and revised its business continuity plan (BCP) in case of a major earthquake which was included in its four three-year sets of priority risks (fiscal 2009–2020). In the fifth set of priority risks (fiscal 2021–2022), flooding-related disasters were also included.

Toray Group's basic policy when ensuring business continuity in the event of a major earthquake or flood is to meet its social responsibility to continue supplying products. The top priority of the plan is to confirm employees' safety and prevent any impact on the local community. In addition to striving to prevent the damage from expanding and to prevent any secondary damage, the Group works to continue the supply of key products and to restore business quickly. In line with this, the Group continues to systematically retrofit plant buildings, elevate evacuation locations, and raise emergency power generators to higher positions.

In addition, since fiscal 2012, Toray Group has continued to conduct company-wide drills on setting up an emergency response headquarters to prepare for a major earthquake. In recent years, in light of Toray Industries' enhanced network environment and the improved reliability of public network infrastructure, the Company has conducted initial response drills online.



Eleventh Company-Wide Earthquake Response Headquarters Drill Conducted in Fiscal 2023

The Noto Peninsula Earthquake struck on January 1, 2024. On the same day, Toray Group established an online company-wide response headquarters led by the executive vice president in charge. The team rapidly initiated activities such as confirming personnel safety and damage conditions, as well as recovery and support efforts. While no Toray Group employees suffered injuries as a result of the earthquake, some experienced damage to their homes. In response, the Group provided temporary housing to affected employees and their families by utilizing Toray-owned apartments and dormitories.

Some group companies experienced power outages, water supply disruption, or ground subsidence. However, these companies received stored water and food supplies from the Toray Industries Ishikawa Plant, which suffered no major damage. The companies promptly restored power, carried out ground subsidence repair work, inspected equipment and made adjustments, and resumed production operations as quickly as possible, with cooperation from the response headquarters.

The response headquarters also checked damage conditions at relevant customers, suppliers, and logistics warehouses that experienced seismic intensity of 5 or higher on Japan's shindo scale. It addressed the impacts for those locations on an individual basis.

Going forward, the Group will continue to strengthen its capabilities for responding to major earthquakes through continued drills and training.

Click [here](#) for more information on Toray Group's recovery support efforts after the 2024 Noto Peninsula Earthquake.

Related Information

See the following page for information on water stress areas and water resource management.

> [Initiatives for Managing Water Resources](#)

Click [here](#) for the main initiatives for CSR Guideline 5, "Risk Management" in CSR Roadmap 2025.

CSR Activity Report (CSR Guideline Activity Reports) - Risk Management

Addressing Information Security Risks

Addressing Information Security Risks

CSR Roadmap 2025
Main Initiatives (6)

In fiscal 2022, Toray Group reviewed its policies and framework related to information security with the aim of maintaining and enhancing information security across the entire Group.

As part of this effort, it established the Toray Group Information Security Basic Policy, which outlines how all executives and employees, including contracted, part-time, and dispatched employees, are expected to fulfill the Group's social responsibility concerning information security.

In terms of structure, the Toray Group Information Security Steering Committee has been established to promote information security across the entire Group. It is chaired by the general manager of the General Administration & Communications Division at Toray Industries¹, and the members include representatives from the Legal & Compliance Division, Human Resources Division, Information Systems Division, and other relevant departments. The committee deliberates on information security policies, discusses risk mitigation measures, and issues instructions to the Information Security Committees set up in each division. It also monitors security situations and reports the activities to the Company's Executive Committee. The Information Security Committees in each division provide instructions on security measures to their respective departments within Toray Industries, and to the group companies they oversee, and monitor each situation accordingly.

The main activities of the Toray Group Information Security Steering Committee are as follows and are reported to the Board of Directors after being deliberated by the Executive Committee, which acts as a consultative body.

- Ascertaining the risk situation across the entire Toray Group and staying informed on global trends
- Formulating Toray Group information security standards² and monitoring progress: Checking whether all group companies have met the standards. Requiring companies that have not met the standards to create an improvement plan, as well as following up on progress made
- Conducting regular diagnostic security assessments and monitoring: Having third-party information security companies evaluate Internet security and performance at group companies. Also, requiring any necessary improvements to be carried out by the companies concerned, and following up on progress made
- Ensuring immediate response and prevention of damage escalation in the event of a security incident: The department or group company discovering an incident must report it within 24 hours to the general manager of the General Administration & Communications Division. Depending on the scale of potential or actual damage, actions must be taken according to predetermined procedures to notify relevant internal and external stakeholders and prevent damage from spreading.

¹ As of July 2024, a senior vice president serves as general manager of the General Administration & Communications Division.

² Toray Group information security standards have been developed with reference to information security standards issued by the International Organization for Standardization (ISO) and the National Institute of Standards and Technology (NIST) and using advice from external security companies. The standards encompass measures to mitigate risks such as cyberattacks, insider threats, and employee operational errors.

Toray Group Information Security Basic Policy: Established in April 2022

Toray Group prioritizes information security as an important management issue. In order to fulfill the Group's social responsibility, all officers and employees (including contract, part-time, and dispatched employees) take thorough measures based on the Information Security Basic Policy.

1. Ethics and compliance

We will prohibit ourselves from collecting, moving or using any information assets illegally in violation of the regulation or law where Toray group engages their duties.

2. Development and operation of systems and rules

In order to promote information security measures and to respond promptly to information leaks, we have established an information security system. We will establish a system and rules for security and apply them appropriately.

3. Protection of information

We will protect the information of our customers and the Toray group companies in accordance with the significance of risk. From the perspective of the protection of personal information, we will protect the personal information of our employees, customers, and Toray group companies from being used for any purpose other than its original intent.

4. Availability of information assets in support of business continuity

We will secure the availability of information assets necessary to pursue and fulfill our social responsibility.

5. Continuous Improvement and Maintenance of Information Security

We will continuously improve the information security management system by prioritizing identified issues, by continuously conducting risk analysis of emerging threats, changes to the business, and or the evolution of information technology.

Combating Cyber Attacks

CSR Roadmap 2025
Main Initiatives (6)

Toray Group is taking a range of measures to combat today's increasingly sophisticated cyberattacks. In addition to efforts aimed at preventing such incidents, the Group has implemented measures to mitigate risks in the event of a damaging attack.

1. Compliance with Toray Group information security standards

Each group company establishes its own information security management system. After identifying information assets such as computer terminals, servers, user IDs, confidential information, and personal data, the companies define and implement rules for managing and securing each asset. Security measures also include procedures for responding to security incidents, securing backups for system recovery, and preparing recovery procedures.

2. Device management

Toray Industries has standardized specifications and settings for its computers and smartphones and has established a system for centralized management of these devices. These measures are being expanded across the Toray Group.

3. Authentication management

Toray Industries has established a system for centralized management of user IDs and utilizes multi-factor authentication (MFA). This initiative is also being expanded across the Group.

4. Network management

(1) Toray Industries and its group companies constantly monitor communications between the Internet and their own internal networks.

(2) Toray Group conducts regular risk assessments of Internet security and performance using third-party security companies and implements all necessary improvements.

5. Server and cloud service management

Toray Group maintains server and cloud service ledgers. Toray Industries has also developed a group-wide shared server environment with security monitoring capabilities, which is being adopted across the entire Group.

6. Enhancing education and training

As IT measures alone may not be sufficient to address today's increasingly sophisticated cyberattacks, the Group also conducts education through regular e-learning for all employees (once a year) and training sessions on responding to unsolicited email.

Prevent Employees from Leaking Confidential Information

CSR Roadmap 2025
Main Initiatives (6)

Toray Group implements a range of measures in accordance with the Toray Group information security standards. In addition to providing information security education for all employees on an annual basis, Toray Group conducts level-specific training for employees, including new employees and newly appointed managers. The aim is to improve security awareness and skills, while also thoroughly disseminating the Toray Group Information Security Basic Policy. At the same time, an e-mail magazine is sent out regularly and a series on information security is carried in an in-house magazine to encourage the improvement of information security literacy among all employees.

Before removing a computer or smartphone from an office, for example, employees must receive permission from a manager. In addition, the actual device must be inspected monthly, and an inventory of assets is taken once every six months. Moreover, the Group has established approaches to dealing with the loss of such devices and other similar incidents, and has built channels for reporting and other mechanisms to minimize damage thereof.

Click [here](#) for the main initiatives for CSR Guideline 5, "Risk Management" in CSR Roadmap 2025.

CSR Activity Report (CSR Guideline Activity Reports)

Communication

Disclose corporate information in an active, fair and straightforward manner to maintain management transparency; and disclose information appropriately to encourage dialogue and cooperation with stakeholders including customers, employees, stockholders, business partners, consumers, mass media, and other parties.



Basic Approach

Toray Group communicates with diverse stakeholders throughout its business activities in accordance with its Basic Policies to Promote Dialogue with Stakeholders and its Information Disclosure Principles. The senior management team takes the lead in implementing communication initiatives, while working with relevant departments responsible for engaging with each stakeholder group.

Toray Group's goal of achieving sustainable growth globally and into the future is about much more than just expanding the Group's business. The aim is to practice Toray-style management, contribute to society, and remain a corporate entity respected by society. Toray-style management is all about living up to the corporate philosophy of "contributing to society through the creation of new value with innovative ideas, technologies and products," and this is done by executing the corporate missions of serving customers, employees, shareholders, and society. In fiscal 2020 and 2021, Toray Group implemented the Toray Philosophy Project as a group-wide two-year initiative aimed at promoting a deeper understanding of Toray-style management both inside and outside the Group. Initiatives under the Medium-Term Management Program, Project AP-G 2025, which was launched in fiscal 2023, focus on strengthening the Toray brand by enhancing people-centric management to foster a corporate culture where employees can thrive and take pride in their work and by engaging in communication designed to earn the trust and meet the expectations of external stakeholders.

Basic Policies to Promote Dialogue with Stakeholders Established September 2005

1. Toray Group will promote dialogue and collaboration with all stakeholders, including customers, stockholders and investors, business partners, employees, government, local communities, NPOs, citizens, the global community and the media.
2. Each company in Toray Group, through dialogue and collaboration with stakeholders, will take steps to carry out reforms designed to increase the satisfaction level of everyone.
3. All Toray Group employees, in their respective workplaces, shall identify and strive to solve issues affecting stakeholder satisfaction as part of their CSR activities.

Information Disclosure Principles Established January 2004

1. Information Disclosure Principle:
Strive to communicate with various stakeholders associated with the Company by actively disclosing pertinent information.
2. Voluntary Disclosure Principle:
Comply with statutory disclosure and timely disclosure requirements and voluntarily disclose information that can be disclosed.
3. Timely Disclosure Principle:
Strictly comply with the appropriate disclosure timing for statutory disclosure and timely disclosure, and disclose information on facts that can be disclosed as quickly as possible for voluntary disclosure as well.
4. Fair Disclosure Principle:
Disseminate information to all stakeholders in a fair and unbiased manner.
5. Information Management Principle:
Officers and employees associated with the content of information to be disclosed shall strive to maintain thorough information management until disclosure.

Structure

The General Administration & Communications Division works with divisions and departments of Toray Industries and its group companies in and outside Japan to devise the best methods for collecting and disseminating information. The Group's business sites regularly engage and maintain lines of communication with local residents and governments. Additionally, the Group is always open to inquiries and feedback from stakeholders, which are fielded through its corporate websites.

Opinions obtained from stakeholder communication processes are used to provide feedback to the related divisions and departments. They are encouraged to act on the feedback received in order to maintain good relationships with stakeholders. For example, matters related to safety, health, accident prevention, and environmental conservation are suitably handled by the Group's business sites. The CSR Operations Department guides the implementation of social contribution initiatives, which are carried out by the business sites.

CSR Roadmap 2025 Targets

CSR Roadmap goals

1. In accordance with the Basic Policies to Promote Dialogue with Stakeholders and the Information Disclosure Principles, enhance communication activities with each stakeholder group to improve corporate value
2. Promote dialogue and collaboration with each stakeholder group, and reflect information obtained in management decisions in a timely and appropriate manner

Main Initiatives and Key Performance Indicators

	KPI
(1) Actively dispatch information on the Toray Philosophy and use education to ensure it is embraced throughout the Group	-
(2) Enhance information dissemination utilizing owned media such as the Group's websites and social media accounts	6-①
(3) Strive to ascertain customer needs and improve customer satisfaction	-
(4) Facilitate exchange of opinions between management and employees, ascertain issues and problems, and reflect them in the Group's CSR initiatives	6-②
(5) Expand opportunities for management to disseminate information and promote communication with stockholders and investors	6-③
(6) Enhance communication with the mass media	6-④

Key Performance Indicator (KPI)	Target			Fiscal 2023 Result
	Fiscal 2023	Fiscal 2024	Fiscal 2025	
6-① Number of corporate website page views (per month)	1 million page views	1 million page views	1 million page views	1.12 million page views
6-② Interviews conducted to exchange opinions within the company (rate of progress)	(First round) 100% completed	(Second round) 30%	(Second round) 60%	100%
6-③ Interviews with key investors in which management participates (number)	Cumulative total of 120	Cumulative total of 120	Cumulative total of 120	Cumulative total of 197
6-④ News releases (number)	200	200	200	178

Reporting scope: Toray Industries, Inc. (6-①)
Toray Group (6-②, 6-③ and 6-④)

Related Materiality for CSR

- Developing in Collaboration with Stakeholders

* Click [here](#) for the Materiality View of CSR Roadmap 2025 (PDF:392.4KB).

[PDF](#)

Looking to the Future

With the diversification of social issues in recent years, dialogue with stakeholders has become increasingly important. Toray Group brand value lies in its business portfolio, which has grown from Toray's original textile business and which cannot be easily duplicated by competitors. The Group treats requests from stakeholders as opportunities for growth. By contributing to society through its businesses and other efforts, Toray Group will continue to promote social progress and help to resolve global issues, thereby enhancing its corporate value and continuing to serve as a corporate group of high value to all stakeholders.

Click [here](#) for the main initiatives and KPIs for CSR Guideline No. 6 "Communication" during the CSR Roadmap 2025 period (fiscal 2023–2025).

[PDF](#)

CSR Activity Report (CSR Guideline Activity Reports) - Communication

Communication via Corporate Websites

CSR Roadmap 2025
Main Initiatives (2)

Number of corporate website page views (per month)

■Reporting scope
Toray Industries, Inc.

■Target in fiscal 2023
1 million page views

Result in fiscal 2023

1.12
million page views

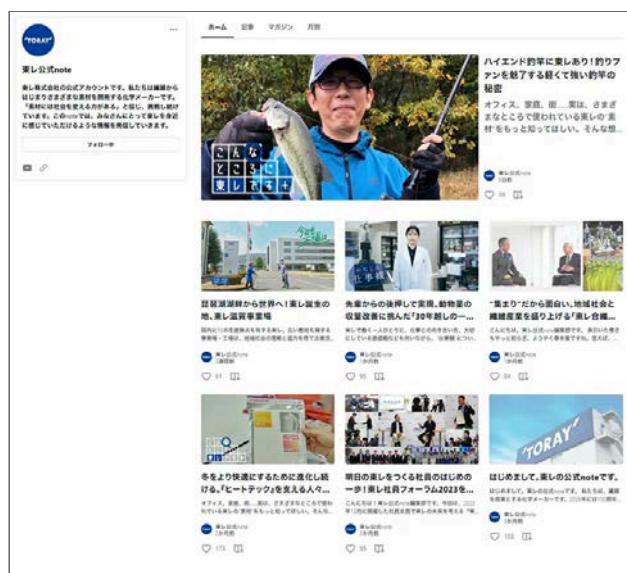
On the Toray Group website, information is provided to a wide range of stakeholders to give them an accurate perspective on Toray, with information in menu categories such as “About Us,” “Sustainability,” “Our Businesses,” “Research and Development,” “Investor Relations” and “Career.”

In fiscal 2023, the Group launched a new website to highlight Toray's initiatives to help realize a circular economy and strengthen efforts to disseminate information on the issue. The website features articles that describe various Toray initiatives, such as recycling efforts in business areas such as fibers, films, and resins, as well as co-creation projects with other companies.

The Group has launched its owned media to better share Toray's current situation while obtaining further understanding and support from a wide range of stakeholders. The content on this channel conveys Toray Group's people-centric management approach by focusing on Group employees and their actual opinions and ideas.



Toray Group's circular economy promotion website "[GO CIRCULAR](#)" (in Japanese only)



Newly launched [Toray owned media](#) (in Japanese only)

Click [here](#) for the main initiatives for CSR Guideline 6, "Communication" in CSR Roadmap 2025.

CSR Activity Report (CSR Guideline Activity Reports) - Communication

Communication with Customers

CSR Roadmap 2025
Main Initiatives (3)

True to its “customer first” commitments, Toray Group has conducted a group-wide customer satisfaction survey every three years from 2008 to 2020.

To better ascertain customer needs, the Group currently conducts market research and other surveys in each business area as needed and strives to reflect customer feedback in its operations.

Moreover, the following activities are being actively promoted to share information with customers, helping them gain a deeper understanding of the Group.

Showrooms

Toray Industries, Inc. has set up showrooms in Mishima (at the Toray Human Resources Development Center), at the Shiga Plant, and at other major Toray sites as space for communicating with customers. These showrooms feature accessible displays of Toray’s business and product applications. The goal is to deepen understanding of the Toray Group Sustainability Vision and Toray Group’s commitment to leverage its innovative technologies and advanced materials to contribute solutions on a host of issues. Toward this end, the exhibit space on the corporate culture floor of the Toray Human Resources Development Center in Mishima was also renovated in fiscal 2022.



Exhibit space at Toray Human Resources Development Center in Mishima

Global Communication Assets

As a global company, Toray has developed corporate communication tools, such as story-based videos focusing on Toray employees, to convey the company's core values to customers and stakeholders in Japan and elsewhere. These videos showcase the intrinsic value Toray employees bring to society. One example is the short film, “Straight Path,” which portrays the life of Tri Q. Huynh, President of Toray Membrane USA, Inc. Another is “Evolution in Aviation,” a brand storytelling video illustrating Toray’s collaboration efforts with the U.S. startup Joby Aviation, Inc., in developing flying cars and other urban air mobility systems.

Notably, Straight Path won Branded Shorts of the Year, the top prize in the Branded Shorts (National Competition) category, at Asia’s largest international short film festival, the Short Shorts Film Festival & Asia.



Straight Path, a short film

Click [here](#) for the main initiatives for CSR Guideline 6, “Communication” in CSR Roadmap 2025.

CSR Activity Report (CSR Guideline Activity Reports) - Communication

Communication with Stockholders and Investors

In accordance with its Information Disclosure Policy, Toray Industries, Inc. makes sure to disclose information required under laws and regulations in an accurate, timely and appropriate manner, as well as a broad range of additional information beyond these requirements. The Company's Investor Relations Department was established to liaise with stockholders and investors, aiming to create as many communication opportunities as possible.

Interviews with key investors in which management participates (number)

■Reporting scope
Toray Group

■Target in fiscal 2023
Cumulative total of 120

Result in fiscal 2023

Cumulative total of **197**

Holding Investor Relations Events to Communicate with Stockholders and Investors and Giving Feedback to Top Management

CSR Roadmap 2025
Main Initiatives (5)

Toray Industries actively communicates with institutional investors and securities analysts through same-day briefing sessions held shortly after the release of quarterly and annual earnings results. Additionally, it holds interviews and IR seminars focused on business overviews and strategies. The Company also conducts information and briefing sessions for shareholders and for individual investors. Feedback received at investor briefing sessions and through communication with investors and stockholders is regularly reported to the Board of Directors, helping to guide management and business activities.



Information session for shareholders



Toray President Mitsuo Ohya making a presentation at an IR seminar

Activities	Number of events	Number of meetings/participants
Meetings with institutional investors and securities analysts	As required	572 meetings
IR seminars for institutional investors and securities analysts	3	292 participants
Briefing sessions for individual investors	1	78 participants
Information sessions for shareholders	1	68 participants

External Evaluation of Information Disclosure to Investors

CSR Roadmap 2025
Main Initiatives (2)

In the “[Investor Relations](#)” section of its corporate website, Toray Industries provides information about its financial results and management policies and strategies for stockholders and investors. In an effort to disclose information fairly, the Company promptly posts financial data and presentation materials, including English translations, used in its briefings for institutional investors. In fiscal 2023, the Company’s publications were evaluated externally by a number of organizations, as shown below.

■Website Evaluations

Organization details	Evaluations
Daiwa Investor Relations Co., Ltd.	2023 Internet IR Awards Award for outstanding website
Nikko Investor Relations Co., Ltd.	2023 All Japanese Listed Companies' Website Ranking (AAA Website in overall ranking)
GOMEZ	Silver Prize (top in textile sector) in IR Site Ranking 2023

■Annual Report Evaluation

Evaluations
LACP 「2022/23 Vision Awards」 Gold Award, Technical Achievement Award

Evaluations from the Perspective of Socially Responsible Investment

CSR Roadmap 2025
Main Initiatives (2)

- Included in Dow Jones Sustainability™ Asia / Pacific Index
- Listed in The S&P Global Sustainability Yearbook 2024
- Included in FTSE4Good Index / FTSE Blossom Japan Index / FTSE Blossom Japan Sector Relative Index
- Received AAA rating in MSCI ESG Ratings / Included in MSCI Japan ESG Select Leaders Index

Convenient General Stockholders Meetings

CSR Roadmap 2025
Main Initiatives (2)(5)

For the convenience of its stockholders, Toray Industries avoids holding its general meeting of stockholders on a date when many other companies in Japan hold their meetings. Toray Industries held its general meeting of stockholders on June 27, 2023. Since 2021, it has been live-streaming a hybrid in-person/online meeting to accommodate stockholders who are unable to attend and/or are in remote locations. Every year, the general stockholders' meeting notice is sent out and posted on the website approximately four weeks in advance of the meeting to give stockholders extra time to review the agenda items. The meeting notice is also translated into English, and voting enhancements include smartphone-based electronic proxy voting and an electronic voting platform for institutional investors.

In 2023, to comply with an amendment to Japan's Companies Act that requires electronic provision of materials for general shareholders meetings, Toray Industries began sending out summarized versions of its meeting notices. In 2024, the general meeting of stockholders was held on June 25. To improve shareholder convenience and accessibility, the meeting notices were prepared in full color and audio narration was added for the reporting items.

Click [here](#) for the main initiatives for CSR Guideline 6, "Communication" in CSR Roadmap 2025.

CSR Activity Report (CSR Guideline Activity Reports) - Communication

Communication with Business Partners

Toray Group holds policy briefings and carries out CSR procurement surveys for business partners to foster mutual understanding and closer collaboration.

Related Information

- [Socially Responsible Procurement Initiatives at Toray Group](#)
- [Toray Group Distribution Initiatives](#)

CSR Activity Report (CSR Guideline Activity Reports) - Communication

Communication with Employees

Internal Branding

CSR Roadmap 2025
Main Initiatives (1)/(4)

In preparation for its 100th anniversary in 2026, Toray Group adopted an initiative for “creating opportunities and momentum for challenge-taking” in fiscal 2023. The Group engages mechanisms that encourage employees to focus on creating new value through their work and promotes activities aimed at fostering a dynamic and open corporate culture by creating opportunities for dialogue between employees and the company president.

1. Real Talk – Everyone’s Voice

Since January 2023, the Group has held regular video live stream events called, “Real Talk – Everyone’s Voice,” to provide opportunities for open, two-way communication between the management team and employees. In fiscal 2023, there were a total of six events, including some hosted at plants. The average number of participants each time was 898, with an average participant satisfaction rate of 90%.

2. First Steps Award

As a way to encourage individual employees to take on new challenges, the First Steps Award was launched in fiscal 2023. The Group invited employees to submit examples of workplace challenges that have been undertaken, regardless of scale, completion status, or success level. Submissions were welcomed from individual challenge-takers or their co-workers and did not require any supervisor approval. With 190 submissions received, the response surpassed initial expectations. To ensure review of the submissions by a wide range of employees, the winners were decided by an employee vote, and more than 9,000 votes were cast. The awards were presented at the Toray Employee Forum, which helped to boost employee interest and engagement.

This award program will continue as an annual activity.

3. Toray Employee Forum

The Toray Employee Forum was held in December 2023 to foster a sense of group-wide unity with employees sharing best practices in terms of approaches and activities based on the Toray Philosophy and gaining first-hand exposure to Toray’s core principles and DNA. Under the banner of “Let’s Think About Taking on Challenges Together,” the event featured a conversation between Tadashi Yanai, the Chairman, President & CEO of Uniqlo Co., Ltd., and Mitsuo Ohya, President of Toray Industries, Inc. The presentation ceremony for the First Steps Award was also held at the same event. Through a live web conference covering 16 Toray sites in Japan, including the headquarters and various other offices and plants, 3,112 employees participated in the Toray Employee Forum in real time. Based on feedback received afterward, 90% of participants expressed satisfaction with the forum, while 97% indicated an interest in attending future events. Overall, it proved to be a highly engaging initiative for employees.

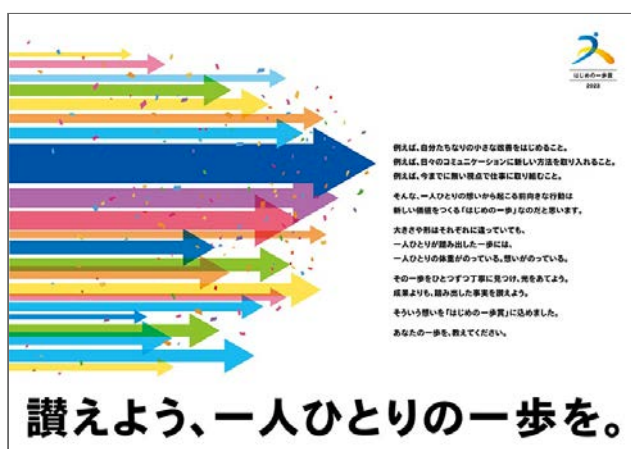
Going forward, Toray Group will continue to implement various internal branding initiatives aimed at fostering a dynamic corporate culture with open communication and a pioneering spirit, ensuring that Toray remains a corporate group employees can take pride in.
The next forum is scheduled for November 2024.



Sixth Real Talk event at the Nagoya site



Eighth Real Talk event at the Mishima Plant



Announcement for the First Steps Award program



First Steps Award winners together with Chairman Nikkaku (far right) and President Ohya (far left)



Conversation between Uniqlo Chairman Yanai (right) and Toray President Ohya (left) at the Toray Employee Forum



Toray Employee Forum venue at the Toray Industries, Inc. Head Office

Financial Results Briefings for Employees

Every six months, Toray Industries holds Financial Results Briefings for employees at its business sites and plants, which are hosted by the president and other executives. In addition to questions submitted in advance, the senior managers also answer questions posed at the meeting. These briefings are great opportunities for employees to hear directly from the management team and engage in dialogue with them.



Financial Results Briefing at the head office in Tokyo



An employee asks an executive a question at a Financial Results Briefing at the Okazaki Plant

Communication via In-house Magazines and Intranet

CSR Roadmap 2025
Main Initiatives (1)(4)

Toray Group employs various internal media such as printed in-house magazines and an intranet to provide information on the Group's management policies and issues. This helps promote communication that fosters both a sense of belonging among Group employees and a shared understanding of the Toray brand. Messages from the president appear in all of these media. The printed in-house magazine is published in two languages (Japanese and English) to keep employees informed about management and business topics as well as corporate projects. The Group has launched an intranet called TORAYNAVI in Japanese and English for group companies both in and outside Japan to share timely information.

In fiscal 2023, initiatives such as Real Talk – Everyone's Voice, First Steps Award, and the Toray Employee Forum were implemented under the banner of "creating opportunities and momentum for challenge-taking." These initiatives were announced in the in-house newsletter and related information was shared through video streaming on the Group's intranet. Also, during the Noto Peninsula Earthquake in January 2024, the intranet became the primary means of distributing the latest disaster-related information, and updates on Toray's response efforts were promptly shared group-wide.

Toray Group's publications

Circulation of Toray Group's publications

Japanese edition of *People* in-house magazine :

Around 16,000 copies per issue (published six times per year)

English edition of *People* in-house magazine :

Around 3,000 copies per issue (published four times per year)

Toray Management magazine for managers :

About 7,000 copies per issue (published four times per year)



Employee Survey

Toray Industries, Inc. regularly conducts an employee attitude survey of Toray Group employees in and outside Japan. The survey is designed to assess employee engagement, motivation, and sense of belonging, and to gauge the level of progress in implementing the long-term vision and medium-term management program. In fiscal 2023, the survey content was revised to capture both expectations and actual experiences, instead of just job satisfaction. The survey frequency was increased from every two years to annually, and the feedback process was accelerated, allowing results to be viewed the day after the survey. Moreover, the system was revised to enable detailed assessments of each organization's and individual's situation, ensuring swift implementation of improvement activities.

The EX Score^{®1} metric was adopted for releasing the survey results, and in fiscal 2023 the Group's score was 64.8. Various initiatives are now being implemented with the aim of improving each year and ultimately exceeding a score of 70. Examples of these initiatives include sharing information on the intranet, holding discussions at each workplace, and sharing successful examples of improvement across the Group.

¹ The EX Score[®] provides an indicator of organizational health. It measures the gap between each individual's expectations and their actual experiences. The score is maximized when both expectations and actual experiences are high and the gap between them is minimal. EX Score[®] is a registered trademark of HRBrain, Inc. which conducted the employee survey for the Group. The average industry score at the time of the fiscal 2023 survey was approximately 70 out of 100. The survey revealed that Toray Group employees had significantly higher expectations than the average, with actual experiences varying by category.

Promoting CSR Initiatives in Every Workplace

A special characteristic of Toray Group's approach to corporate social responsibility is its “CSR line activities,” an employee participation system that emphasizes putting CSR into practice on the job. Each workplace implements activities suited to its own circumstances, such as holding discussions on CSR issues.

Related Information

> [Toray Group Corporate Social Responsibility Initiatives](#)

Facilitating Internal Exchange of Opinions on CSR Issues and Enhancing Awareness

Interviews conducted to exchange opinions within the company (rate of progress)

■Reporting scope	■Target in fiscal 2023
Toray Group	(First round) 100% completed

Result in fiscal 2023

100%

Toray Group strives to ensure that social responsibility awareness is firmly rooted in its culture by providing employees with various opportunities.

Since fiscal 2019, the CSR Operations Department of Toray Industries has visited departments as well as group companies worldwide to conduct interviews to exchange opinions. The aims are to instill CSR awareness and to ascertain the status of CSR initiatives in each workplace. By the end of fiscal 2023, the department achieved its target of 100% completion for the first round of visits. The second round of visits for opinion exchanges began in fiscal 2024. The issues for CSR activity implementation identified during the interviews to exchange opinions will be reflected in Toray Group's CSR promotion activities.

Toray Group communicates CSR information through a variety of internal publications (including the *People* and *Toray Management* magazines and an internal CSR newsletter) to help employees understand the necessity of implementing CSR in each workplace. In addition, the Group also strives to increase CSR awareness with an e-learning course covering the fundamentals of CSR, CSR webinars designed to promote understanding and awareness of CSR issues, and other programs.



A CSR webinar on the topic of CSR procurement, held in March 2024, with an external consultant as the guest speaker

CSR Webinars

Fiscal Year	Topic
2021	Protecting the Global Environment by Tackling River and Ocean Waste
2022	What is the Circular Economy?
2023	What is CSR Procurement?

Activities to Promote Internal Communication



Winners of a costume contest posing with the General Manager of the Shiga Plant (center) at the plant’s Halloween party (600 participants) (Toray Industries, Inc. Shiga Plant)



Company sports day, held for the first time in five years [Toray Fibers & Textiles Research Laboratories (China) Co., Ltd.]



Exhibition of finished product samples at the Shiga Plant and Gifu Plant for employees that manufacture Ultrasuede™ products (Toray Industries, Inc.)



Web conference held by the Senior Vice President, Engineering Division (bottom right) to interact with new division employees (Toray Industries, Inc.)

Communicating with Employees' Families

Toray Group organizes workplace tours for employees and their families to help employees' families get to know more about Toray. Family Days are also held to further deepen connections with family members.



Employee family members learning about Toray ABS resin products displayed in a showcase (Toray Industries, Inc. Chiba Plant)



Touring the Torayvino Production Section (Toray Industries, Inc. Okazaki Plant)



Visitors getting a view of the entire plant (Toray Industries, Inc. Tokai Plant)



Approximately 1,800 people attended a Family Day event jointly held for all four Toray Group companies in Mexico (Toray Advanced Textile Mexico, S.A. de C.V., Toray Resin Mexico, S.A. de C.V., Zoltek de Mexico S.A. de C.V., and Toray International de Mexico, S.A. de C.V.)

Click [here](#) for the main initiatives for CSR Guideline 6, "Communication" in CSR Roadmap 2025.

CSR Activity Report (CSR Guideline Activity Reports) - Communication

Communication with the Media

CSR Roadmap 2025
Main Initiatives (6)

News releases (number)

■Reporting Scope	■Target in fiscal 2023
Toray Group	200

Result in fiscal 2023

178

Toray Industries, Inc. recognizes that public relations and corporate communication activities have a role in fulfilling responsibilities for information disclosure as well as influencing public opinion. Accordingly, the Company's Corporate Communications Department actively engages with a wide range of media organizations, linking the Company with the public.

Based on Toray's Information Disclosure Principles, the department provides fair and impartial information, even if it may cast the Company in a bad light, in a timely and appropriate manner. In fiscal 2023, Toray Group issued 178 press releases and carried out 244 interviews in response to media requests.

Related Information

> [Toray's Information Disclosure Principles](#)

Click [here](#) for the main initiatives for CSR Guideline 6, "Communication" in CSR Roadmap 2025.

CSR Activity Report (CSR Guideline Activity Reports) - Communication

Communication with Local Communities

Toray Group creates various opportunities for communication with people who live near its business sites. In fiscal 2023, the Group continued to [contribute actively to local communities](#).



Discussion with neighborhood representatives (Toray Industries, Inc. Gifu Plant)



Employee volunteers engaged in a clean-up and maintenance activity at a local city park (Toray Industries, Inc. Mishima Plant)



Visitors from a nearby junior high school learning about disaster preparedness [Toray Industries, Inc. Basic Research Center (Kamakura)]



Toray Nagoya Summer Festival held for the first time in four years – approximately 800 employees, their family members, and local residents participated (Toray Industries, Inc. Nagoya Plant)



Relief supplies donated to the earthquake-stricken areas of Gansu Province, China [Toray BlueStar Membrane Co., Ltd. (East Asia)]



Employees preparing Braille cubes for donation to social welfare organizations, enabling visually impaired children to learn Braille in a fun way (Toray Advanced Materials Korea Inc.)



Factory tour for fashion design college students [P.T. Century Textile Industry Tbk (Jakarta)]



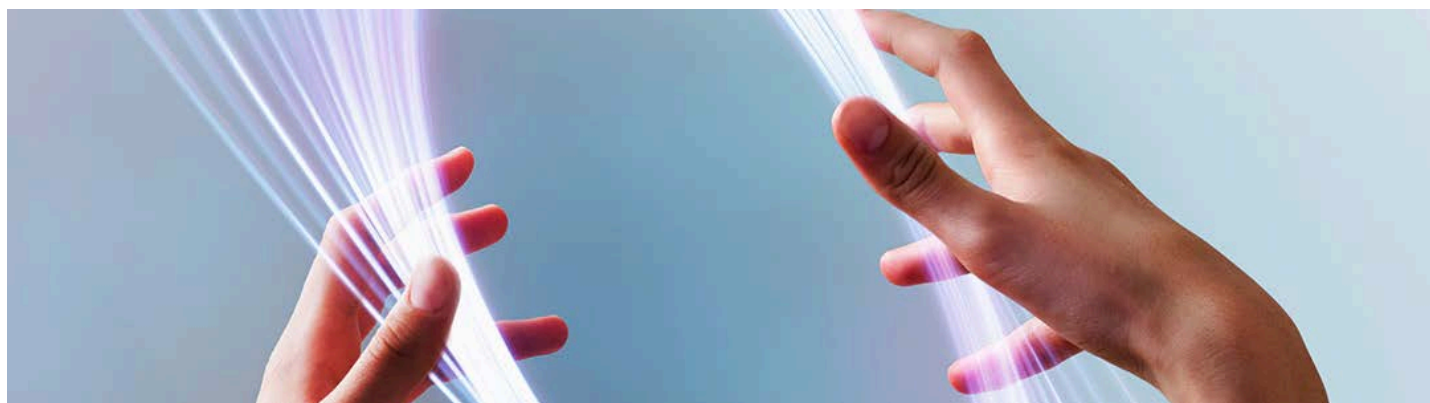
Donations and volunteering for the Day of Caring event, organized by a charity (Toray Composite Materials America, Inc.)



CSR Activity Report (CSR Guideline Activity Reports)

Contributing Solutions to Social Issues through Business Activities

Leverage innovation to provide solutions to various social issues such as climate change, resource and energy use, water resource and natural environment conservation, improvement of medical care, and promotion of public health, thereby contributing to sustainable development for society.



Basic Approach

Global environmental issues continue to become increasingly severe, marked by global warming, water scarcity, marine pollution, resource depletion, and loss of biodiversity. The world population is approximately eight billion, a number that is expected to surpass 10 billion by 2050. Meanwhile, developed countries as well as many emerging countries are expected to face rapid population aging, as average lifespans increase and birthrates decline. In the world of the 21st century, the most critical shared challenges are to resolve global-scale environmental issues and to provide healthcare that helps people lead healthy, independent lives, which involves delivering high-quality medical care that reduces the burden on both patients and medical staff.

In 2018 and 2020 respectively, the Group established and announced the Toray Group Sustainability Vision followed by the Long-Term Corporate Vision, TORAY VISION 2030 to clearly outline the world as envisioned by the Toray Group in 2050. The Group also set KPIs to be achieved by 2030 as long-term milestone targets. Under the Medium-Term Management Program, Project AP-G 2025, announced in March 2023, Toray integrated the Green Innovation and Life Innovation businesses, creating a Sustainability Innovation (SI) Business¹ to better meet diversifying sustainability needs. This is being promoted under the Sustainability Innovation (SI) Business Expansion Project.

With its SI business, Toray Group aims to help achieve “a net-zero-emissions world, where greenhouse gas emissions are completely offset by absorption” (in other words, a net zero emissions, carbon-neutral world), “a world where resources are sustainably managed,” “a world with a restored natural environment, with clean water and air for everyone,” and “a world where everyone enjoys good health and hygiene” as outlined in the Toray Group Sustainability Vision. Here are some specific examples of Toray initiatives in this business area. To accelerate efforts to combat climate change, the Group is expanding aircraft and automobile applications for its advanced materials and helping to reduce CO₂ emissions by improving fuel efficiency through vehicle weight reduction. It is also working to help society transition to renewable energy by supplying materials for wind and hydrogen power applications. For the sustainable, circular use of resources, the Group is also promoting initiatives for resource recycling and bio-technology. To help ensure safe water and air, it is proceeding with initiatives in areas such as water treatment membranes and air filters. Finally, the Group is expanding its products that support health, longevity, improved quality of medical care, and human safety, as well as help the elderly and home-care recipients to live more independent lives.

¹ Sustainability Innovation (SI) business: Businesses or material lines that can help realize the Toray Group Sustainability Vision.

Structure

To promote activities designed to achieve the Toray Group Sustainability Vision, the Group formulates and promotes medium- and long-term roadmaps and action plans under the SI Business Expansion Project and the Climate Change Project, addressing climate change and the need for circular economy creation. The Group is also managing progress toward achieving relevant numerical targets set for 2030.

Through these projects, Toray Group is contributing to the reduction of greenhouse gas emissions to help achieve a carbon neutral world, as well as promoting the reduction of Toray Group greenhouse gas emissions to become carbon neutral itself. The Group is also accelerating its resource recycling efforts, including recycling and the conversion of key polymers to biomass-based polymers, by developing and promoting group-wide strategies for the implementation of sustainable, circular use of resources.

Furthermore, the Group is examining and promoting an overall strategy to reduce its impact on biodiversity and natural capital.

The Board of Directors is supported by the Executive Committee, which serves as a council for deliberating key group-wide matters. The committee discusses project details, key policies, and important agenda items related to sustainability. Moreover, it collaborates with functional departments responsible for CSR, risk management, safety, health, and the environment, as well as research and technological development, to address sustainability challenges faced by the entire Toray Group.

The Board of Directors receives reports on these discussions from each functional department at least once a year and provides oversight and makes key decisions. When it comes to formulating business strategy and making management decisions, sustainability issues are a key consideration in the overall deliberations and decision-making.

For more information on the Toray Group governance structure related to the issue of climate change, please refer to the [Toray Group TCFD Report Ver. 2.1](#).

CSR Roadmap 2025 Targets

CSR Roadmap goals

Leverage Sustainability Innovation Business to address social issues by growing businesses based on the provision of innovative technologies and advanced materials, and by creating new technologies

Main Initiatives and Key Performance Indicators

	KPI
(1) Expand revenues from Sustainability Innovation Business	7-①
(2) Expand contribution to CO ₂ reduction in the value chain ²	7-②
(3) Expand water filtration throughput contribution by Toray's water treatment membranes ³	7-③
(4) Conduct a wide variety of product research and technology development to help build a low-carbon, circular economy	-
(5) Contribute to the utilization of biomass in and recycling of plastic products, the spread of renewable energy and hydrogen, and the reuse of water resources	-
(6) Contribute to countermeasures to public health risks, including infectious diseases, by developing and upgrading materials and products for personal protective equipment, as well as materials to protect environmental hygiene including of air and water	-

Key Performance Indicator (KPI)	Target			Fiscal 2023 Result
	Fiscal 2023	Fiscal 2024	Fiscal 2025	
7-① Revenues from Sustainability Innovation Business	1,600 billion yen (Fiscal 2025)			1,311.5 billion yen
7-② Contribution to CO₂ reduction in value chain	15 times compared to fiscal 2013 (Fiscal 2025)			10.3 times compared to fiscal 2013
7-③ Contribution of Toray water treatment products	2.9 times compared to fiscal 2013 (Fiscal 2025)			2.7 times compared to fiscal 2013

Reporting scope: Toray Group

2 Toray calculates the value chain CO₂ emissions reduced throughout the entire product lifecycle in accordance with the chemical sector guidelines of the Japan Chemical Industry Association, and the International Council of Chemical Associations (ICCA).

3 Water treated annually with Toray water treatment membranes. It is calculated by multiplying the amount of fresh water that the Toray membranes can produce per day, including reverse osmosis (RO), ultrafiltration (UF) and membrane separation bioreactors (MBR), by the number of membrane elements sold.

Related Materiality for CSR

- Accelerating Climate Change Mitigation
- Promoting a Circular Economy
- Taking a Nature-Positive Approach
- Committed to Healthier Lives
- Developing in Collaboration with Stakeholders

* Click [here](#) for CSR Roadmap 2025 from the perspective of materiality (PDF:392.4KB).

PDF

Looking to the Future

The consolidated revenue generated by the Sustainability Innovation (SI) Business in fiscal 2022 was 1.2828 trillion yen. For fiscal 2023, revenue increased by 2.2% year-on-year to 1.3115 trillion yen. In the carbon fiber composite materials business, while the wind turbine blade segment was affected by inventory adjustments, recovery in the aviation segment had a significant impact. The fiscal 2025 revenue target for this business is 1.6 trillion yen, with the aim of achieving an average annual growth rate of 7.6% compared to fiscal 2022. Along with business expansion, the contribution to CO₂ reduction in the value chain and the environmental contribution of Toray water treatment products have steadily increased.

Worldwide, a range of issues are becoming increasingly interconnected and serious. These include population growth and aging in many countries, as well as climate change, water shortages, and resource depletion. This is inducing a transition to more sustainable modes of production and consumption.

Initiatives will be implemented for moving to a circular economy where used products are recovered and regenerated to make new ones. This will enable a further transition from a mass production/mass consumption linear business scheme to business models such as PaaS (products as a service), sharing, product life extension, resource collection and recycling, and circulated supply chains.

In order to better respond to diversifying sustainability needs, the Group is promoting more vigorous expansion of products that can help achieve the aims outlined in the Toray Group Sustainability Vision. These include aims to achieve “a net-zero-emissions world, where greenhouse gas emissions are completely offset by absorption,” (in other words, a net zero emissions, carbon-neutral world) [CN domain⁴], “a world where resources are sustainably managed” [CE domain⁵], and “a world with a restored natural environment, with clean water and air for everyone” [NP domain⁶], and “a world where everyone enjoys good health and hygiene” [LI domain⁷].

⁴ CN domain: Defined as products that support energy conservation by reducing the weight of mobility and decreasing electrical loads; new energy source adoption, with a focus on renewable energy, mobility electrification, and hydrogen-related products; and the absorption and recycling of CO₂. Initiatives in this domain are mainly focused on energy conservation that utilizes lightweight materials and heat-blocking/insulating materials, as well as electrification and hydrogen-related materials.

⁵ CE domain: Defined as products to support recycling, biomass utilization, and valuable material separation and recovery. In this domain, the focus is primarily on promoting the recycling of key polymers such as PET and nylon, as well as the use of biomass-derived raw materials.

⁶ NP domain: Products for water treatment, air purification, and reducing environmental impact. The primary efforts are in water treatment membranes, as well as materials and alternative technologies for reducing pollution.

⁷ LI domain: Products for improving the quality of medical care, health, longevity, and human safety. The focus is on expanding businesses related to pharmaceuticals, medical devices, hygiene products, safety, and health.

Click [here](#) for the main initiatives and KPIs for CSR Guideline No. 7 “Contributing Solutions to Social Issues through Business Activities” during the CSR Roadmap 2025 period (fiscal 2023–2025).

CSR Activity Report (CSR Guideline Activity Reports) - Contributing Solutions to Social Issues through Business Activities

Sustainability Innovation Business Expansion Project

CSR Roadmap 2025
Main Initiatives (1)(2)(3)(4)(5)(6)

Revenues from Sustainability Innovation Business

■Reporting scope

Toray Group

■Target

1,600 billion yen (Fiscal 2025)

Fiscal 2023 Result

1,311.5
billion yen

The Toray Group mission is to deliver innovative technologies and advanced materials that provide real solutions to the challenges the world faces with balancing development and sustainability.

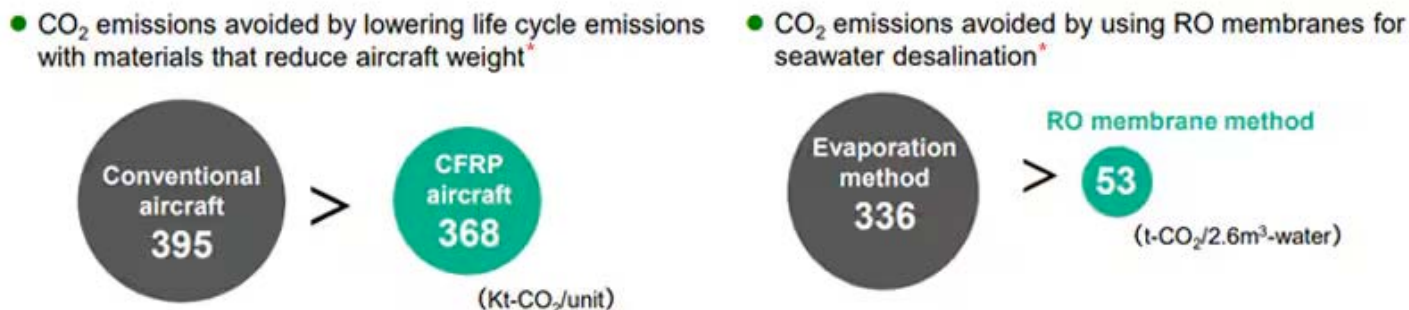
Under the Medium-Term Management Program, Project AP-G 2025, which began in fiscal 2023, the Group has combined its Green and Life Innovation businesses to create the Sustainability Innovation (SI) business, which it aims to further expand. In fiscal 2023, the SI business accounted for 53% of Toray Group's consolidated revenue. In fiscal 2023, Toray Group products helped to reduce CO₂ emissions¹ in the value chain by 395.29 million tons (10.3 times higher than in fiscal 2013) and added 73.00 million tons of water filtration² (2.7 times higher than in fiscal 2013).

Contribution to CO₂ reduction in value chain in fiscal 2023

395.29 million tons-CO₂

(10.3 times compared to fiscal 2013)

Volume of CO₂ emissions avoided through use of Toray products



* Figures in the circles above represent CO₂ emissions for the entire product life cycle.

Source: *Innovations for Greenhouse Gas Reductions*, Japan Chemical Industry Association (JCIA)

Contribution of Toray water treatment products in fiscal 2023

73.00 million tons

(2.7 times compared to fiscal 2013)

To achieve global carbon neutrality, greenhouse gas emissions must be reduced across entire supply chains. Accordingly, there is a growing demand for product carbon footprint data to be made available and for carbon levels to be reduced. The Group is undertaking a succession of product footprint calculations and has begun providing data to some business partners.

As part of efforts to address global environmental issues, it is important for companies to consider the entire life cycle of their products and services when deciding how to reduce environmental impact, while enhancing economic and social value at the same time.

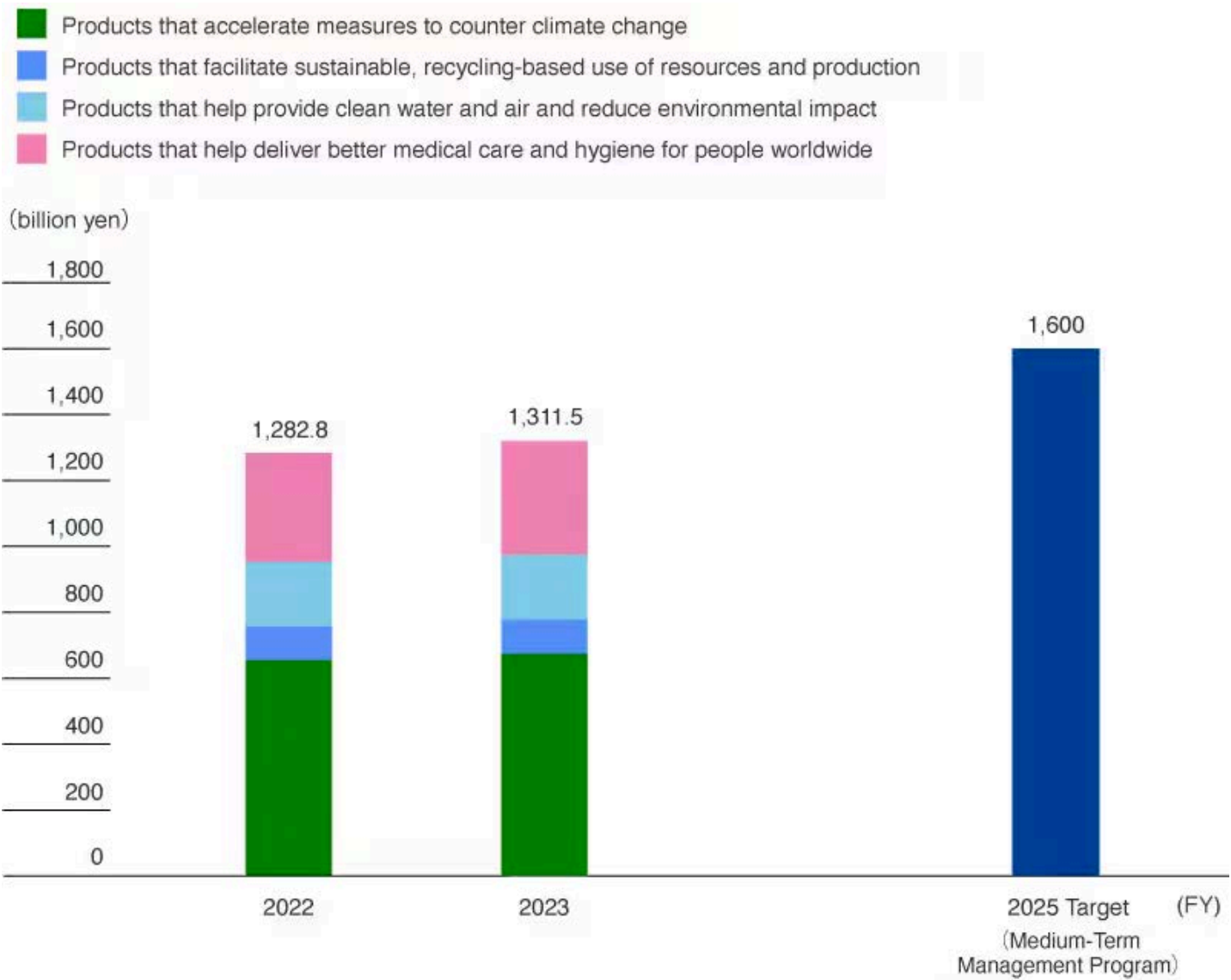
Toray Group has long promoted product life cycle management (LCM). The Group's aim is not only to achieve its own carbon neutrality, but to also help realize a carbon-neutral society through the reduction of greenhouse gas emissions across the entire supply chain.

¹ Toray calculates the value chain CO₂ emissions reduced throughout the entire product lifecycle in accordance with the chemical sector guidelines of the Japan Chemical Industry Association, and the International Council of Chemical Associations (ICCA).

In recent years, new calculation guidelines have been released by various organizations, and the Group is considering revision of its calculation method based on the updated standards.

² Water treated annually with Toray water treatment membranes. It is calculated by multiplying the amount of fresh water that the Toray membranes can produce per day, including reverse osmosis (RO), ultrafiltration (UF) and membrane separation bioreactors (MBR), by the number of membrane elements sold.

Net Sales (Revenue) from Sustainability Innovation Businesses (Toray Group)



Fiscal 2023 Initiatives for the Sustainability Innovation Business

Toray's SUMMER SHIELD™ Fabric Protects Participants at 5th All Japan Beach Volleyball U-23 Men's and Women's Select Championship

Beach Volleyball NEXT 2023, the 5th All Japan Beach Volleyball U-23 Men's and Women's Select Championship was held under the scorching sun at the Okura Coast beach park in Akashi City, Hyogo Prefecture. To help protect participating athletes and staff from the risk of heatstroke, shade canopies made from SUMMER SHIELD™ fabric were set up. On the day of the event, a trial was carried out to compare traditional canopies made of coated fabric and those made using SUMMER SHIELD™. The participants were able to experience the cooling effect of each canopy type, and surface temperatures were compared using a thermal camera.



Players taking a break under a SUMMER SHIELD™ canopy during a match

Toray Participates in the Net Zero Forum Shiga

Net Zero Forum Shiga was launched with the involvement of various stakeholders in Shiga prefecture. Its aim is to help achieve net zero emissions in the prefecture and enhance the quality of life for residents, while promoting sustainable development for the region and its economy. Toray Senior Director Toshiyuki Nonaka spoke at the forum. The event was attended by a diverse group, including business representatives, experts, and government officials. In his presentation, Mr. Nonaka highlighted Toray's net-zero activities. He also discussed global trends, changes in the industry, energy and CO₂ reduction initiatives, as well as movements in the plastics and food sectors aimed at circular economy creation. He emphasized the importance of inter-company collaboration across regions and diverse initiatives involving industry, government, and academia.



Toray Senior Director Toshiyuki Nonaka delivering his presentation

Click [here](#) for the main initiatives for CSR Guideline 7, "Contributing Solutions to Social Issues through Business Activities" in CSR Roadmap 2025.

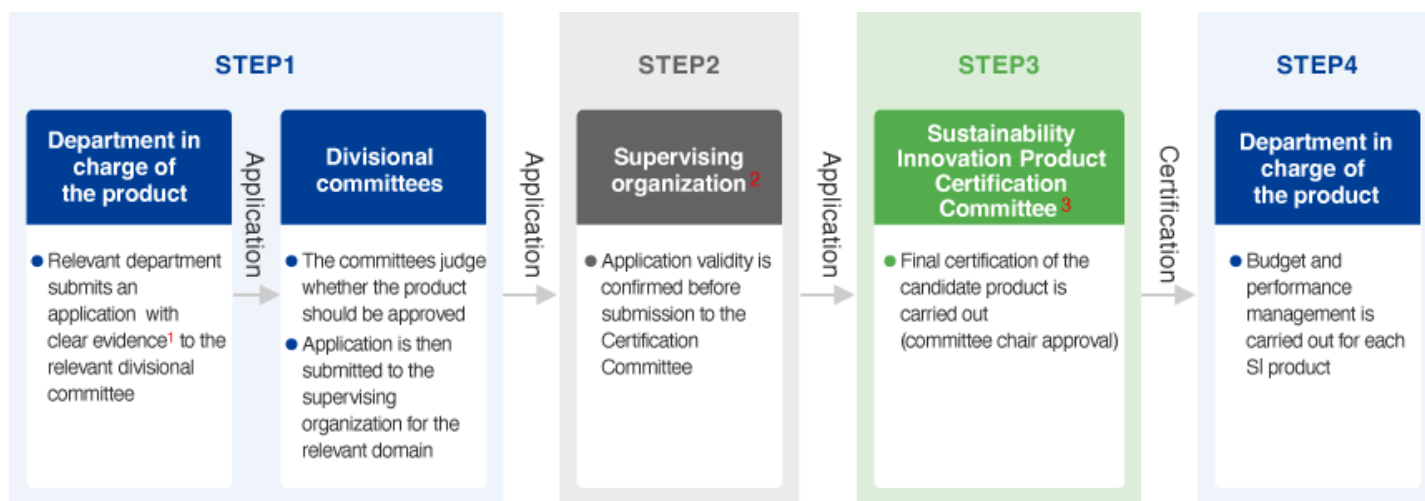
CSR Activity Report (CSR Guideline Activity Reports) - Contributing Solutions to Social Issues through Business Activities

Approach to Sustainability Innovation Products

CSR Roadmap 2025
Main Initiatives (1)(2)(3)(4)(5)(6)

Toray Group is contributing to society and reducing its own environmental impact through business activities, aiming to realize the four objectives outlined in the Toray Group Sustainability Vision. The Group defines its Sustainability Innovation (SI) Products as products and technologies that can help achieve the four priorities outlined in the Toray Group Sustainability Vision, namely, 1) products that accelerate measures to counter climate change, 2) products that facilitate sustainable, recycling-based use of resources and production, 3) products that help provide clean water and air and reduce environmental impact, and 4) products that help deliver better medical care and hygiene for people worldwide. To certify its SI products, the Group has established an SI Product Certification Committee, and products are certified according to the procedures shown in the diagram below. Based on a three-stage review process involving the relevant divisional committee, supervising organization, and the SI Product Certification Committee, SI products are certified based on objective assessment of their contribution to sustainability.

Sustainability Innovation Product Certification Process



¹ In addition to estimates of CO₂ emissions reduction attributable to the product, and details concerning the intended applications and materials used, analysis results data based on 1) a product life cycle assessment (a method for quantitatively evaluating environmental impacts throughout the entire life cycle of a product, from resource extraction and material and component manufacturing, to distribution, use, and disposal), as well as 2) a life cycle inventory (a list of environmental impact items and the relevant resource inputs and emission outputs over the life cycle of the product or service)

² Supervising organizations (domains of responsibility):

- SI Strategy Group, Corporate Strategic Planning Division (Carbon Neutral and Nature Positive)
- Environmental Solutions Department (Circular Economy)
- Sustainable Technology Department (Life Innovation)

³ Sustainability Innovation Product Certification Committee: The SI Business Expansion Project leader (committee chair: executive vice president for Corporate Sales & Marketing), senior vice president in charge of the Corporate Strategic Planning Division, executive officer in charge of the SI Strategy Group, general manager of the Corporate Marketing Planning Division, general manager of the Technology Center Planning Division, as well as external experts when necessary

Sustainability Innovation-Related Products and R&D Announced in Fiscal 2023

CSR Roadmap 2025
Main Initiatives (1)(2)(3)(4)(5)(6)

Toray Launches DEWEIGHT™ – A PFAS-free Stretch Textile with Outstanding Water Repellency

Toray Industries, Inc. has recently developed DEWEIGHT™ a stretch textile offering excellent water repellent performance without any PFAS (organic fluorine compounds, frequently called “forever chemicals”).

This newly developed material mimics the structure of highly water-repellent surfaces found in nature, such as lotus leaves and butterfly wings. By looking at the multiscale roughness of these natural surfaces, which feature micro- and nanoscale structures, Toray developed a fabric that allows water droplets to easily roll off the surface while providing a smooth, dry, and comfortable feel against the skin.

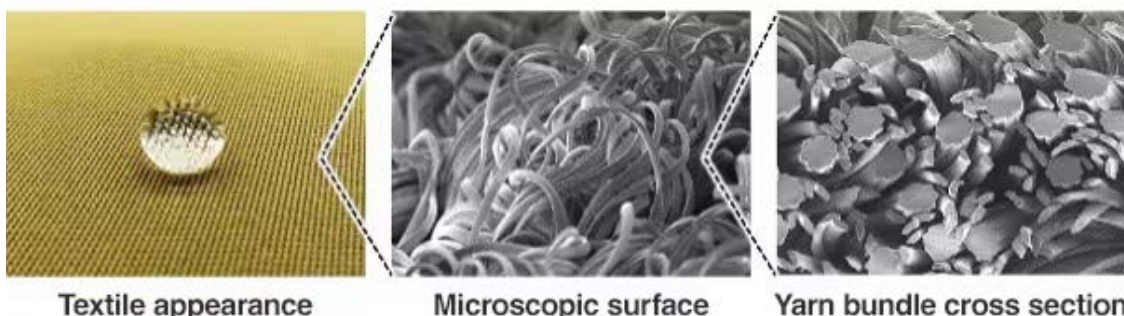
The new textile structure was achieved through the precise control of fiber cross-sections using new proprietary yarn and Toray’s special advanced processing technology (NANODESIG™)⁴ that creates two different types of spiral structures. This innovation delivers superior water repellency without using fluorine-based water repellents, which are coming under increasing regulation due to potential health hazards when they accumulate in the human body.

DEWEIGHT™ was developed to better meet customer desires, such as wanting to look stylish and feel comfortable even on rainy days. Going forward, there are plans to expand its application to everyday fashion, including everything from outerwear for both men and women, to pants and dresses.

DEWEIGHT

デューエイト

Brand logo



⁴ Website for conjugate spinning technology NANODESIGN™ : <https://www.nanodesign.toray/en/>

Toray Develops High-Durability Reverse Osmosis Membrane that is Expected to Improve Wastewater Reuse Efficiency, and Halve CO₂ Emissions

Toray Industries, Inc. has recently developed a high-durability reverse osmosis (RO) membrane that can produce high-quality water for extended periods while maintaining treatment performance, which makes it suitable for reusing industrial wastewater and treating sewage. The new membrane offers double the resistance to cleaning chemicals compared to conventional products. This is expected to reduce performance degradation due to membrane deterioration and simplify operational management, thereby halving replacement frequencies and shrinking the product’s carbon footprint.

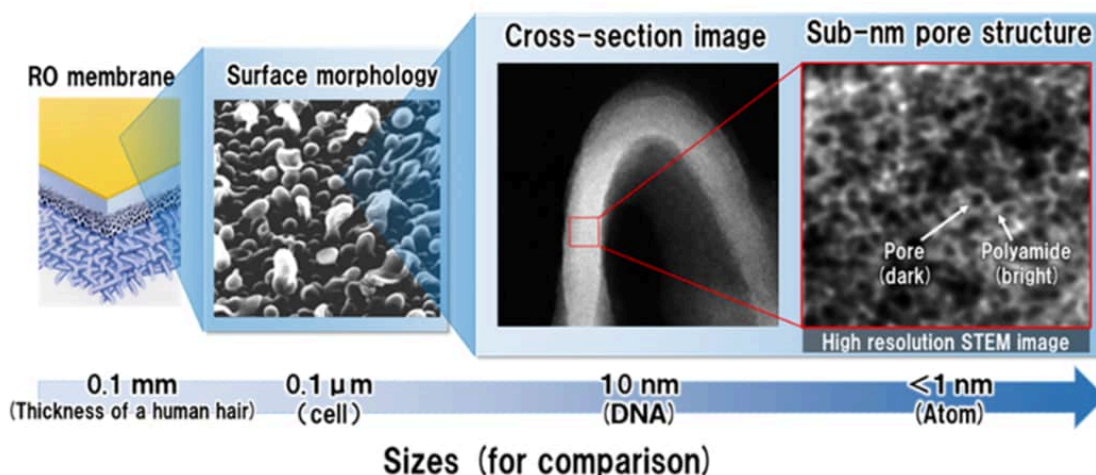
The broad applications of RO membranes include desalinating seawater and river water, reusing wastewater, and producing drinking water as a technology to ensure sustainable water sources.

In the field of wastewater reuse, cleaning chemicals are being used more frequently to maintain filtration

performance, leading to membrane pore deformation, which in turn lowers contaminant removal performance. This has spurred demand for more durable RO membranes.

The company combined scanning transmission electron microscope (STEM)⁵ technology developed by the Toray Research Center with a digital data analysis technique to quantitatively analyze the pore structure of the separation layer of RO membranes. These pores are smaller than one nanometer (a billionth of a meter) in diameter. Toray drew on the analysis to identify a substructure that helps enhance pore structure stability when in contact with cleaning chemicals. It then designed a new polymer structure to create an RO membrane that delivers a stable pore structure.

Results of RO membrane structural analysis



Toray tested its new RO membrane at a wastewater reuse plant to simulate harsh chemical cleaning conditions. The membrane proved effective in reducing deterioration by half in the quality of obtained water. By offering an extended lifespan, the new RO membrane can halve associated CO₂ emissions based on less frequent membrane replacement and disposal. This is particularly beneficial in applications such as wastewater reuse in facilities that require frequent chemical cleaning, like sewage treatment plants, as well as chemical, steel, and dyeing factories. It is also useful when implementing a Zero Liquid Discharge (ZLD)⁶ environmental management strategy.

⁵ Scanning Transmission Electron Microscope (STEM): A device that scans a sample using an electron beam while detecting transmitted electrons to obtain high-resolution images. It enables the analysis of the sample's elemental composition and atomic-level structural information.

⁶ Zero Liquid Discharge (ZLD): A framework for water reuse by ultimately discharging only solid waste with concentrators and crystallizers after RO membrane and other treatment, eliminating environmental or sewage releases of wastewater from factories and other facilities.

Toray Launched Toray APOA2-iTQ- Insurance-Covered *In Vitro* Diagnostics Kit for Aiding the Diagnosis of Pancreatic Cancer

Toray Industries, Inc. launched Toray APOA2-iTQ in Japan on February 22, 2024. This *in vitro* kit aids with pancreatic cancer diagnosis. Insurance coverage for the kit in Japan began on February 1.

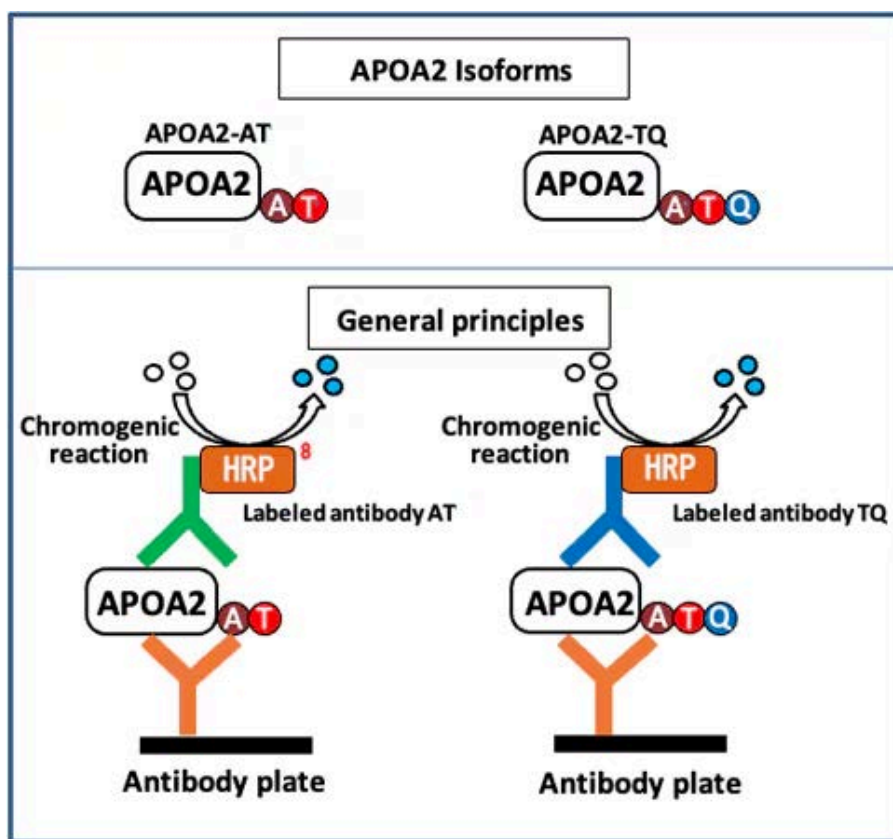
As it uses blood-based diagnostics, the kit is more easily accessible to a greater number of people. It measures substances other than conventional tumor markers and is expected to promote early detection of pancreatic cancer, which had gone undetected in the past.



Toray APOA2-iTQ diagnostics kit

Professor Kazufumi Honda of the Graduate School of Medicine of Nippon Medical School discovered that the quantitative ratios of APOA2-AT and APOA2-TQ⁷ change in the blood of people with pancreatic cancer. Using these research results, Toray Industries independently developed an assay reagent using antibodies that recognize each of the terminal structures of the two APOA2 isoforms. It collaborated with the National Cancer Center and the Graduate School of Medicine of Nippon Medical School, leveraging research findings from the Japan Agency for Medical Research and Development. In June 2023, Toray obtained marketing approval for an *in vitro* diagnostic kit using that antibody that it has decided to launch.

The principle of this kit is to detect structural changes in APOA2 isoforms resulting from pancreatic exocrine function abnormalities from tumors and other causes. Since this principle differs from that of existing methods that detect tumor markers in the patient's blood such as CA19-9, the new kit is considered complementary to methods based on CA19-9. The kit could thus offer early detection of pancreatic cancer patients that eludes identification with conventional techniques.



⁷ APOA2 Isoforms (APOA2-AT and APOA2-TQ): Apolipoprotein A2 is a major component of high-density lipoprotein (HDL), and is a protein composed of 77 amino acids. APOA2-TQ has a terminal sequence of “alanine (A) - threonine (T) - glutamine (Q),” and truncation of the terminal glutamine results in APOA2-AT, with a final sequence of “alanine (A) - threonine (T).” In healthy individuals, APOA2-AT and APOA2-TQ are present at constant concentrations. In many pancreatic cancer patients however, one or both types of APOA2- isoforms decrease, leading to changes in their relative proportions. With the new diagnostic kit, the concentrations of the two types of APOA2 isoforms (APOA2-AT and APOA2-TQ) in blood plasma are measured separately.

⁸ Horseradish Peroxidase (HRP): An enzyme found in horseradish. Antibodies tagged with this enzyme are used to detect the target protein indirectly through a colorimetric reaction.

CSR Activity Report (CSR Guideline Activity Reports) - Contributing Solutions to Social Issues through Business Activities

Realizing a Circular Economy

CSR Roadmap 2025
Main Initiatives (1)(2)(4)(5)

As a manufacturer of a wide range of materials, Toray Group has been promoting various recycling initiatives to ensure that the earth's resources are efficiently utilized.

In the Toray Group Sustainability Vision, the Group outlines “a world where resources are sustainably managed,” as one of the perspectives of the world as envisioned in 2050. Conventional societies face a variety of problems, including the depletion of resources, marine pollution caused by large amounts of waste, and CO₂ emissions. In order to solve these problems and realize a sustainable, circular economy that makes effective use of resources, the Group facilitates recycling of discarded plastic products and process remnants, switching to biomass for raw material, adopting renewable energy and hydrogen, and reusing water, across its various technologies.

In its Medium-Term Management Program, Project AP-G 2022, Toray Group identified helping to build a circular economy as a key issue. An initiative example in this area is material recycling¹, which enables the reuse of discarded products and process remnants, such as fibers/textiles, resins, and films. In addition, chemical recycling², which converts products that are difficult to mechanically recycle back into basic chemicals such as monomers and gases, is already implemented for nylon fiber/textile products.

Toray Group is also working to develop materials that use bio-based instead of fossil resources, and membrane-integrated bioprocess technology, which efficiently produces these raw materials. Moreover, with an eye to the future, the Group is promoting research and development into carbon recycling, including ways to utilize CO₂ as a resource. Toray technology is also used in the materials for the wind turbine blades and hydrogen production equipment that utilize renewable energy sources to generate electricity and hydrogen used in manufacturing processes, as well as in the water treatment membranes for the reuse of wastewater.

Under the Medium-Term Management Program, Project AP-G 2025, launched in fiscal 2023, Toray Group has set out helping to build a circular economy as an important objective. Accordingly, the Group aims to improve the value of its products and businesses by promoting further R&D. Additionally, Toray has identified the opportunities and risks associated with the transition to a circular economy as follows.

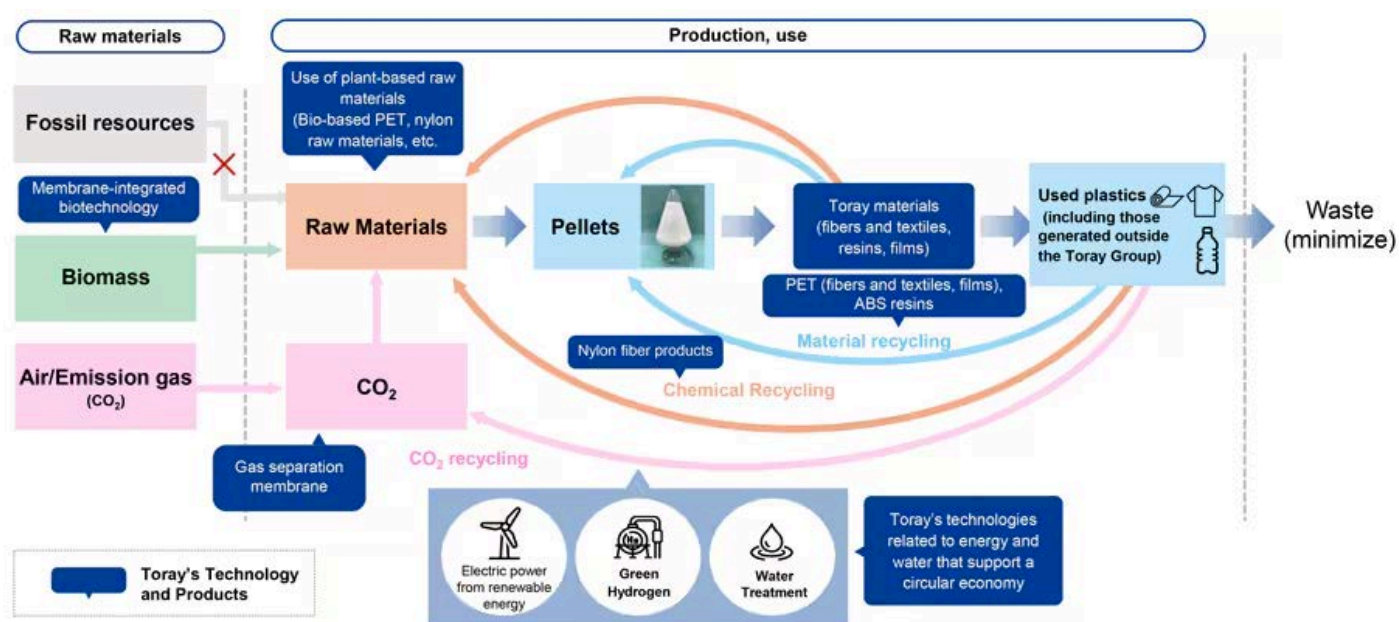
Opportunities

- Growth of biomaterials business
- Growth of recycled materials business
- Growth of businesses that help reduce waste (waste reduction, and product durability)

Risks

- Increased cost of waste processing
- Contraction of the materials market due to a shift away from mass production and consumption
- Lost opportunities due to any delay in adapting to the circular economy

In order to reduce the risks and maximize the opportunities, the Group intends to promote the use of biomaterials and recycling as outlined below. In promoting these, Toray is also helping to create systems that can lay the foundation of a circular economy. These efforts include not only Toray Group's own activities, but also collaboration with recyclers (e.g. PET bottle recycling with Kyoei Industry Co., Ltd., and discarded fishing net recycling with Refineverse Group, Inc.), and collaboration with customers (e.g. fishing net-to-net recycling with Nitto Seimo Co., Ltd. and Maruha Nichiro Corporation, as well as technical demonstration of subcritical depolymerization of automobile parts with Honda Motor Co., Ltd.).



- 1 Material recycling is a recycling process that uses heat to convert discarded plastic (PET) bottles and products as well as remnants produced during manufacturing processes into chips, which are then used to make yarn, staple fiber, film, resin, and other materials.
- 2 Chemical recycling is a recycling process that breaks down through depolymerization used products and remnants produced during manufacturing processes into monomers that are manufactured back into chips and then recycled into yarn, staple fiber and other materials.

Toray Group's target percentage of raw materials sourced from biomass and other recycled is 20% to be achieved by fiscal 2030 for core polymers (polyester and nylon). The actual rate in fiscal 2022 was only a few percent, and to achieve the 2030 target the Group will continue to promote recycling and the switch to biomass for raw materials.

As part of its efforts to promote recycling and the use of bio-based materials, Toray Group has adopted the mass balance approach³. The following Toray companies and sites have obtained ISCC PLUS certification, an internationally recognized system to verify proper use of the mass balance approach by companies.

- Toray Industries, Inc. (Ehime Plant, Okazaki Plant, Tokai Plant, Nagoya Plant, Chiba Plant)
- Toray Advanced Materials Korea Inc.
- Toray Plastics (America), Inc.
- Toray Plastics (Malaysia) Sdn. Berhad
- Toray Films Europe S.A.S.
- Toray Carbon Fibers Europe S.A.
- Delta-Preg S.p.A.
- Toray Celanese Co., Ltd.



Gunsan Plant, a production site for PPS resin (Toray Advanced Materials Korea Inc.)

- Toray International, Inc.

The ISCC PLUS certification system ensures appropriate management and traceability for production using biomass or recycled materials, based on the mass balance approach, as part of a global supply chain. Certified sites are able to allocate and use bio-based or recycled materials according to the mass balance approach and produce and supply products with verifiable levels of sustainability.

Toray Industries is committed to following the latest ISCC regulations and declares its conformity to the ISCC PLUS requirements.

3 Mass Balance Approach: During the processing and distribution stages from raw material procurement to finished product delivery, materials with specific characteristics (e.g., biomass-derived raw materials) are often mixed with materials without those characteristics (e.g., petroleum-derived raw materials). The mass balance approach is a method for reliably allocating the characteristics of specific raw materials to a portion of the finished product based on the input amount of those raw materials.

Related Information

For more information on Toray Group waste reduction, chemical management, energy conservation, and climate change measures, please visit the website below.

> [Safety, Accident Prevention, and Environmental Preservation](#)

Recycling Activity Principles Established in March 2004

1. We shall design, produce, and sell products that reduce our impact on the environment.
2. We shall purchase and use materials and products which will help reduce our impact on the environment.
3. We shall disclose information related to recycling programs and recycled goods.
4. We shall voluntarily cooperate with customers to recycle or otherwise appropriately dispose of our products.

Biomaterials Business

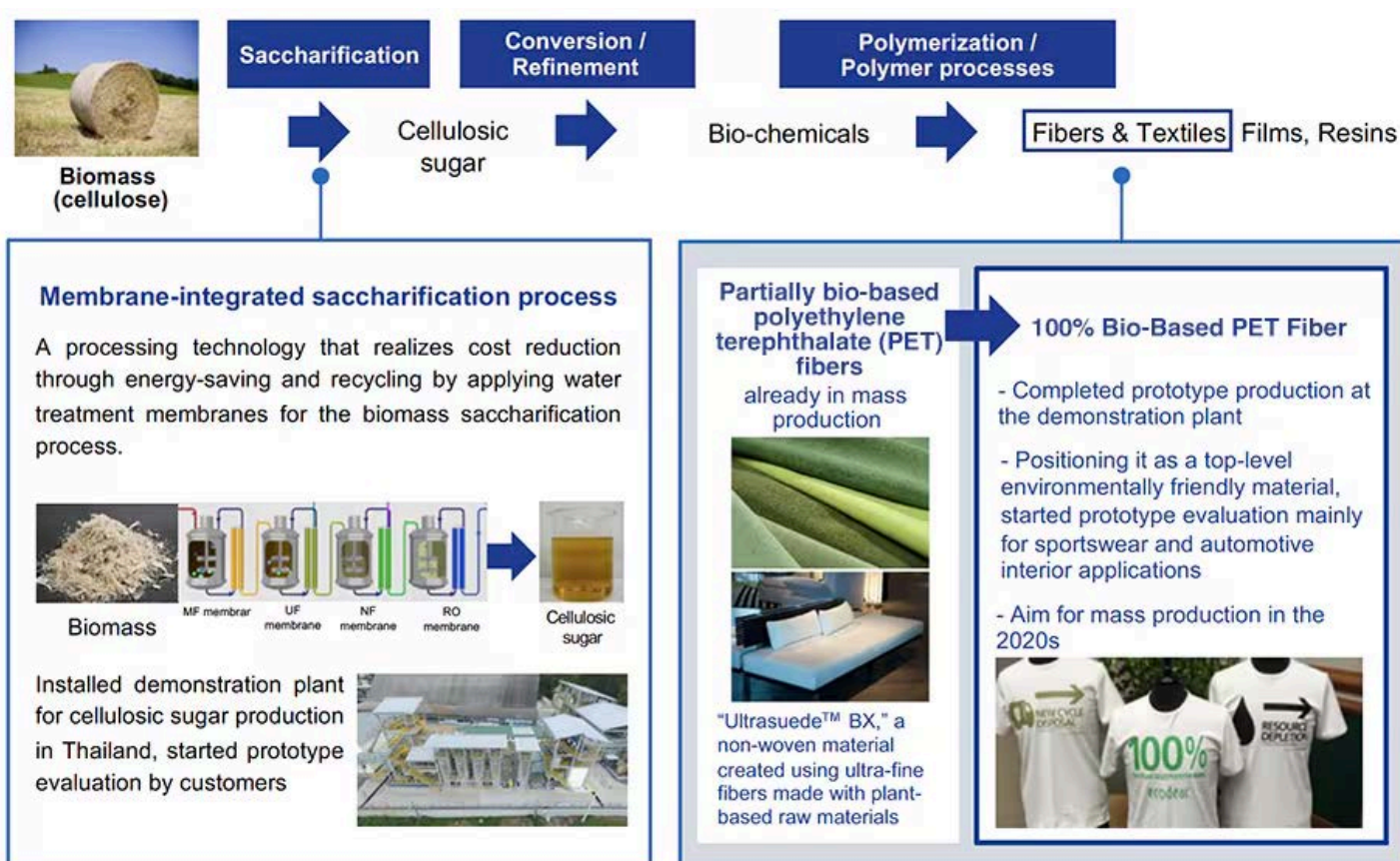
CSR Roadmap 2025
Main Initiatives (1)(2)(4)(5)

Toray Group is promoting initiatives related to biomaterials under a unified brand, Ecodear™. It is developing these products using raw materials derived from biomass-based resources rather than fossil resources. For example, Toray Group mass produces partially bio-based polyethylene terephthalate (PET) fibers that are made from plant-based ethylene glycol, derived from molasses byproducts. These fibers are also used to make Ultrasuede™ PX and Ultrasuede™ BX synthetic suede texture fabrics. Toray Group is also proceeding with prototype sales of bio-based PET fiber, in which both of the main raw materials, ethylene glycol and terephthalic acid, are derived from biomass resources. At the same time, it is developing membrane-integrated bioprocesses for the in-house production of biomass-based raw materials. In the field of nylon fibers, the Group has recently developed and launched Ecodear™ N510, a nylon fiber made from 100% plant-based raw materials. In collaboration with Yoshida Co., Ltd. and ISSEY MIYAKE Inc., this fiber has been utilized for bags and clothing in the TANKER series and in the STRINGS lineup, respectively.

PET Fiber Made Using Bio-based Main Ingredients, Membrane-Integrated Bioprocesses

Toray Group produces a bio-based PET material using ethylene glycol made from waste molasses and terephthalic acid obtained from bio-para-xylene produced at its pilot plant. It is positioning this material as one of its top environmentally conscious products. Toray Group seeks to launch mass production of these materials for sportswear and automotive interior applications as early in the 2020s as possible.

Toray Group is also developing a membrane-integrated bioprocess to enable bio-based raw materials to be manufactured with greater efficiency. This membrane-integrated bioprocess combines membrane separation technology and biotechnology to create new applications for water treatment membranes in processes such as saccharification, fermentation, and purification. The technology significantly improves the manufacturing of raw sugar from non-edible biomass and increases fermentation efficiency, thereby contributing to realizing biomaterials made from biomass-based raw materials. Toray Group is currently operating a technology demonstration project for a saccharification process that produces sugars from nonedible biomass. Toray Group will work to commercialize the technology, in order to build a supply chain that produces materials and chemicals from non-edible biomass.



Toray Group is promoting recycling initiatives across a wide range of business segments including fibers & textiles, plastics, and films. The Group works with fibers derived from recycled plastic (PET) bottles and production scrap ends, recycled resin made from scrap ends and used plastics, as well as films made by recovering and recycling films that have been used in customer processes.

In the fiber/textile segment, Toray Group uses discarded PET bottles as raw materials, along with filtering and cleaning technologies to remove foreign matter, making it possible to develop a wide variety of recycled products. In 2019, Toray Group introduced the &+TM (“And plus”) brand of recycled fibers that include Toray’s original traceability function. After rebranding in April 2023, the Group added recycled fiber products made using nylon recovered from discarded fishing nets to the &+TM brand. As a recycled material brand, &+TM advocates consumer and organizational participation from the very beginning of the recycling process, the collection of recyclable items, encouraging them to support and take part in Toray’s recycling efforts.

By utilizing waste fibers, resin, and film, the Group is promoting initiatives to create systems that recycle materials for various uses.

Fiber and Textile Recycling

&+TM Recycled Fiber Brand

Previously, fibers derived from recycled PET bottles were limited in variety due to contaminants mixed into raw materials, which made it difficult to produce special cross-sections and fine fibers. In response, Toray Industries together with Kyoei Industry Co., Ltd. developed contaminant filtering technology and advanced plastic bottle cleaning techniques to stabilize the supply of high-quality raw materials. Combining these technologies with Toray’s fiber production technology, it is possible to achieve the same level of diversity in fabric applications as with fiber materials made directly from fossil resources. Moreover, Toray has commercialized its highly reliable polyester fiber under the &+TM brand by incorporating its proprietary traceability technology that can detect special additives premixed in with plastic bottle-based raw materials. In January 2020, Toray Industries began full-scale sales of &+TM brand products. Going forward, the goal is to expand the scale of the brand by utilizing a diverse supply chain that includes textiles and sewn products, as well as fibers, and involves production sites around the world. The Group is also creating a unique recovery scheme for discarded fishing nets in collaboration with a recycling company and a fishing net manufacturer. The nylon in the recovered nets will be used for a newly released recycled nylon fiber material sold under the &+TM brand. Through the production and sale of high-value-added recycled nylon fiber based on Toray’s chemical recycling technology, the Group aims to raise awareness of the need to help recover discarded fishing nets and is working to further promote the activity. The Group also intends to expand its recycled fiber material lineup to enable product planning that will further satisfy the needs of consumers.

> [&+TM \(product site\)](#)

Promoting Recycling with UNIQLO Co., Ltd.

Together with UNIQLO Co., Ltd., Toray Industries is promoting new initiatives for sustainable products, with Toray supplying fibers derived from PET bottles for some of UNIQLO’s quick-drying wear DRY-EX brand polo shirts

starting in 2020.

In addition, UNIQLO stores are collecting used down items from customers to recycle the feathers. Conventionally, the stuffing in duvets and other objects incorporating down is manually removed. Such processes are arduous with Ultra Light Down items because of their thin outer fabric and complex construction. By developing special extraction machinery, Toray Industries has fully automated cutting, stirring and separating, and recovery, for 50-fold the process capacity of manual processes, thus greatly alleviating workloads. Toray and UNIQLO are jointly developing new recycling-based down products from recycled feathers.

Resin Recycling

CSR Roadmap 2025
Main Initiatives (1)(2)(4)(5)

Toray Group is developing sustainable resin materials through recycling and the use of bio-based raw materials. In the area of resin recycling, the Group is developing and distributing recycled resins based on a proprietary formulation design using material and chemical recycling (depolymerization chemical recycling), which breaks down polymers into monomer raw materials before re-polymerizing them.

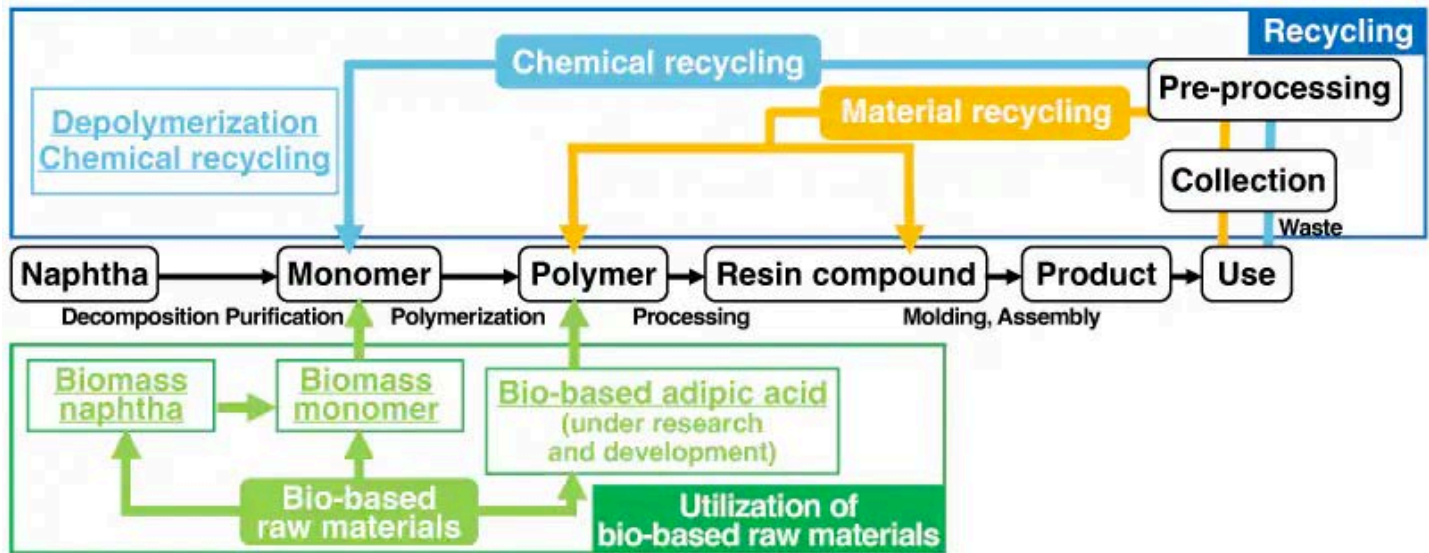
Going forward, Toray will actively work to recycle resin using post-consumer material for recycling, thereby promoting sustainable resource utilization.

Furthermore, Ecouse™, a group-wide unified brand for recycled materials and products, will be expanded to include resins, and the development of the Ecouse™ series of environmentally friendly resin materials will be accelerated.

1. Recycled Nylon 6 Resin “Ecouse” AMILAN™: Toray Industries and Honda R&D Co., Ltd. have begun a joint development project for chemical recycling of automotive nylon 6 resin. This project focuses on a chemical recycling technology that uses subcritical water to depolymerize glass fiber-reinforced nylon 6 resin parts recovered from scrap vehicles, thereby producing the raw monomer caprolactam. Toray and Honda have developed this technology to leverage the high permeability, dissolving power, and hydrolytic capabilities of subcritical water, and have succeeded in using it to depolymerize nylon 6 resin. As a form of high-temperature, high-pressure water, subcritical water can depolymerize nylon 6 without the use of catalysts. There are no additive effects, and it generates a high yield of raw monomer in less than half an hour. After the raw monomer is separated and purified for repolymerization, the resulting recycled nylon 6 has physical properties equivalent to those of virgin material.
2. Recycled nylon 66 “Ecouse” AMILAN™: Toray has developed a recycled nylon 66 resin compound that is made by removing silicone from airbag fabric scrap cuttings, and then washing the remaining material. With Toray’s proprietary additive compounding technology, residual silicone resin is prevented from migrating to the surface of molded products, and mold adhesion is also significantly reduced. Accordingly, the flowability and mechanical properties of recycled nylon 66 “Ecouse” AMILAN™ are on par with injection molding grades derived from virgin raw materials.
3. Recycled PBT resin (polybutylene terephthalate) “Ecouse” TORAYCON™: Toray has launched a recycled PBT resin, “Ecouse” TORAYCON™, as a chemically recycled resin with physical properties comparable to virgin materials.
4. Recycled PPS (polyphenylene sulfide) resin “Ecouse” TORELINA™: Toray has developed a material recycling technology for glass fiber reinforced PPS resin.

In the area of bio-based raw material use, Toray has established a supply system for biomass-based acrylonitrile butadiene styrene (ABS) resin, bio-based polyphenylene sulfide (PPS) resin, and chemically recycled PPS resin (ISCC PLUS certified) using the mass balance approach.

Resin Resource Recycling Initiatives

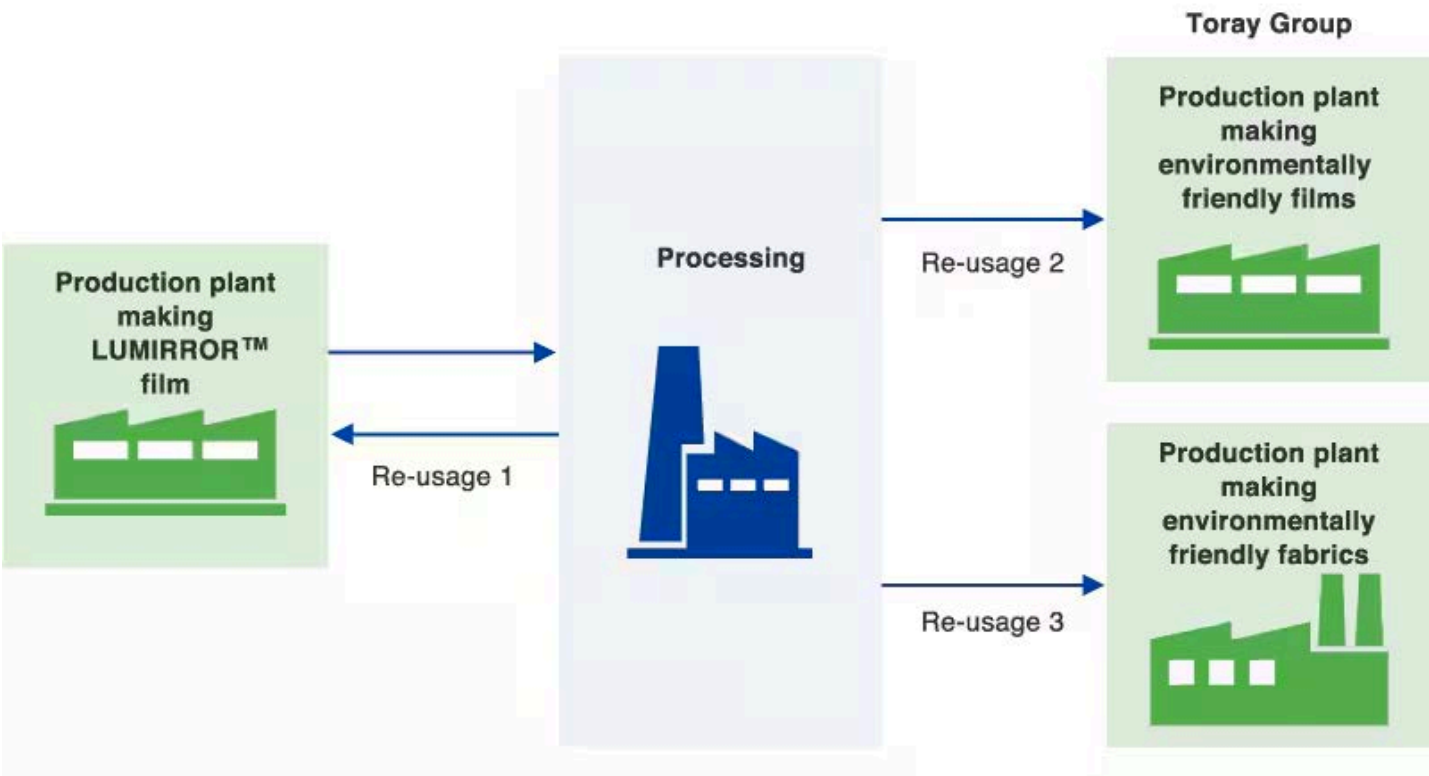


Film Recycling

CSR Roadmap 2025
Main Initiatives (1)(2)(4)(5)

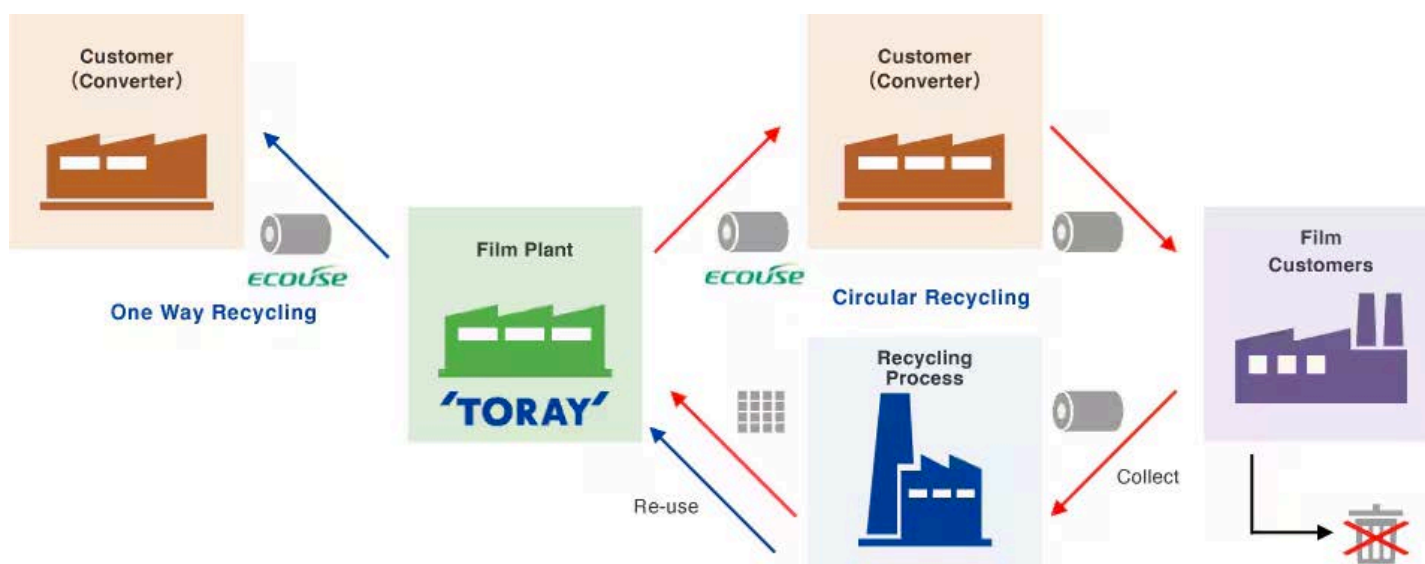
Toray Industries is promoting production activities that use resources carefully. PET plastic generated as waste in PET film LUMIRROR™ manufacturing and other processes is collected and re-pelletized for use in making textiles and resin products and film. In addition, the Company operates a system for collecting used PET film from customer manufacturing processes, and then recycling it as raw material for film.

Processing and Re-using Recovered Raw Materials Generated from Manufacturing Processes



Reusing waste PET film from customer manufacturing processes

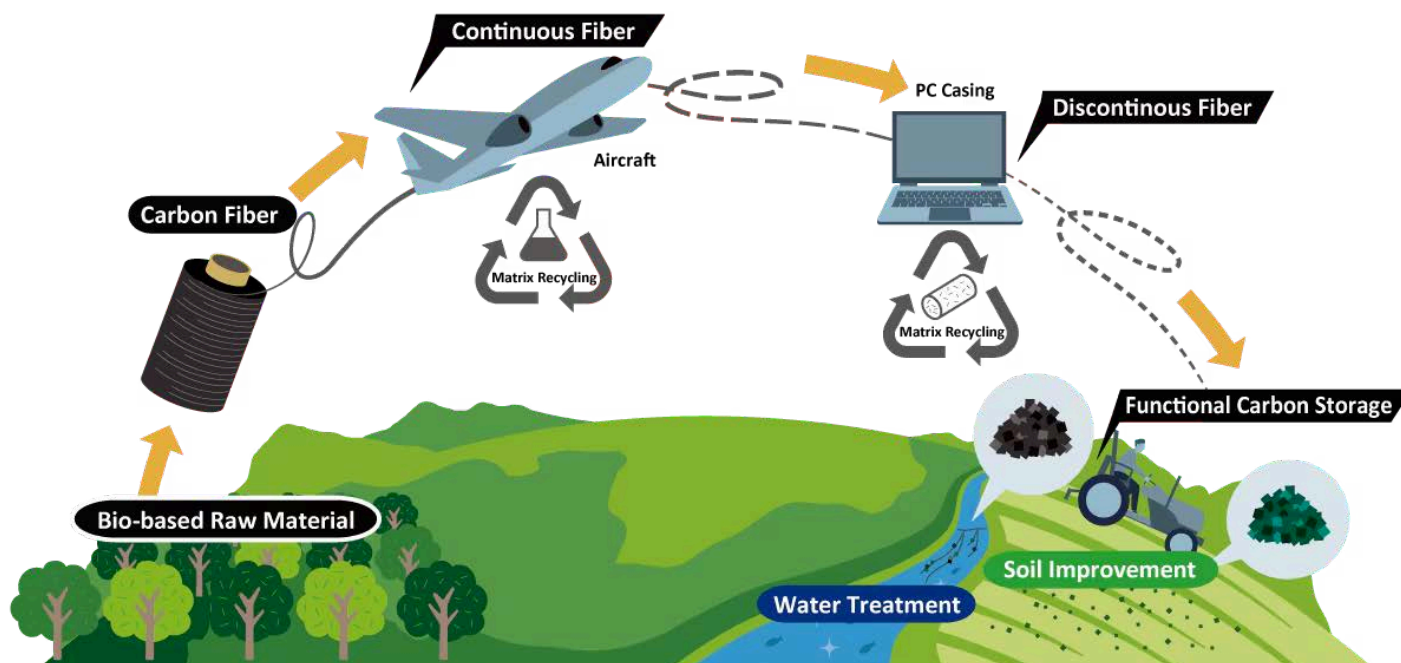
Toray Industries has established a recycling system to collect used films from electronic component applications and recover them for use in producing films, launching the Ecouse™ series, which is helping to create a world where resources are managed sustainably. The company combined mechanical recycling process technology, which removes coating materials and resins from film surfaces, with foreign matter removal techniques for each manufacturing process to enable reuse of the recovered materials in films without impairing mechanical characteristics or reliability. These PET films have reduced the amount of fossil-based resin used as a raw material and can therefore lower CO₂ emissions by up to 50% compared to conventional films. The Company will continue to make use of this system to help build a circular economy.



Carbon Fiber Recycling

CSR Roadmap 2025
Main Initiatives (1)(2)(4)(5)

Carbon fiber, with its excellent mechanical properties, provides products that are lighter in weight and have longer lives. Carbon fiber also contributes to the reduction of CO₂ emissions throughout the product's lifecycle, helping to solve global environmental issues. In particular, the use of carbon fiber in environmental products such as large wind turbines, aircraft, and hydrogen tanks significantly reduces CO₂ emissions during their operation. As demand grows, market expectations for the development of carbon fiber recycling technologies are also on the rise. The successful development of recycled carbon fiber (rCF) and associated applications requires collaboration with a wide range of customers to explore various possibilities for use in specific parts and materials. Toray carbon fiber is applied in the primary structures of the Boeing 787. Off-cuts generated during this production process are turned into rCF, which Lenovo has utilized to make casings for its computers. rCF based on waste CFRP during the production process of Boeing 787 wings is utilized in Lenovo PC casing. Toray Industries also produces non-woven rCF fabric by recycling scrap material from aircraft manufacturing. This fabric has been applied in components of a solar racing car for the Tokai University Team. In collaboration with partners, Toray is accelerating product development using rCF, with the aim of realizing a circular economy for carbon fiber. Carbon fiber offers higher resistance to heat and ultraviolet light and absorbs less moisture than other organic materials. Moreover, carbon fiber can also be produced from bio-based raw materials. By leveraging these strengths, Toray Industries aims to build a "Material Eco SYSTEM" for carbon fiber.

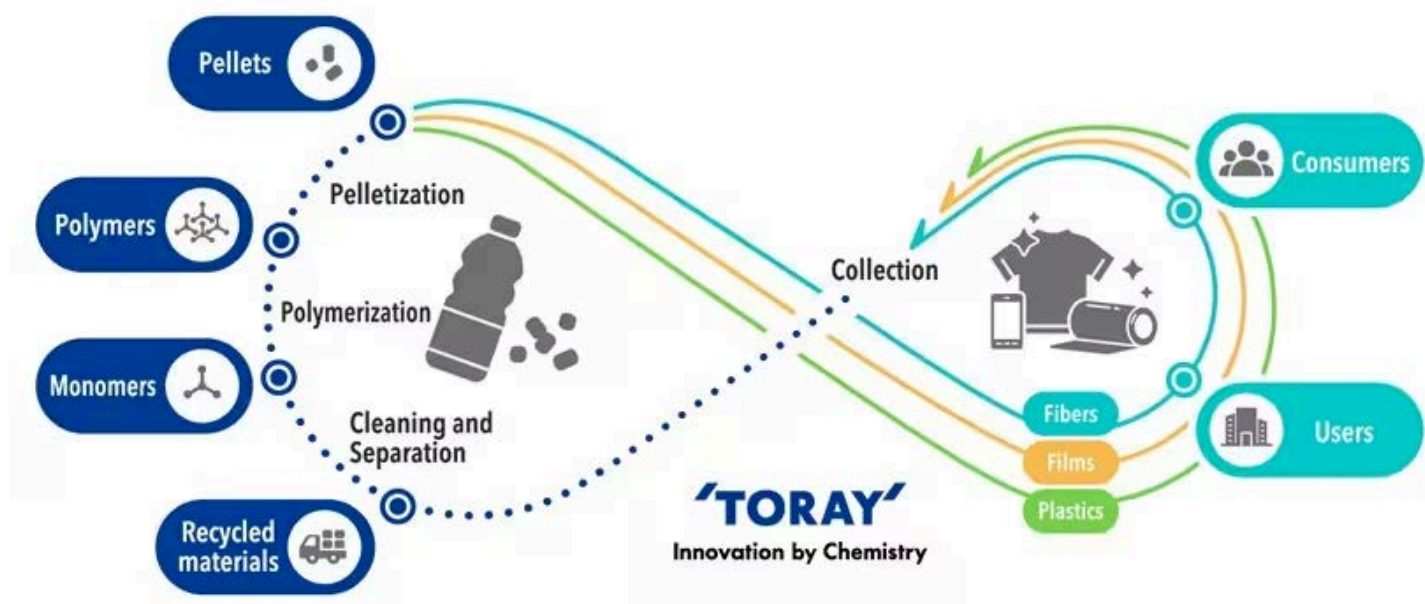


Blockchain-based Traceability

CSR Roadmap 2025
Main Initiatives (1)(2)(4)(5)

Since recycled materials basically have the same physical properties as virgin materials derived from fossil resources, traceability is important for assuring customers that the material has actually been recycled. Therefore, Toray is using blockchain technology to create a traceability system based on manufacturing and transport data from the supply chains of Toray Group products. The technology prevents input data from being tampered with. This system has been set up as a small-scale demonstration.

Blockchain-based Traceability System



Click [here](#) for the main initiatives for CSR Guideline 7, "Contributing Solutions to Social Issues through Business Activities" in CSR Roadmap 2025.

CSR Activity Report (CSR Guideline Activity Reports)

Human Rights Promotion and Human Resources Development

Respect human rights, provide safe and healthy workplaces for employees, secure and train personnel, and diversify while striving to protect employment.



Basic Approach

Committed to Human Rights

At Toray Group, respect for human rights is a mandatory management principle for ensuring the continuity of corporate activities and building positive relationships with all of the Group's stakeholders. The Group works to promote and raise awareness of human rights, for instance by declaring its commitment to the respect of human rights in its Corporate Guiding Principles and Ethics & Compliance Code of Conduct. In the Code, discrimination of any kind based on race, creed, skin color, gender (including gender identity and sexual orientation), religion, nationality, language, disability, physical characteristics, socioeconomic status, place of birth, or any other personal characteristic is strictly forbidden in every process from recruiting and hiring to work placement, compensation, training, and retirement. Furthermore, wages and working hours are set in accordance with the relevant laws and regulations in the country or jurisdiction concerned.

Moreover, Toray Group has selected “respecting human rights and promoting human resource diversity” as a material CSR issue. The Group respects internationally recognized human rights and works to create workplaces where diverse human resources can demonstrate their creativity and thrive.

The Ethics & Compliance Code of Conduct stipulates that harassment must never be tolerated in the workplace, including sexual, and power harassment. In addition, Toray Industries has established Guidelines for Preventing Harassment in the workplace and informs officers and employees of the policy and prevention management system that does not allow sexual harassment, pregnancy-based harassment, and power harassment.

Toray Group has been tackling the issue of discrimination based on self-acknowledged gender and sexual orientation. In January 2017, the Group established an employee hotline specifically for LGBTQ issues, which is operated by the Human Rights Promotion group of the Industrial Relations Department of Toray Industries.

The Group also addresses global human rights issues in accordance with the Toray Group Policy for Human Rights, considering the diverse cultures, customs and social norms of the countries and regions where it operates.

Related Policies

Policies on Human Rights

Toray Group declares fulfilling our responsibility to respect human rights as a good corporate citizen in its Corporate Guiding Principles and specifies its respect for human rights in its Ethics & Compliance Code of Conduct and strives to prevent any human rights violations through education and awareness activities within the Group.

In addition, as a global enterprise, the Group respects international norms such as the Universal Declaration of Human Rights, the International Labor Organization's conventions, and the UN Guiding Principles on Business and Human Rights. Based on approval by the Board of Directors, the Group has also established the Toray Group Policy for Human Rights, which lays out the Group's commitment to ensuring that it is not complicit in any human rights violations in the overall supply chain, including at suppliers or contract manufacturers, and to promptly and appropriately addressing issues if and when they arise.

Toray Group Policy for Human Rights (Established December 2017)

We at Toray Group believe that respect for human rights is a mandatory principle for corporate management. Therefore, we respect international standards such as the United Nations Universal Declaration of Human Rights and the International Labor Organization's standards in compliance with the laws and regulations of countries and regions where we operate, and will endeavor to fulfill our duty of respect for human rights as a good corporate citizen.

1. We will respect human rights, character and individuality of employees and eliminate harassment and discrimination in workplaces. Furthermore, we will prohibit child labor, forced labor and unfair low-wage labor.
2. We will strive to promote respect for human rights throughout the entire supply chain related to our business activities. In addition, we will not be complicit in infringing on the human rights.
3. We will endeavor to understand adverse human rights impacts associated with our business activities and to avoid or reduce such influences.
4. If it becomes evident that we have caused or contributed to adverse human rights impacts, we will promptly take appropriate actions.
5. We will promote educational activities about issues of human rights for every employee and foster a proper understanding of issues among them.

Enhancing People-Centric Management

Since its founding, Toray Group has placed clear importance on human resource development. The Toray Group holds to the philosophy that the success or failure of a company is decided by its people, and that employees shape its destiny. Guided by this concept, the Toray Global HR Management Fundamental Policy was established in 2011 and since then the Group has made securing and developing outstanding human resources as one of its most important tasks and a fundamental management priority.

Accompanying the May 2020 announcement of the Long-Term Corporate Vision, TORAY VISION 2030, Toray Group organized the principles it has followed since the beginning in the form of the Toray Philosophy. At this time, people-centric management was positioned as a key part of the Corporate Culture, which forms the foundation of the Group's Corporate Philosophy. Furthermore, under the Medium-Term Management Program, Project AP-G 2025, which aims to realize the Long-Term Corporate Vision, one of the core strategies is to "enhance people-centric management," with efforts focused on strengthening the human resources that form the Group's foundation.

By using people-centric management, the Group is working to develop dedicated talent capable of creating new value, and to foster a group-wide environment where these professional individuals can grow and work with motivation. This is a basic strategy that places human resource development, a focus since Toray's early days, at the core of management. The aim is to maximize corporate value and ultimately contribute to society.

"Enhanced people-centric management" is an updated version of the original people-centric management approach. This revision was made in response to recent changes in employment dynamics, such as increasing uncertainty in the business environment, diversification of personal values, and a growing desire for career autonomy. The revised approach focuses on embracing diverse human resources and values, developing talent and organizations that can adapt to change, and fostering engagement with the Toray Philosophy and the development of fulfilling careers. The Group's human resource strategy is being devised and implemented to both maximize corporate value and enhance employee well-being.

Human Resource Development Policy

Under the Toray Global HR Management Fundamental Policy, securing and developing outstanding human resources is a key senior management priority, and the Group is promoting talent development with the following objectives:

- Development of fair-minded individuals who act with high ethical standards and a sense of responsibility
- Training of professionals with advanced expertise, technical skills and originality in problem solving
- Development of leaders who act with foresight and a sense of balance
- Development of individuals, professionals, and leaders who can play an active role in global business

In the area of human resource acquisition, the Group is actively working to secure outstanding individuals with high aspirations who can play an active role in a global organization. This kind of talent is recruited regardless of gender, nationality, or whether they are new graduates or mid-career job seekers.

As for human resource development, the Group is committed to creating workplace environments that prioritize employee health and foster a culture of pride and fulfillment. Moreover, systematic training programs are provided to employees at all levels and in all fields. The aim is to strengthen their management skills, enhance sales and production capabilities, improve specialized skills, and foster global competencies. Through these efforts, the Group aims to cultivate the next generation of senior management candidates, while expanding and enhancing the core talent base, which is essential for maintaining strong frontline capabilities.

Toray Global HR Management (“G-HRM”) Fundamental Policy

Toray Group established its [Global HR Management \(“G-HRM”\) Fundamental Policy](#), with the goal of managing human resources from a common perspective shared by the entire Group, thereby surmounting differences between countries, regions, cultures, customs, and individual companies.

Under the policy, Toray Group practices a united approach to human resources management of each group company.

Structure

Human Rights Promotion System at Toray Group

Under the Ethics and Compliance Committee chaired by the president of Toray Industries, Toray Group operates the Human Rights Promotion Committee in Japan and the Global Human Rights Promotion Committee.

The Human Rights Promotion Committee in Japan determines the human rights activity policy to be carried out in the offices and plants of Toray Industries. Activities are implemented accordingly, with the aim of ensuring that working environments are positive and supportive throughout the Company.

Group companies in Japan use the activity policy of Toray Industries as a reference, and then implement their own human rights programs with the support of the parent company.

Meanwhile, the Global Human Rights Promotion Committee aims to minimize human rights risks outside Japan.

Each group company takes its own specific human rights initiatives based on circumstances in the country or region concerned.

Toray Group's Human Rights Promotion System



CSR Roadmap 2025 Targets

CSR Roadmap goals

1. Respect human rights and ensure fair promotions based on merit throughout the Toray Group by eliminating discrimination based on factors such as race, creed, skin color, gender (including gender identity and sexual orientation), religion, nationality, language, ability/disability, physical attributes, assets, and place of birth
2. Ensure work environments take into consideration the health and diversity of employees and build a vibrant and rewarding workplace culture group-wide, working systematically to secure and train personnel

Main Initiatives and Key Performance Indicators

	KPI
Human Rights Promotion	
(1) Implement human rights education and training	8-①
(2) Achieve the legally mandated employment rate of persons with disabilities	8-②
(3) Operate a whistle-blowing system and consultation service at each Toray Group company to promptly and appropriately respond to any problem reported in an effort to prevent or mitigate any negative impact on human rights	-
Human Resources Development	
(4) As part of career development initiatives for core staff, enhance the use of the career path worksheets included in the personnel information system	8-③
(5) Systematically hire, develop, and appoint core staff outside Japan	-
(6) Create workplace environments in which women will feel comfortable performing their duties	-
(7) Promote the use and improve the operation of measures to support employee work-life balance	8-④, 8-⑤

(8) Reduce overtime work exceeding standard hours

8-⑥

(9) Encourage the use of annual paid leave by labor union members

8-⑦

Key Performance Indicator (KPI)	Target			Fiscal 2023 Result
	Fiscal 2023	Fiscal 2024	Fiscal 2025	
8-① Group companies implementing human rights education and training (%)	100%	100%	100%	100%
8-② Group companies that have achieved legally mandated employment rate of persons with disabilities (%)	100%	100%	100%	59.4%
8-③ Career development initiatives for core staff using the personnel information system (use of career path worksheets) (% of employees)	Year-on-year increase	Year-on-year increase	Year-on-year increase	Year-on-year 101%
8-④ Employees returning to work from childcare leave (%)	100%	100%	100%	99%
8-⑤ Male employees taking childcare leave or other leave for the same reason (%)	Year-on-year increase	Year-on-year increase	Year-on-year increase	Year-on-year 106%
8-⑥ Reduction in employees who exceed 45 hours/month of non-statutory working hours	Year-on-year reduction	Year-on-year reduction	Year-on-year reduction	Year-on-year 81.1%
8-⑦ Available annual paid leave used by labor union members (%)	90%	90%	90%	95.7%

Reporting scope: Toray Group (8-① and 8-③)

Toray Group (Japan) (8-②)

Employees of Toray Industries, Inc. (8-④)

Employees of Toray Industries, Inc. (not including those posted outside Japan) (8-⑤)

Toray Industries, Inc. (8-⑥ and 8-⑦)

Related Materiality for CSR

- Committed to Healthier Lives
- Respecting Human Rights and Promoting Human Resource Diversity

* Click [here](#) for the Materiality View of CSR Roadmap 2025 (PDF:392.4KB).

PDF

Looking to the Future

Committed to Human Rights

During the CSR Roadmap 2025 period (fiscal 2023–2025), efforts are being made throughout Toray Group to improve awareness of the need to protect human rights. These efforts are carried out via ongoing campaigns and training highlighting the Toray Group Policy for Human Rights.

In addition to identifying human rights issues within Toray Group and responding promptly and appropriately, the Group continues to augment its internal education at Toray Industries, Inc. and its group companies and to improve human rights awareness among officers and employees in fiscal 2024.

Securing and Developing Human Resources

Toray Group is continuing a range of initiatives to build workplace environments that are considerate of employee health and a workplace culture characterized by pride and motivation. To secure the future management talent needed to lead the Group in coming years, Toray Group hires systematically, continually improves its grade-specific management training to strengthen frontline capacity and continues to upgrade its selective training to foster managerial candidates.

Click [here](#) for the main initiatives and KPIs for CSR Guideline No. 8 “Human Rights Promotion and Human Resources Development” during the CSR Roadmap 2025 period (fiscal 2023–2025).

PDF

CSR Activity Report (CSR Guideline Activity Reports) - Human Rights Promotion and Human Resources Development

Human Rights Activity Report

Human Rights Training

CSR Roadmap 2025
Main Initiatives (1)

Group companies implementing human rights education and training (%)

■Reporting scope	■Target in fiscal 2023
Toray Group	100%

Result in fiscal 2023

100%

Toray Industries, Inc. holds human rights promotion campaigns annually to help increase awareness and understanding of human rights issues. In fiscal 2023, the campaign focused on the human rights sensitivity of every person, harmony in the workplace, and communication that can overcome biases and foster compassion. Educational pamphlets were handed out to all employees. Through the campaign, the Company communicated to employees that it is important to create a workplace culture that respects the dignity of others, prevents sexual harassment, pregnancy-based harassment, and power harassment, and understands LGBTQ issues. The Company also sought to deepen understanding in each workplace that global interest in respect for human rights is increasing.

To raise awareness of human rights among employees, the Company holds management training and workplace-based study sessions at Toray Industries' offices and plants. In fiscal 2023, the Human Rights Promotion Group Leader conducted remote and in-person group training sessions for members of the Human Rights Promotion Committee as part of the human rights awareness campaign. Online training courses on Toray ethics and legal compliance are also held every year targeting all executives and employees (including contracted, part-time, and dispatched employees). In addition to reviewing the code of conduct and promoting awareness of the whistleblower hotlines, the program focuses on a different theme each year, looking at case studies of such issues as bribery prevention, or human rights and workplace harassment prevention. The fiscal 2023 program was held in March 2024, and 97.1% of eligible participants completed the activity. The theme was promoting understanding of the Ethics & Compliance Code of Conduct and Toray Group's whistleblowing system.

For group companies in Japan, the leader of Toray Industries' Human Rights Promotion Group held training sessions on human rights for labor managers and members of their staff (58 group companies participated). In addition, the Company provided teaching materials, educational pamphlets and e-learning materials—the same ones used in the human rights promotion activities of Toray Industries. In this way, the Company supported efforts by group companies to promote human rights.

For group companies outside Japan, Toray Industries provided educational materials reflecting the Toray Group Policy for Human Rights, the Group's human rights promotion system and international codes such as the Universal Declaration of Human Rights and the UN Guiding Principles on Business and Human Rights. Overall, Toray Group promoted education tailored to the conditions of each country or region as it disseminated the Toray Group Policy for Human Rights.

The Group will continue to promote greater human rights awareness among its employees through ongoing human rights education and training programs.

Fiscal 2023 Human Rights Training and Seminar

Type of training		Number of sessions	Number of participants
Toray Industries, Inc.	Training at head office	24	1,437
	Training at offices and plants	2,150	17,040
	Training at outside company	23	37
Group companies in Japan	Training at companies	1,247	23,991
	Training at outside company	160	383

Total amount of time dedicated to training

1,616 hours

Identifying, Assessing and Mitigating Human Rights Risks for Toray Group

CSR Roadmap 2025
Main Initiatives (1)/(3)

Toray Group carries out an annual survey of all of Toray Industries' offices and plants as well as its main group companies in and outside Japan, asking about their human rights promotion activities, including awareness and education efforts. The results are confirmed at the Human Rights Promotion Committee in Japan and the Global Human Rights Promotion Committee. Using this process, issues, problems and concerns are identified as human rights risks, and initiatives are considered and implemented in line via the human rights promotion system. Toray Group has set up a system that enables everyone working for the Group to report and consult on human rights issues. In Japan, the Corporate Ethics and Legal Compliance Helpline has been set up, and each group company outside Japan also has established a Helpline contact point. All these services can be used anonymously, and there is also an externally operated helpline available. Toray Group strives to mitigate human rights risks and to respond promptly and appropriately if and when any issues arise. Information concerning the use of the Helpline contact points in Japan, such as the number of contacts and their content, is reported to the semiannual Ethics and Compliance Committee meetings chaired by the president of Toray Industries, Inc.

In order to also promote respect for human rights in the supply chain, compliance-related communications can always be submitted through the Toray website. The system for ensuring human rights are protected in the supply chain is described under "Establishing Sustainable Supply Chain."

Related Information

- [Inquiries concerning CSR initiatives by Toray Group and its business partners](#)
- [Socially Responsible Procurement Initiatives at Toray Group](#)

Response to Reports and Consultations on Human Rights

CSR Roadmap 2025
Main Initiatives (3)

In fiscal 2023, 50 hotline reports and consultations related to human rights (workplace harassment and inappropriate behavior, etc.) were received across Toray Group. Investigations were conducted to check facts for all these cases, based on coordination between the department (person) in charge of the investigation, relevant department (person) involved in the incident, and the internal consultation offices set up at each company of Toray Group. In cases where a problem was verified, corrective measures were taken based on the group company's internal rules, such as the employment regulations.

The number of reports and consultations received, an overview of the cases, and the results of measures taken in response were reported to the Ethics and Compliance Committee, the Board of Directors, and the Board of Corporate Auditors as part of updates on the operational status of the whistleblowing system as a whole. Detailed reports were also submitted to the Human Rights Promotion Committee in Japan, and the Global Human Rights Promotion Committee.

In addition, through its human rights education in Japan, Toray Group introduced examples of issues reported to employees in a way that makes it impossible to identify the workplace or individuals to promote understanding and alerting to workplace harassment and other issues.

Click [here](#) for more information on the establishment and operation of the whistleblowing system relating to CSR Guideline 2, "Ethics and Compliance".

Click [here](#) for the main initiatives for CSR Guideline 8, "Human Rights Promotion and Human Resources Development" in CSR Roadmap 2025.

CSR Activity Report (CSR Guideline Activity Reports) - Human Rights Promotion and Human Resources Development

Securing and Developing Human Resources to Create New Value

Enhancing People-Centric Management

1. People-Centric Management

Accompanying the May 2020 announcement of the Long-Term Corporate Vision, TORAY VISION 2030, Toray Group organized the principles it has followed since the beginning in the form of the Toray Philosophy. Within these principles, people-centric management was positioned as a key part of the Corporate Culture, which forms the foundation of the Group's Corporate Philosophy.

People-centric management involves efforts to develop dedicated talent capable of creating new value, and to foster a group-wide environment where these professional individuals can grow and work with motivation.

This is a basic strategy that places human resource development, a focus since Toray's early days, at the core of management. The aim is to maximize corporate value and ultimately contribute to society.

2. Enhanced People-Centric Management

"Enhanced people-centric management" is an updated version of the original people-centric management approach. This revision was made in response to recent changes in employment dynamics, such as increasing uncertainty in the business environment, diversification of personal values, and a growing desire for career autonomy.

The revised approach focuses on embracing diverse human resources and values, developing talent and organizations that can adapt to change, and fostering Toray Philosophy engagement and the development of fulfilling careers. The Group's human resource strategy aims to both maximize corporate value and enhance employee well-being.

Employing a Diverse Workforce

Toray Group employs talented human resources with high aspirations who can play an active role in global business, inclusive of gender and whether employees were hired out of university or mid-career.

Since 1998, Toray Industries, Inc. has been expanding its efforts to recruit a diverse human resource population and has hired 118 non-Japanese as regular employees as of fiscal 2023. The Company actively recruits non-Japanese students who are studying in Japan, and Japanese students who graduate from universities abroad. Then, it seeks to build a work environment where all employees are able to fully demonstrate their individual abilities and perform to their utmost potential. In addition, Toray is actively pursuing mid-career hiring, while providing follow-up support for these hires, including additional training after joining the company.

Number of Employees Hired in Fiscal 2019-2023 (Toray Industries, Inc.)

Result		2019	2020	2021	2022	2023
New graduates	Men	244	176	123	110	172
	Women	44	36	38	20	40
	Total	288	212	161	130	212
Mid-career hires	Men	37	9	13	53	121
	Women	8	2	6	7	20
	Total	45	11	19	60	141

Recruiting Talent in Vietnam

[Toray Industries (H.K.) Vietnam Company Limited (THKVN)]

Recruiting human resources in Vietnam's textile industry has become challenging in recent years due to the aging of textile specialists and their declining number. In response, THKVN is strengthening its collaboration with top universities in Vietnam, such as Hanoi University of Science and Technology, Hanoi University of Industry, and Hanoi Industrial Textile Garment University, to recruit university graduates with textile expertise. As part of these efforts, the company offers scholarships and welcomes interns.



The general manager of the General Administration & Human Resources Department at THKVN delivering a congratulatory speech at a welcome ceremony for students entering Hanoi University of Science and Technology

Systematic and Effective Training for Human Resource Development

CSR Roadmap 2025
Main Initiatives (4)(5)

Toray Industries develops well-designed training programs and systematically executes diverse training programs to enhance management, sales, production technology, and specialized skills, and to better equip employees to address globalization. These programs cover all levels of employees and fields, aiming to develop future management candidates while expanding and educating the base of core staff ready to employ their strong capabilities to lead on the front lines.

In recent years, Toray Industries has focused on reorganizing its training system to further enhance the Company's human resource development. Management Training for Executive Candidates was created as a new program with the aim of developing senior management successors. Two other new programs, management training for general managers and management training for managers, were established in order to enhance organizational

management capabilities. At the same time, the Company has launched multiple programs to train personnel involved in digital transformation (DX) initiatives, as part of specialized field-specific training for technology and sales personnel. In fiscal 2023, training expenditures per employee at Toray Industries stood at 146,300 yen, compared to 132,000 yen in the previous fiscal year. (Since much of the training is now being done in-house, starting in fiscal 2023 the calculation also includes costs related to in-house training.)

Moreover, to allow everyone regardless of age to regularly update their abilities and skills, Toray is working to enhance its professional development programs for employees, including the expansion of eligibility for Challenge Courses (subscription-based e-learning). In addition to training, the Group is adopting various personnel programs to develop an organization in which human resources who are ready for new challenges can play a greater and more active part in the Company.

Fiscal 2023 Training Programs at Toray Industries

	Management	Technical	Sales, Marketing, and Administration	Global	General
Directors	Director Training			Toray Group Executive Seminar (TGES)	
Division and Department Managers	Management Training for Executive Candidates Department Manager Training			Toray Group Senior Management Seminar (TGSMS)	
Section Managers	Toray Management School Management Skills Development Seminar for Section Managers Management Training for New Managers	Training to become leaders in technology development	Training to become leaders in sales/marketing	Toray Trainee Program (TTP)	
Non-Managerial Senior Level	Management Training for Supervisors	Training to become leaders in technology development Mid-Level Engineer Training	Marketing and Merchandising Strategy Training	Toray Global Mindset & Communication School (TGS) Toray Management and Technology Training (TMTT)	
Non-Managerial Junior Level	Follow-up training for new hires in their third year at Toray Industries Follow-up training for new hires in their first year at Toray Industries	Second Technical Training First Technical Training	Second Sales/Marketing Training First Sales/Marketing Training	Global Diversity Seminar	
Newly-Hired Employees	Introductory Training for Newly-Hired Employees	Practical plant training	Plant assignment	Intensive English Conversation Training for Newly-Hired Employees	

Training also open to employees of group companies in Japan

Training for "national staff" of group companies outside Japan, held in Japan

Company-Wide Training Course Enrollment in Fiscal 2023 (Toray Industries, Inc.)

Training category	Persons enrolled			Time dedicated to training per employee (hour) ¹
	Men	Women	Total	
Management	1,002	168	1,170	38.8
Technical	726	86	812	29.5
Sales, marketing, and administration	186	50	236	24.9
Global	70	23	93	53.1
Total	1,984	327	2,311	34.7

¹ Time dedicated to group training at the Toray Human Resources Development Center. It does not include time for correspondence learning or study abroad, etc.

Toray School of Technology and Business Administration Develops Leaders to Improve Frontline Capabilities Across the Toray Group

Toray Industries is dedicated to improving the capabilities of frontline employees across Toray Group. It opened the Toray School of Technology and Business Administration in September 1994 as a training facility for young group employees in Japan. The aim is to develop human resources who can think and act without being micromanaged. As of the 28th session in 2022, the school has produced 831 graduates. Classes include general subjects such as mathematics and English, along with specialized subjects including polymer chemistry, engineering basics, and robotics, as well as more practical group problem-solving exercises and chemical experiments. In response to the rapidly growing internal demand for development of human resources with digital transformation (DX) expertise, the Toray School of Technology and Business Administration established a new course, “Information I,” linked to the group-wide DX human resource certification system. This course provides instruction that meets frontline needs, including algorithms, programming, and training using collaborative robots. In October 2022, the Toray School of Technology and Business Administration opened a new Frontline Skills Enhancement School (*Genba-ryoku Kyoka* School: GKS) to develop unit manager candidates, graduating 16 students in the first cohort. Students learn soft skills such as leadership, team building, followership, and motivation by solving problems in their own departments. Toray Group is developing frontline leaders who have acquired the basic skills needed by working members of society in order to succeed in a changing world.



Employees working on a collaborative robot exercise as part of a Toray School of Technology and Business Administration program

Personnel System (Toray Industries, Inc.)

Management-by-objectives system ²	Each employee establishes annual objectives. At the end of the fiscal year, employees and their supervisors meet to review accomplishments and the extent to which they were able to meet their objectives.
Personnel appraisal system ²	Designed to facilitate a fair appraisal of employee contributions in terms of duties, responsibilities, capabilities, and performance ³ . In order to link ethics and compliance with individual performance reviews and compensation, evaluation items concerning safety, CSR, quality assurance, and compliance have been added to performance appraisal.
Individual meeting system ²	Employees meet with their supervisors twice a year in a one-on-one setting. Supervisors provide consultation on employee performance and new objectives.
Self-assessment system for managers, occupational specialists, and G-Course employees	Employees are surveyed annually on topics concerning work experience and desires for interdepartmental transfer. Surveys can then be linked to individual personnel transfers and placement.
Career assessment system for G-Course employees	Employees participate in a regular review consisting of presentations of daily operations and personnel interviews in order to focus on the direction of their future growth.
Job opening system	Employees are given an opportunity to apply for jobs inside the Company and proactively develop their career, while ensuring optimal staff assignment.

² Applies to 100% of managers, occupational specialists, and employees pursuing G-Course and S-Course career paths.

G-Course: A career path for Toray Group executive or upper-level professional candidates

S-Course: A career path for manager, supervisor, or specialist candidates

³ Including CSR initiatives

Career development initiatives for core staff using the personnel information system (use of career path worksheets) (% of employees)

Result in fiscal 2023

Year-on-year **101%**

■Reporting scope

Toray Group

■Target in fiscal 2023

Year-on-year increase

Toray Industries has introduced career path worksheets as a human resource development tool designed to promote employee growth. These worksheets encourage employees to reflect on their past work experience and the level of skill required in their field, as well as facilitate career-related discussions through interviews with supervisors and subordinates.

The career path worksheets were first introduced in fiscal 2020 for employees pursuing G-Course career paths in sales and corporate administration. In fiscal 2021, their use was extended to technical G-Course employees and, as of March 2022, has been expanded to all G-Course employees. Since fiscal 2022, Toray Industries and some of its affiliated companies have expanded eligibility for the career path worksheet program.

Development of Future Management Candidates for Toray Group

Toray Group implements training in order to systematically develop future management candidates. Numerous employees who have undergone the training are already active in management positions. The Group holds Management Training for Executive Candidates, which was created as a new program in fiscal 2021 with the aim of developing senior management successors.

Strategies for Developing Future Management Candidates

Program	Participants	Purpose	Year started	Number of Participants in FY2023	Total participants through FY2023
Management Training for Executive Candidates	Department managers of Toray Industries	Develop management leaders at Toray Industries and group companies	2021	12	34
Toray Management School ⁴	Section managers of Toray Industries	Develop future management candidates at Toray Industries and group companies	1991	20	620
Toray Group Management School	Department managers of group companies in Japan	Develop management candidates focusing on group companies in Japan	2006	20	348
Toray Group Executive Seminar	Board members/officers of group companies outside Japan	Develop core staff at group companies outside Japan	2004	Not held	98
Number of employees who participated in programs to develop future management candidates (cumulative total)					1,100

⁴ As of July 2024, 15 of Toray Industries' 28 executive officers have completed the Toray Management School program.

The Toray Global HR Management ("G-HRM") Fundamental Policy was established through a resolution of the Board of Directors. The goal of the policy is to manage human resources from a common perspective shared by the entire Group, thereby surmounting differences between countries, regions, cultures, customs, and individual companies.

Toray Global HR Management (“G-HRM”) Fundamental Policy Revised December 2021

True to its corporate philosophy, “Contributing to society through the creation of new value with innovative ideas, technologies and products” and its embodiment through “Innovation,” and in order to continue being a highly valuable corporate group for every stakeholder, Toray Group focuses on recruiting, retaining, and developing employees with high aspirations, with the understanding that “Human Resources” are the most important asset in management.

As Toray Group continues to promote further business growth and expansion globally, we set the following four principles as the Toray G-HRM Fundamental Policy, despite all differences between countries, regions, cultures, customs, and companies in order to facilitate HR management with a common basis for all Toray Group companies around the world.

Step by step, each company is encouraged to implement and maintain a concrete HR management system in line with the following Toray G-HRM Fundamental Policy. However, at the same time, it is essential to value the merits of local HR management in each company based on the individual circumstances of country, region, culture, custom and company. Thus, it is necessary to promote the policy while integrating both approaches properly.

- 1. Consistently recruit and retain core staff and promote long-term HR development programs**
 - (1) Consistently recruit core staff based on mid/long-term HR management views.**
 - (2) Sustain long-term HR development through emphasizing individual career development, promoting career interviews on development progress between supervisors and staff, and carrying out on-the-job training (OJT), together with training programs (Off-JT) and self-development.**
 - (3) Promote HR development by following up on each individual through MBO (Management by Objectives) and performance appraisal systems.**
- 2. Select and develop core staff who can win a place in the global competition**
 - (1) Recruit, retain and develop diverse and capable staff globally who understand and support the Toray Philosophy.**
 - (2) Provide selected staff with opportunities for sophisticated high-level training and global careers.**
 - (3) Promote staff, who have skills to assume management responsibility for Toray Group companies, to top management positions of each company, and also give them opportunities for selection to executive positions as well as core positions of Toray Industries, Inc.**
- 3. Pursue a “placing the right people to the right jobs” policy while enhancing fairness, understanding (by employees) through convincing explanations, and transparency**
 - (1) Make the best assignment for each employee and assigned organization by focusing on his/her ability and performance.**
 - (2) Place importance on fairness, understanding (by employees) through convincing explanations, and transparency when determining individual compensation, such as salary and bonus, by appropriately taking account all of the roles and responsibilities of the position, the employee's ability, as well as performance appraisal results based on the MBO (Management by Objectives).**

(3) Enhance the HR development system and the compensation system to value challenges as well as contributions to the team.

4. Continue various management methods to further strengthen the company's business structure

(1) Conduct and continue head-count management and labor cost management as an entire company in a well-balanced way appropriate for business environments.

(2) Always sustain a flat, effective organizational structure and control the appropriate proportion of managerial staff.

(3) Build a resilient organization through the appropriate management of diverse work styles.

Systematically Securing, Developing, and Promoting Core Staff Outside Japan at Group Companies

CSR Roadmap 2025
Main Initiatives (5)

Toray Group regards the development of core staff at its group companies outside Japan as one of its priority management objectives. The Group makes active efforts to promote employees locally hired at these companies (national staff) to executive management positions, as well as to key posts and management positions at Toray Industries' head office. In fiscal 2023, a total of seven core staff outside Japan help manage Toray Group, with two serving as vice presidents of Toray Industries and five serving as director (*riji*), a position that is equivalent in scope and level of responsibility to senior management.

In terms of human resource development and promotions, Toray Group has been working on a succession plan and personnel development plan based on a medium- and long-term perspective and drawing up its Medium-Term Human Resources Plan with the goal of implementing systematic personnel assignments to ensure that core staff can tackle important business issues. The Group implements human resources strategies designed to support business strategies by verifying the availability of successor candidates for core positions and developing individualized development plans for future management candidates, including for core staff outside Japan. In addition, the Group is systematically fostering human resources by offering career development opportunities such as domestic and international job rotations.

Human resource development is systematically implemented using both on-the-job and off-the-job training. Off-the-job training consists of training implemented by each group company outside Japan. This is combined with grade-specific training programs held in Japan to ensure understanding of management principles and policies. These are linked with personalized long-term development plans. Toray Group, with direct involvement from the head office, is developing and regularly providing management training courses outside Japan specially designed for the particular circumstances and needs of group companies in each respective country.

Fiscal 2023 Training Courses Held for Core Staff Outside Japan

Japan-based courses

Training program	Managerial category	Participants
Toray Group Executive Seminar	Corporate executives	15
Toray Group Senior Management Seminar	Department managers	10
Toray Trainee Program	Section managers	22
Total participants		47

Courses held outside Japan

Training program	Managerial category	Participants
Toray Group U.S. Management Training	Department managers / section managers	47
Toray Group EU Management Seminar	Department managers / section managers	44
Toray Group Indonesia Management Seminar	Department managers / section managers	23
Toray Group China Management Seminar	Department managers / section managers	69
Toray Group Korea Management Seminar	Department managers / section managers	19
Toray Group India Management Seminar	Section managers	19
Total participants		221

* Training organized and carried out by sites outside Japan is not included in Toray Industries' company-wide training system.

Toray Group Executive Seminar (TGES) (Toray Industries, Inc.)

The Toray Group Executive Seminar (TGES) was established to develop executive human resources working at Toray Group companies outside Japan. It is designed to enhance Toray Group's organizational strength by allowing participants to improve their understanding of the Toray Philosophy, the Long-Term Corporate Vision, the Medium-Term Management Program, and their mission and responsibilities as executives within the Toray Group. Learning takes place through formal discussions and informal conversations with the management team of Toray Industries. Since its inception in 2004, the program has generally been held every other year. In fiscal 2023, in-person training was held for the first time since the COVID-19 travel restrictions were lifted, marking the eighth such seminar.

Fifteen participants from 15 group companies across Europe, the Americas, and Asia took part.

Through lectures and Q&A sessions with the president and the general manager of the Corporate Strategic Planning Division, participants deepened their understanding of the mindset, attitude, and fundamental thinking required of Toray Group executives. In sessions provided by external lecturers, the participants learned about leadership in the context of cross-cultural understanding, reflected on their own approach to management in their current workplace culture, and explored opportunities to strengthen their own group company in a way that is consistent with Toray's corporate culture.

As the fiscal 2023 seminar was conducted in person, it also provided an opportunity for dynamic interaction between the participants and became a meaningful way for them to enhance their personal networks.

Click [here](#) for the main initiatives for CSR Guideline 8, "Human Rights Promotion and Human Resources Development" in CSR Roadmap 2025.

CSR Activity Report (CSR Guideline Activity Reports) - Human Rights Promotion and Human Resources Development

Promoting Diversity

Toray Group is committed to promoting employee diversity to help build thriving workplaces where each individual's abilities can flourish.

Fostering an Organizational Culture Conducive to the Career Advancement of Women

CSR Roadmap 2025
Main Initiatives (6)

Toray Industries, Inc. has long encouraged women in the workplace and implemented policies to support women to build fulfilling careers. The Company promoted its first female manager in 1958 and introduced employee provisions for taking parenting leave nearly 20 years before parenting leave became mandatory in Japan. In 2003, a woman became president of a Toray Group company. Then, in 2004, the Company launched the Advancement of Women Project. As of April 2024, women held 10.1% of unit manager or higher positions and 6.4% of section manager or higher positions. In June 2015, the Company welcomed its first female director (*riji*), a position that is equivalent in scope and level of responsibility to senior management. (One female director [*riji*] as of March 2024.) As of July 2024, two presidents of group companies outside Japan are women.

In March 2021, Toray Industries formulated and publicly released its five-year action plan (April 2021–March 2026) for increasing the retention rate of women employees and the ratio of women employees in management positions by promoting initiatives for individual skill development and career building.

The action plan sets out the following goals and initiatives.

Goals:

1. Increase the percentage of management positions held by women each year, with a specific initial target of raising this percentage from the 5.1% in fiscal 2020 to 6.5%
2. Achieve a 1:1 ratio of men and women employees continuously employed for each employment management category (among those who have been employed for ten years or less)

Initiatives:

- (1) Use career path worksheets to enhance opportunities for discussion with supervisors and subordinates regarding careers and other topics and share content with directors in charge of each business and Personnel Department to follow up on status of implementation.
- (2) Narrow the gap between the percentage of women selected for company-wide leadership training and the percentage of women in the target group for this training.
- (3) Provide continuous training and other means of raising awareness of career development among women employees.
- (4) Enhance systems to enable diverse work styles and create an even better environment for balancing work and life events.

Gender Pay Gap (Female Earnings as a Percentage of Male Earnings)

All employee types	71.0%
Regular employees	83.8%
Part-time and fixed-term workers	58.2%

Promoting Communication Among Women in the Workplace

CSR Roadmap 2025
Main Initiatives (6)

Toray Group supports the voluntary initiatives of women in the workplace to create venues for communication about ways to resolve the issues and difficulties that they may face when trying to balance work and family life.

The outcomes of these communication events give the Group a glimpse into the current conditions facing women at work and their own opinions. Toray Group believes that resolving these issues one at a time will foster greater participation by women at work, and will steadily continue its efforts.

Holding Career Advancement Seminars for Women Serving as Managers and Occupational Specialists, and Discussion Meetings

In fiscal 2014, women serving as general managers at Toray Group developed and initiated a career advancement seminar for women serving as managers and occupational specialists, and it has now been held seven times as of fiscal 2022.

These seminars were developed and launched with the hope that they would help women learn about diverse career paths and leadership and the importance of forming personal networks and learning from one another, particularly now. Participants in past seminars have been encouraged by this chance to hear about the wide range of conditions in which women in management and occupational specialties work and to interact with diverse role models. Each of the seminars is attended by the president of Toray Industries and the senior vice president of the Human Resources Division who engage in dialogue with the participants.

In fiscal 2016, the second seminar was held in January, and subsequently the seminar participants organized discussion meetings for women at all of Toray Industries' offices and plants in Japan to more broadly ascertain the views of women in non-management positions and younger workers at all plants. (In 2017, an additional discussion meeting was also held at the newly established Nasu Plant.)

The meetings offer an opportunity for women in workplaces of various ages and at various stages of life to talk honestly about balancing work and home life, sharing and educating each other about the challenges and issues they face. Men are also included in the conversations at some of these discussion meetings.

In fiscal 2017, follow-up meetings were held in 16 locations (plants), and women employees held group discussions on several themes chosen in the discussion meetings for women. In session one (information sharing), 1,039 employees participated, including 426 men, and 439 women participated in session two (group discussion). At session two (group discussion), a theme that fit the situation at each plant was chosen for discussion from among the themes compiled at the discussion meetings. Talking about a theme of interest to the participants allowed the discussion to go deeper, and issues that should be addressed at plants were identified. There have been several cases in which, based on the views obtained in the follow-up meetings, these discussions have led to improvements in the workplace environment or to facilities that enhanced working conditions for both men and women. In some cases, the discussions sparked the start of regular lunch meetings. These discussion meetings,

led by women, have been held at all Toray offices and plants since fiscal 2019.

In fiscal 2021, an online discussion meeting was held for female G-Course employees in Toray Group. The facilitators were female managers and occupational specialists who are able to serve as role models. It was a valuable opportunity for many G-Course employees to share their work motivations, concerns, and issues, and to hear the opinions and stories of the facilitators and their peers from various generations and workplaces. Through past conferences, participants have identified issues such as the fact that female G-Course employees, who represent the future of the Company, are often burdened with anxiety about future career development.

In fiscal 2022, in order to respond to issues such as these, training was held not only for female managers and occupational specialists, but also for male managers and occupational specialists who have female subordinates. Through this training, male and female managers and specialists shared their viewpoints, deepened their understanding of the current situation, and decided to make their own action declarations aimed at resolving the issues concerned.

In fiscal 2023, to help alleviate the work-life balance concerns of female G-Course employees, an online discussion meeting was held featuring female managers and occupational specialists regarded as accessible role models. Videos were also made available online, including messages from the chairman and president, an overview of group efforts to promote women's empowerment, and an explanation of the purpose of discussion meetings for female employees.

Career Advancement Seminars for Women Serving as Managers and Occupational Specialists, and Discussion Meetings

Fiscal 2015

First career advancement seminar for women serving as managers and occupational specialists

Dates	February 13 – 14, 2015
Overview	Built networks among participants, and share their diverse situations. Helped participants to recognize what they need to do in order to further advance their careers, and foster a perspective that develops leaders who will manage organizations. Former Toray Group employee Fumiko Hayashi (then Mayor of Yokohama) gave a talk on women's full participation in the workforce. In addition, discussed the direction of future seminars.

Second career advancement seminar for women serving as managers and occupational specialists

Dates	January 29 – 30, 2016
Overview	Enabled participants to examine their career plans integrating career and personal life, by studying the experiences of accessible role models. Encouraged each participant to draft a statement of intent about what she needs to do now and in the future to realize her career plan and help her organization achieve its medium-term goals. Lectures and training were given by external specialists in human resource development. Based on feedback from female managers and occupational specialists indicating that training as well as opportunities for incorporating frontline opinions are needed for younger female employees, a review of potential activities for employees who are not managers or occupational specialists was launched.

Discussion meetings for women

Dates	From August through December 2016 ¹
Overview	The meetings were held at plants; women shared their opinions on work situations and the issues they face, and these were summarized.

¹ With the Nasu Plant's incorporation, a discussion meeting was also held there in September 2017.

Fiscal 2016

Third career advancement seminar for women serving as managers and occupational specialists

Dates	February 28 and March 1, 2017
Overview	Problems faced at work were analyzed and recommended solutions provided, based on opinions from the discussion meetings for women and the results of a questionnaire given to all women in the workforce at Toray Industries before the meetings. This series of initiatives is intended to reinforce the problem-solving skills required for managers and occupational specialists. Participants followed up on the progress on the statements of intent they each made at the second seminar.

Fiscal 2017

Follow-up discussion meetings

Dates	From December through March 2017 (22 meetings at 16 sites)
Overview	Held as a follow-up to the discussion meetings for women. Of the themes discussed at these meetings, group discussions were held on: (1) the need for female advisors in balance work and personal life; (2) the need for seminars on systems for childrearing and caregiving; (3) the ease of use of the telecommuting program; and (4) the need for women's training for employees on the S-Course track and for raising interest in participating. Measures to improve these issues were considered and proposed in line with conditions at each plant.



Group discussion

Fiscal 2018

Fourth career advancement seminar for women serving as managers and occupational specialists

Dates July 13– 14, 2018

Overview Before the meeting, men in management positions and male occupational specialists were interviewed about their thoughts on the issue of promoting career advancement for employees regardless of gender. Using results of the analysis, major issues facing the career advancement of diverse employees were identified, in order to enhance their ability to arrive at and implement solutions. Using assessment tools, employees learned about their own strengths and weaknesses and become more aware of their leadership styles.

(This seminar was held for women who had been promoted to managerial and occupational specialist positions after the third seminar, as well as women who were not able to participate in the past three seminars.)



Analysis and discussion of questionnaire results



Comments by the senior vice president of the Human Resources Division



Comments by Harumi Horinouchi, Director (*riji*)

Fiscal 2019

Fifth career advancement seminar for women serving as managers and occupational specialists

Dates October 18– 19, 2019

Overview Based on an analysis of the current situation given by organizers of the seminar, the participants were divided into groups to discuss three challenges for achieving the empowerment of women in Toray Group workplaces and to come up with action plans. The challenges to be tackled are: the promotion of women to managerial and specialist positions, the retention of young female employees, and the realization of long-term career development. Since the seminar, the participants continue to engage in group work. The aim is to further ascertain the current situation and dig deeper into the root causes, and to make recommendations for overcoming the challenges.



Seminar participants



Welcome from the senior vice president of the Human Resources Division



Comments by Harumi Horinouchi, Director (*riji*)

The Company set up a babysitting space in the training center during the career advancement seminars for women serving as managers and occupational specialists so that women who are also raising children could participate with peace of mind.

Fiscal 2020

Sixth career advancement seminar for women serving as managers and occupational specialists

Dates	September 3– 4, 2020 (held online)
Overview	With regard to the three issues defined in the fifth seminar (the promotion to managerial/specialist positions, retention of young employees, and the realization of long-term career development), the participants divided into 11 groups to report and discuss the activities undertaken, the results achieved, and recommendations for future action. Due to the COVID-19 pandemic, the seminar was held as a virtual meeting in fiscal 2020, rather than in-person as it has been in the past.

Fiscal 2021

Online Discussion Meeting for Female G-Course² Employees

Dates	November and December 2021 (participants divided into groups for a total of 62 sessions)
Overview	The discussion meeting was divided into two parts. Part one consisted of the viewing of three videos: the president's message, an explanation of the purpose of the discussion meeting, and a lecture by an outside speaker. Part two provided the opportunity for participants to share their opinions with each other online. In this second part, female managers and occupational specialists (section managers) served as facilitators to create an atmosphere where participants could speak candidly without concern. The facilitators prompted discussion of and carefully listened to individual cases of female G-Course employees, their actual situations, and thoughts on work-life balance and sources of motivation. By helping to create networks among participants, including their role-model female managers and occupational specialists, workplace environments can be developed that enable female employees to pursue careers over longer terms. This includes being able to increase their motivation, access more information and reduce their anxiety about future career development, as well as finding appropriate support for career continuation while balancing childcare or family care responsibilities.

² G-Course: A career path for Toray Group executive or upper-level professional candidates

Fiscal 2022

Online Training for Male and Female Section Managers with G-Course Female Subordinates

Dates	July and August 2022 (participants divided into 39 groups for discussion)
Overview	Based on a prior questionnaire survey of G-Course female employees, participants engaged in discussions and shared opinions on the topic of “workplaces where diverse human resources can thrive.” The aim was to foster workplaces and a corporate culture in which staff can play a more active role by helping managers gain insight in their day-to-day management activities, and at the same time, identify the direction for appropriate measures, including support for balancing family and work responsibilities.

Fiscal 2023

1. Discussion Meetings for G-Course Female Employees

Dates	August and September 2023
Overview	To help ease concerns about balancing work and personal lives, online discussion meetings were held featuring female managers and occupational specialists regarded as accessible role models.

2. Content Portal for G-Course Female Employees

Dates	August to October 2023
Overview	An intranet site was set up to share video content on group activities to promote women's full participation in the workplace. This included video messages from the chairman and president, an overview of group efforts to promote women's empowerment, an explanation of the purpose of discussion meetings for female employees, as well as external e-learning materials on career development and time management.

Sharing Stories via the Company Intranet: Vibrant Employees Achieving Work-Life Balance

The Company gives specific examples on its corporate intranet of employees who have given birth to and raised children, or provided caregiving for other family members, and how they did so while still working.

In 2016, experienced employees began sharing their work-life balance stories on this intranet site, providing younger individuals with ideas on how to enrich both their work and personal lives. A total of 39 stories have been shared, with three added in fiscal 2023. By publishing not only examples of work-life balance achievement amid major life events, but also personal experiences relating to overseas posting and other career stages, the intranet site is helping employees of every age and gender to make their professional and personal lives more fulfilling.



Intranet site: Vibrant Employees Achieving Work-Life Balance

Examples of Workplace Initiatives in fiscal 2023

Follow-up Discussion Meeting After the Women's Empowerment Course (Toray Industries, Inc. Ehime Plant)

As follow-ups to the training session for female S-Course³ employees in 2022, a total of three discussion meetings were held in 2023, with a total of 33 women participating. In the meetings, participants reflected on what they had learned from the training. They also shared ideas they had put into practice and initiatives they had taken to improve their skills.

³ S-Course: A career path for manager, supervisor, or specialist candidates



Ehime Plant manager observing discussions by female employees

Networking Event Held for Female Engineers (Toray Industries, Inc.)

In response to findings from an employee workplace survey, the Engineering Division of Toray Industries is promoting an initiative to ensure that no one feels alone. This reflects the fact that there are only four female Engineering Division employees at the Company's 13 plants. With few opportunities to share thoughts with those in similar situations, these women were at risk of feeling alone. After new female employees recently joined the Chiba Plant, a company-wide networking event was arranged for such employees. As one of the division's "You Are Not Alone" initiatives, it was an effective way for these women to make new connections who can offer each other support whenever they face challenges.



Women's networking session

Employment of Persons with Disabilities

CSR Roadmap 2025
Main Initiatives (2)

Group companies that have achieved legally mandated employment rate of persons with disabilities (%)

■Reporting scope
Toray Group (Japan)

■Target in fiscal 2023
100%

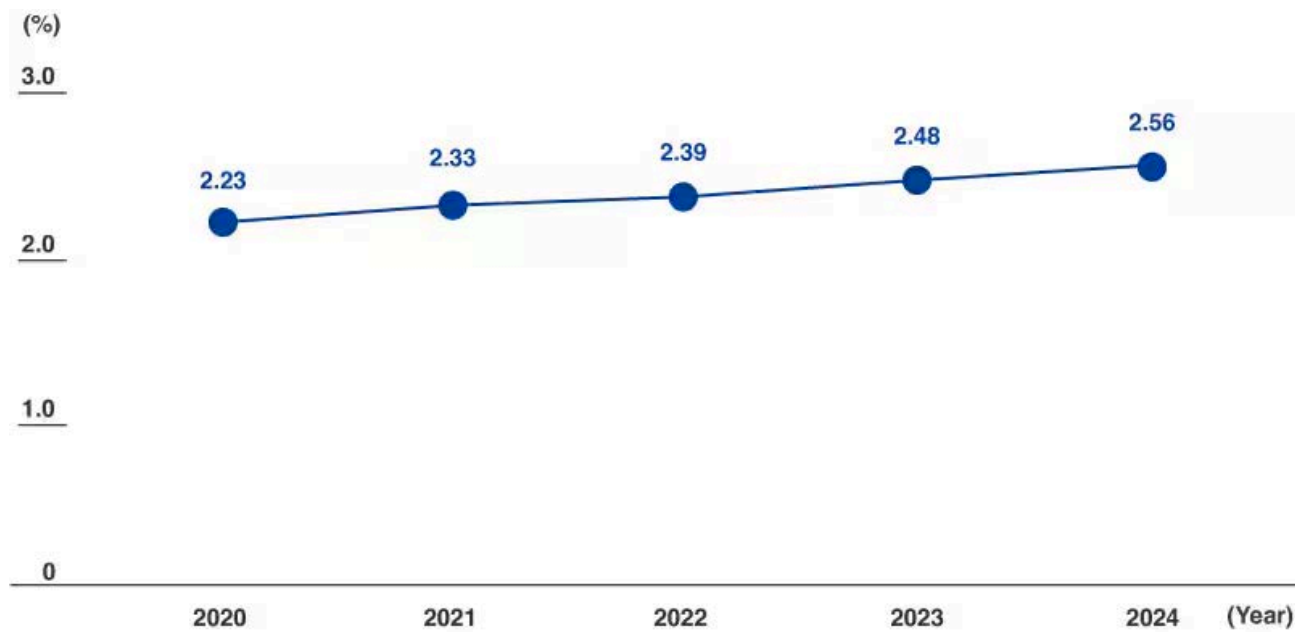
Result in fiscal 2023

59.4%

Toray Group hires and employs persons with disabilities, from those with physical challenges to persons with intellectual and mental challenges. The Group is making workplace improvements to remove physical barriers for persons with handicaps as well as instituting safety measures. Additionally, the Group provides comprehensive training upon work placement and gathers feedback from persons with disabilities to make workplace improvements.

Further, in fiscal 2023, Toray Industries met Japan's legally mandated employment rate of persons with disabilities, as did 59.4% of Toray Group companies in Japan. Group companies actively seek to hire persons with disabilities through public organizations and job placement agencies. However, some individual group companies do not meet the mandated legal requirement. Toray Industries and group companies will continue to work together to actively focus on this issue moving forward.

Employment Rate of Persons with Disabilities (Toray Industries, Inc.)



* As of June 1 each year

Re-employment System

As part of Toray Industries’ initiatives to encourage full utilization of skilled individuals over 60 years of age, in fiscal 2001 the Company introduced a re-employment system open to all of its unionized employees who wish to continue working. In principle, the Company re-employs all employees who reach 60 and would like to continue working to 65. In fiscal 2005, the scope of the re-employment system was expanded to include managers and occupational specialists.

In light of recent legal reforms and societal trends regarding the employment of seniors, in April 2024, the Company raised wage levels for its re-employed union members.

Career Advancement for Non-Japanese Employees

As Toray Industries becomes an increasingly global company, it is working to enable its non-Japanese employees to play more active roles.

Click [here](#) for more information on efforts for the full participation of non-Japanese employees.

Training for Vietnamese Technical Intern Trainees

With employees from Toray Industries (H.K.) Vietnam Company Limited serving as instructors, in fiscal 2023, training was provided to Vietnamese technical interns in their own language on the Toray Philosophy and compliance. The training was held in Japan at Toray Textiles, Inc., Sowa Textile Co., Ltd., Maruichi Fiber Co., Ltd., and Ogaki Fuso Spinning Co., Ltd.



Intern training at Sowa Textile Co., Ltd. (left) and Ogaki Fuso Spinning Co., Ltd. (right)

LGBTQ Issue Awareness

Since January 2017, Toray Group has offered an employee hotline specifically for LGBTQ issues. This is part of its efforts to prohibit discrimination based on gender identity or sexual orientation. Moreover, the Group is working to promote employee awareness of LGBTQ issues by incorporating relevant content into human rights awareness courses and the pamphlets that are distributed during the Group's annual human rights awareness campaign.

Seminar on Psychological Safety and Unconscious Bias (Toray Industries, Inc. Okazaki Plant)

As part of Safety and Compliance Collaboration Activities, a seminar on psychological safety and unconscious bias was held at the Okazaki Plant. Attended by 41 employees, primarily in management positions, the seminar provided information on specific methods for increasing the psychological safety of team members and how to deal with unconscious bias in the workplace. The participants also deepened their understanding through individual exercises and group discussions.



Group discussion during the seminar

Click [here](#) for the main initiatives for CSR Guideline 8, "Human Rights Promotion and Human Resources Development" in CSR Roadmap 2025.

CSR Activity Report (CSR Guideline Activity Reports) - Human Rights Promotion and Human Resources Development

Creating a Positive Workplace for Employees

CSR Roadmap 2025
Main Initiatives (6)(7)(8)(9)

Toray Industries, Inc. has been working to further improve systems that help employees achieve a harmonious balance between work and family life, by offering a wider variety of lifestyle options for men and women. Support systems that exceed those legally mandated for childcare, family care, and maternity protection are provided, the result of the company's commitment to making them accessible and responsive for a diverse range of employee needs. In 2007, the company was granted certification as a general corporate entity meeting the requirements for supporting the development of the next generation by Japan's Ministry of Health, Labour and Welfare.



Since then, Toray has continued to expand its support system as follows.

Jun 2010	Revamped child care support systems in an effort to encourage male employees to make use of them
Apr 2011	Launched the Toray Smile Support Program, a point-based system that lets employees choose from various programs that provide financial assistance mainly for childcare and purchasing homes
Apr 2012	Initiated a telecommuting program aimed at making it easier for employees to work while raising children or caring for family members
Oct 2012	Expanded the scope of the commuting allowance for taking the bullet train
Apr 2013	Improved support systems once again, offering special leave for parents to prepare children for nursery school, and extending eligibility for leave to care for sick children or family members
Jul 2013	Revised lower-hour work schedule systems for those raising children or caring for family members
Jul 2016	Expanded leave provisions for employees requiring special consideration as caregivers
Jan 2017	Eliminated restrictions on the number of times that employees can use long-term family care leave and lower-hour work schedule systems for caregivers
Jul 2017	Started a flextime system without core-hour requirements for employees at the Tokyo and Osaka head offices

Oct 2019	Expanded the scope of the telecommuting program to those raising children or caring for family members
Apr 2020	Began allowing the use of paid annual leave on an hourly basis
Apr 2020	Introduced a working-hour interval system
Jul 2020	Eliminated the requirement of raising children or caring for family members in order to utilize the telecommuting program
Jan 2021	Introduced hourly leave systems for caring for sick children or other family members
Jul 2021	Expanded family-care programs
Jul 2023	Introduced leave to accompany spouse transferred overseas

Major Support Systems for Employee Work and Family Life Balance

Category	Description
Prenatal and postnatal leave	• Prenatal leave can be taken starting eight weeks before the expected delivery date (14 weeks before a multiple pregnancy). • Postnatal leave is available for eight weeks after childbirth.
Long-term childcare leave	• Available for employees using child care center services up to the end of the month in which the child turns two years of age
Postnatal paternity leave	• Fathers of newborns can take up to four weeks leave within eight weeks of the child's delivery date or expected delivery date, whichever is later
Lower-hour work schedules for childcare	• A maximum reduction of two hours per day, calculated in 15-minute increments, available until the end of the fiscal year in which the child is in third grade of elementary school • May be used concurrently with flextime system
Long-term family care leave	• Available for a total of 365 days per situation requiring leave to provide care • May be split up
Spouse's childbirth leave	• Available for three days in the event that an employee's spouse gives birth

Category	Description
Lower-hour work schedules for caregivers	• May be taken multiple times per situation in the five-year period following the first day of use • May be split up • May be used concurrently with flextime system
Leave to care for sick children	• Five days per year of leave per child available until the end of the fiscal year in which the child is in third grade of elementary school • Can be used on hourly basis
Family care leave	• Five days per year of leave available per family member • Can be used on hourly basis • At maximum 10 additional days per year available when no other appropriate caregiver is available
Toray Smile Support Program	• Welfare point system offering a selection of programs with an emphasis on providing support for childcare and home acquisition
Childcare services payment assistance	• Childcare coupons offering a 70% discount on services provided by participating companies issued as an additional Toray Smile Support Program service • No restrictions on number of coupons or age of participating employee's child
Telecommuting program	• Available for employees who are proficient in their assigned duties, can perform these duties self-sufficiently, and meet certain requirements. • Available up to three days (22.5 hours) per week and no more than a maximum of ten days (75 hours) per month for approved employees, who may use the program on a full-day or hourly basis. If an employee requests more than the maximum hours/days due to special circumstances, and it is deemed not to interfere with workplace management, the employee may telecommute for more than the maximum allowed under the program.
Registration system for reemployment	• Registration system providing reemployment opportunities to former employees who resigned due to personal matters such as marriage, childbirth and childcare, nursing care for family members, or a spouse's work transfer • The registration period is ten years. Registrants may be immediately eligible for regular employee positions depending on the content of their

Category	Description
	jobs, expectations of their role in the company, and their personal situations.
Commuting allowance for bullet train or other limited express travel	• Allowance for tickets for applicable distances on bullet trains or other limited express trains available for employees who wish to avoid (cease) living apart from their families due to job transfers or employees who bear personal responsibilities such as caring for family members • In certain cases, employees may be required to pay a part of the commuting expenses out of pocket.
Leave to accompany spouse transferred overseas	• Can be taken by an employee wanting to accompany their spouse on an overseas job transfer of six months or more • Can be taken for up to four years

* Toray Group employees working near Nihonbashi in Tokyo can use a local consortium-based child care center (Kids Square Nihonbashi Muromachi).

Examples of Workplace Initiatives in fiscal 2023

Online Discussion Meeting Held Concerning Support for Balancing Work and Family Lives

Toray Group has set up a section on its employee welfare site called WELBOX to provide information on various work-life balance support programs. WELBOX also shares examples of work-life balance achieved by Toray Group employees. The WELBOX Online Salone has been held since fiscal 2021 as an online discussion meeting for those interested in the cases featured on the site. As of the end of fiscal 2023, there have been five such meetings.

Reflecting on the themes of “taking action to begin a new career,” “work-life balance and lifestyle design,” and “non-linear careers,” the participants shared their daily struggles, and used it as an opportunity for intergenerational and cross-gender communication that goes beyond the usual workplace boundaries. Going forward, the plan is to continue holding this meeting about twice a year.



WELBOX online discussion meeting

Utilization of Childcare and Family Care Leave Systems (Toray Industries, Inc.)

FY		2019	2020	2021	2022	2023
Employees taking childcare leave	Women	60	66	56	46	51
	Men	10	22	40	82	95
Employees taking family care leave	Women	3	1	2	2	1
	Men	1	0	1	1	1

* Figures show the number of employees taking leave in each year.

Number of Employees Who Returned to Work after Childcare Leave and Family Care Leave (Toray Industries, Inc.)



		FY2022		FY2023	
		Number of employees who returned to work	Percentage of employees who returned to work	Number of employees who returned to work	Percentage of employees who returned to work
Childcare Leave	Women	52	100%	37	100%
	Men	77	100%	95	99%
Family Care Leave	Women	2	100%	0	-
	Men	1	100%	1	100%

* Number/percentage of employees returning to work per fiscal year

Employees taking leave for spouse's childbirth (Toray Industries, Inc.)

FY	2020	2021	2022	2023
Number of employees	230	220	233	203

Male employees taking childcare leave¹ or other leave for the same reason² (%) (Toray Industries, Inc.)

Male employees taking childcare leave or other leave for the same reason (%) ■Reporting scope Employees of Toray Industries, Inc. (not including those posted outside Japan) ■Target in fiscal 2023 Year-on-year increase		Result in fiscal 2023 Year-on-year 106%
--	--	--

FY	2022	2023
Male employees taking childcare leave (%)	81%	86%

¹ Childcare leave includes postnatal paternity leave

² Childcare leave includes spouse's childbirth leave

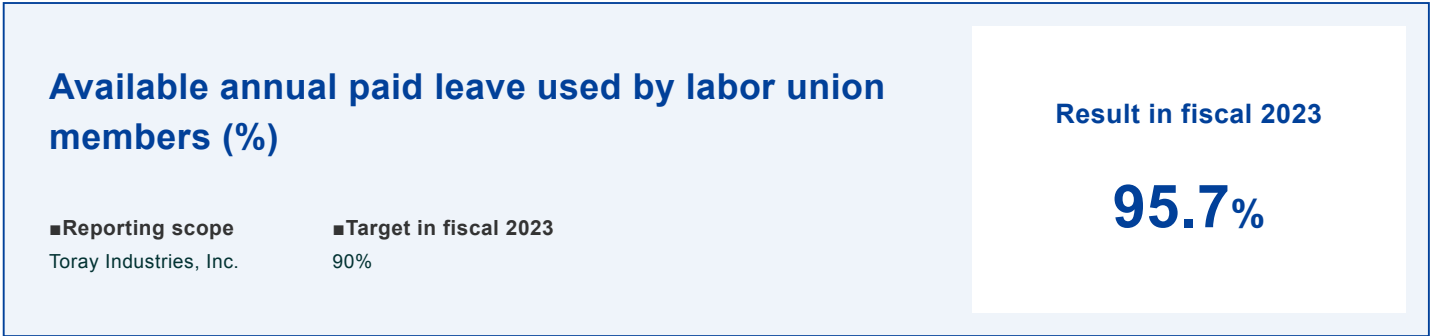
Discussion Meeting with Employees Who Have Taken Childcare Leave [Toray Industries, Inc. Basic Research Center (Kamakura)]

With the aim of deepening understanding of the childcare leave program and encouraging employees to take childcare leave, the Toray Industries Basic Research Center held its first discussion meeting for employees on this topic. A total of ten employees (seven men and three women) participated. Employees can now take childcare leave with more flexibility than before, with options such as postpartum paternity leave and childcare leave that can be taken in increments, raising the level of interest in these programs. At the meeting, male and female employees who had taken childcare leave spoke candidly about their reasons for utilizing the program and their initial concerns.



Relaxed discussion meeting on childcare leave

Initiatives to Reduce Overtime and Encourage Use of Annual Paid Leave (Toray Industries, Inc.)



Not only is Toray Industries taking steps to prevent overwork, it is also positioning employee work-life balance as a workplace innovation. The aim is to enhance labor productivity and competitiveness by changing employee mindsets, while also creating more supportive workplace environments. Since fiscal 2008, regular workplace discussions are held in each workplace to raise awareness of different working styles, and working late at night or on holidays is prohibited, in principle. All lights in the workplace are turned off at a certain time at night, and company-wide "no overtime days" take place one day each month. The Company has been working on ongoing initiatives to reduce overtime hours and encourage employees to take annual paid leave. (Employees used 95.7% of available annual paid leave in fiscal 2023).

In fiscal 2010, Toray Industries set up a Work-Life Balance Committee (renamed the AP-G 2022 Labor-Management Committee in fiscal 2020), which focuses on further improving and operating the systems. The committee follows up on work-life balance initiatives, including support for balancing work and family life, reducing excessive working hours, enhancing mental healthcare, and support for healthy work lives. In addition to reviewing further possible measures, the committee also analyzes current conditions regarding ideal work styles (required work styles, working conditions, and labor-management rules), identifies the issues involved, and reviews and proposes steps to be taken.

Employee Health

Toray Industries sees employee health management as a management priority. It is strategically working to create workplaces that prioritize employee health, while fostering an organizational culture of pride and job satisfaction. In fiscal 2023, the results of health initiatives were reported at the group-wide Safety, Health, and Environment Committee. An action plan was decided and then implemented at each business site and factory. Moreover, a group-wide meeting for relevant staff is hosted every year by the Industrial Relations Department, which is responsible for group-wide health management. At the meetings there are individuals from various business sites and plants, including occupational physicians and employee health nurses, as well as labor union and employee health insurance association representatives. They come together to share progress made on the Group's initiatives and identify challenges. Working in collaboration with the employee health insurance association, the Company actively promotes employee health.

Specific initiatives include sharing health information via internal communication tools and holding participatory events three times a year using health information sites. There are also lifestyle disease prevention seminars, and the promotion of employee physicals with greater assistance to offset costs.

Toray Industries is also addressing mental health, and since fiscal 2011 has been implementing employee stress check-ups through an external provider. This helps employees recognize their own stress levels and learn how to manage stress, which leads to an improved workplace environment. The stress check-ups are also carried out at group companies in Japan.

In recognition of these efforts, in March 2024, Toray Industries was again listed as a White 500 Company in the Certified Health and Productivity Management Organization Recognition Program.

Examples of Workplace Initiatives in fiscal 2023

Health Seminar on Women's Wellness (Toray Industries Inc. Osaka Head Office)

An obstetrician was invited to give a lecture on menopause, a health issue that concerns older women. The event was planned in collaboration with the Blue Moon Project (BMPJ: a new project on female-specific health issues) which is being promoted chiefly by the Sustainable Technology Department of Toray Industries.



Women's health seminar

Women's Seminar on Managing and Preventing Menopausal Symptoms (Toray Industries Inc. Tokai Plant)

A seminar was held for female employees on managing and preventing menopausal symptoms, with a total of 21 people in attendance. This topic is one of particular interest according to a questionnaire survey conducted at a women's networking event last year. In response, the Women's Empowerment Team planned this seminar. Additionally, from the perspective of preventing employee turnover, it is important for female employees to deepen their understanding of ways to manage and prevent menopausal symptoms.

The seminar allowed the participants to gain useful information while deepening communication and sharing their own insights. These included their own experiences with menopausal symptoms, and how they dealt with and overcame them. As men can also experience their own form of menopause, a similar seminar for male employees is being planned.



Seminar on coping with menopause

Lectures by an Occupational Physician (Toray Industries Inc. Gifu Plant)

As in fiscal 2022, lectures were given to Gifu Plant employees by an occupational physician. Responding to the desire of both men and women to maintain positive and fulfilling lives, the two lecture topics were "Men's Mental Health Challenges" and "Insomnia: Getting a Good Night's Sleep." Along with sharing his own experiences, the occupational physician spoke about the stress tendencies of both genders, the importance of listening carefully and the early detection of mental health issues, as well as tips for getting a good night's sleep.



Health lecture

Dialogue with Labor Unions

Toray Industries holds meetings of the Central Labor and Management Council twice a year with the attendance of directors at the senior vice president level and higher and labor representatives at the union head level and higher. In addition to briefing the union on management information about Toray Group, the meetings facilitate ongoing dialogue with the union.

Resolution of labor issues is undertaken at separate Labor and Management Council meetings.

Based on the union shop system, all regular employees, excluding those at the management level or accepted as exempted from labor-management consultations, are members of the Toray Workers' Union. As of March 2024, Toray Workers' Union membership stood at 7,756 workers.

Click [here](#) for the main initiatives for CSR Guideline 8, "Human Rights Promotion and Human Resources Development" in CSR Roadmap 2025.

CSR Activity Report (CSR Guideline Activity Reports)

Establishing Sustainable Supply Chain

To establish a sustainable supply chain, work closely with suppliers, processing vendors, subcontractors, customers and distribution companies to implement socially responsible procurement throughout the supply chain in order to ensure responsible practices with respect to environmental preservation and human rights.



Basic Approach

Toray Group operates a wide range of businesses in countries and regions around the world. As a result, its procurement of raw materials and supplies and the locations and industries of its contractors and suppliers are diverse.

At the same time, CSR initiatives in today's global society are increasingly important. They have become more diverse and advanced in the effort to address climate change, environmental protection, respect for human rights and improvements to the labor environment. These initiatives can no longer focus solely on a single company and are being extended to encompass its entire supply chain.

To address this issue and ensure stable and sustainable procurement, Toray Group has established the Toray Group CSR Procurement Policies. The policies specify the Group's commitment to building a supply chain that not only ensures quality and supply stability, but also incorporates ethical, environmental, social and human rights considerations. Accompanying the policies, the Group has also formulated Toray Group CSR Procurement Guidelines to provide specific, detailed guidelines for action to further promote CSR throughout the supply chain. Suppliers are required to comply with the guidelines. Finally, the Toray Group CSR Procurement Policies and the Toray Group CSR Procurement Guidelines are continuously reviewed and updated in response to changes in society and other factors.

Related Policies

Toray Group CSR Procurement Policies Revised March 2022¹

1. Establish an internal CSR organization to facilitate CSR initiatives throughout the supply chain and sincerely committed to it.
2. Promote fair transactions grounded in corporate ethics, and comply fully with all laws and regulations, as well as social norms inside and outside Japan, when making purchases.
3. Take into account the impacts that purchasing activities have on the labor environment and health and safety. Also, engage in risk management through, for example, responding swiftly to unexpected situations and disclosing accurate information.
4. While appropriately managing chemical substances, pursue raw materials procurement that takes into account impacts on the environment such as green procurement and green purchasing.
5. Promote dialogue and cooperation with business partners and other stakeholders.
6. Maintain and strive to improve product quality and safety.
7. Respect human rights, eliminate all forms of discrimination, and strive to improve workplace environments. Additionally, do not be complicit in the infringement of human rights in the supply chain, such as through forced labor, slave labor, child labor, and unjust low-wage labor.
8. Do not use minerals from conflict regions or high risk regions, nor minerals that clearly contribute to conflicts or infringe upon human rights.
9. Prevent leaks of confidential information and respect intellectual property rights.
10. In selecting business partners, take into account their CSR initiatives, such as compliance with laws and regulations, respect for human rights, environmental preservation, and the like, while seeking strict adherence to the Toray Group CSR Procurement Guidelines and facilitating CSR initiatives throughout the supply chain.

¹ Approved by a resolution of the Board of Directors, the Toray Group CSR Procurement Policies are the new and revised version of the earlier CSR Procurement Guidelines, which were formulated in 2004.

Toray Group CSR Procurement Guidelines Formulated March 2022

The major contents of the new CSR Procurement Guidelines formulated in March 2022 are as follows.

1. Ethics and Compliance

(1) Legal Compliance

Strictly adhere to the laws and regulations of each country and region, and carry out business activities grounded in corporate ethics. Establish compliance policies and build a framework and training system in order to ensure thorough compliance.

(2) Strict Adherence to Competition Laws

Refrain from conduct that obstructs fair competition, such as unjust transaction restrictions (private monopolies, cartels, bid rigging, etc.), as well as unfair trade practices or abusing a dominant bargaining position.

(3) Preventing Corruption and Prohibiting Bribery

Do not, for the purpose of obtaining improper advantage, provide to or solicit money or goods (including facilitation payments) from parties concerned, and do not provide or accept gifts or hospitality exceeding the acceptable range of social norms. Furthermore, do not engage in illegal political donations and the like.

(4) Prohibition against Behavior that Presents a Conflict of Interest

Do not engage in behavior that is against the interest of the Company and in the interest of yourself, a business partner, or a third party, and do not accept inappropriate demands from Company customers or employees of business partners.

(5) Protecting Confidential Information and Personal Information

Strictly adhere to each country and region's laws and regulations on business partner, third party, and Company employee personal information, as well as business partner and third party confidential information. Obtain said information, strictly manage and protect it, and use it within an appropriate scope of business.

(6) Whistle-blowing System and Whistle-blower Protections

Establish a system for Company employees and business partners to report legal and statutory violations, as well as matters of concern related to the business. Safeguard whistle-blowers to ensure that they are not subject to termination, threats, harassment, or other disadvantages, nor are they subject to retaliation.

(7) Appropriate Import/Export Management

Follow appropriate import/export procedures and properly manage the import/export of technologies and goods subject to the laws and regulations of each country and region.

(8) Respect for and Safeguarding of Intellectual Property

While appropriately safeguarding the Company's intellectual property, demonstrate respect for the intellectual property of third parties and do not infringe upon their intellectual property rights.

(9) Appropriate Information Disclosure

Engage in the timely and appropriate disclosure to stakeholders of management, financial, business activity, and other information stipulated for disclosure in the laws and regulations of each country and region. Also, strive for mutual understanding and the maintenance and enhancement of relationships of trust with stakeholders through communication.

(10) Responsible Procurement of Mineral

Carry out procurement activities with due consideration to ensure that raw materials, such as minerals, contained in our products are not contributing to human rights violations, environmental destruction, or conflicts in the areas in which they are produced. If there are materials of concern, carry out measures to avoid the use of these materials.

2. Safety, Accident Prevention, and Risk Management

(1) Occupational Safety Management

In order to protect the safety and health of employees, ensure that equipment, working conditions, and working procedures are safe. While adhering to the labor laws and regulations of each country and region, strive to avoid occupational accidents by establishing educational programs and safety measures to prevent incidents.

(2) Occupational Health Management

Assess the work environments of each workplace, including chemical substance control, noise, odors, etc., and, while establishing measures to avoid injuries to health, strive to manage employee health through regular health exams and the like.

(3) Responding in Times of Emergency

In order to protect lives and physical well-being, anticipate potential disasters, diseases, etc. and prepare and disseminate response measures for times of emergency.

(4) Business Continuity Plan (BCP) Initiatives

In order to maintain the continuity of business activities, identify risks that may interfere with the activities and carry out initiatives for preventing and mitigating those risks.

3. Environmental Preservation

(1) Environmental Management

While strictly adhering to the environmental laws and regulations of each country and region, build a company-wide management framework for promoting environmental activities and strive to continually utilize and improve those frameworks.

(2) Reduce Emissions of Greenhouse Gases

Control greenhouse gas emissions in business activities and promote activities that continually reduce those emissions, while striving to effectively utilize energy.

(3) Minimize Impacts on the Environment

Manage and reduce emissions of substances that have an impact on the environment, and strive to prevent air, water, and soil pollution.

(4) Resource Reduction and Waste Product Management

Appropriately handle waste products, mitigate waste production, promote recycling, and strive to effectively utilize resources.

(5) Chemical Substance Management

While endeavoring to keep products free of chemical substances legally prohibited by each country and region, appropriately manage and handle chemical and other substances released into the outside environment.

(6) Concern for Biodiversity

While preserving biodiversity and striving for its sustainable use, engage in raw materials procurement that takes biodiversity into account.

4. Product Quality and Safety

(1) Maintain and Improve Quality

Strive to improve quality while building frameworks for appropriate quality control and quality assurance, and maintaining quality that meets expectations.

(2) Product Safety

Strictly adhere to the laws, regulations, and standards of each country and strive to ensure product quality and safety. In the event that a quality issue does arise, handle it promptly and appropriately.

5. Human Rights Promotion

(1) Respect for Fundamental Human Rights and Elimination of Discrimination and Harassment

Respect fundamental human rights and, in all aspects of employment, including recruiting, hiring, placement, compensation, training, and resignation, do not engage in any discriminatory treatment on grounds of race, creed, color, sexuality (including gender identify and sexual orientation), religion, nationality, language, physical characteristics, economic status, place of origin, etc., and do not engage in any form of harassment.

(2) Prohibition of Child Labor and Due Consideration toward Young Workers

Do not hire workers who do not meet the eligible working age stipulated by the laws and regulations of each country and region. Additionally, exercise particular consideration for the health and safety of employees under the age of 18, based on the laws and regulations of each country and region.

(3) Prohibition of Forced Labor and Slave Labor

Do not utilize forced, compulsory, involuntary, exploitative, or slave labor, nor labor obtain through human trafficking. Additionally, no forms of work shall be forced and employees shall be assured the ability to voluntarily end their employment.

(4) Wages and Benefits

Make payments appropriately and strictly adhere to the laws and regulations of each country and region regarding minimum wage, overtime work, payroll deductions, piecework payments, and other allowances. Additionally, do not carry out any unjust wage reductions.

(5) Working Hours

Strictly adhere to the laws and regulations of each country and region regarding the determination of employee work hours and holidays, and the granting of annual paid leave.

(6) Dialogue and Cooperation with Employees

6. Facilitating CSR initiatives throughout the Supply Chain

(1) Request for Initiatives to Business Partners

While requesting that suppliers, contracted processors, and other business partners strictly adhere to the provisions of these Guidelines or their equivalent, work to thoroughly promote these Guidelines through regular surveys and inquiries on the status of implementation by business partners.

Policies on Purchasing and Distribution

As a manufacturer of advanced materials that supplies a wide range of materials and products, Toray Group must expand CSR initiatives into upstream management, including production facilities and the procurement of raw materials and products. It has therefore established Basic Purchasing Policies together with Basic Distribution Policies. The entire Group works to fulfill its social responsibilities relating to procurement, purchasing, and distribution. These include measures to ensure fair and equitable transactions, quality improvement, legal compliance, environmental protection, and respect for human rights. Finally, the Basic Purchasing Policies and the Basic Distribution Policies are continuously reviewed and updated in response to changes in society and other factors.

Related Policies

Basic Purchasing Policies Revised March 2022

1. Toray does its utmost to select suppliers and determine actual purchases fairly and on the basis of economic rationality, with consideration for price, quality, capability to provide stable supplies, technological capabilities, reliability, and other factors.
2. In selecting suppliers, Toray opens its doors to a wide range of companies inside and outside Japan. Toray does not rely solely on vendors it has existing or past relationships with, or on members of its corporate group.
3. Toray works to maintain and improve the quality of purchased products through cooperation with its suppliers.
4. Toray strictly adheres to its Toray Group CSR Procurement Policies and Toray Group CSR Procurement Guidelines, and works to promote purchasing that upholds Toray's corporate social responsibilities on a company-wide basis.

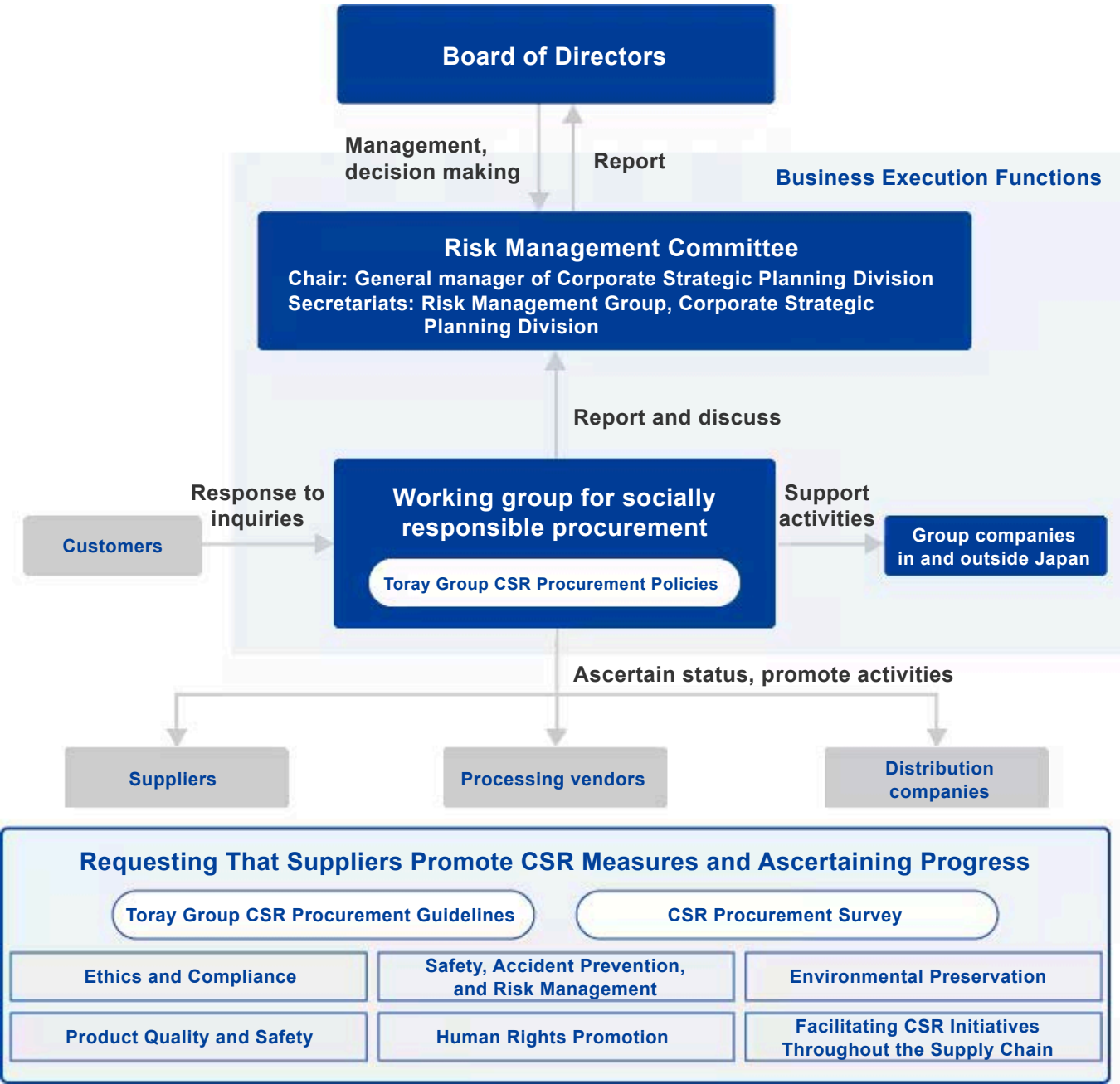
Basic Distribution Policies Revised March 2022

1. Toray does its utmost to select transport and warehousing providers and determine individual agreements impartially and based on factors such as economic rationality with consideration given to price, quality, supply stability, technological capabilities, reliability, and efforts to reduce environmental impact.
2. In selecting transport and warehousing providers, Toray opens its doors to a wide range of companies, rather than relying exclusively on companies with which we have done business in the past or companies affiliated with Toray Group.
3. Toray works to cooperate with our transport and warehousing providers in gauging and reducing the environmental impact of our transport and warehousing operations.
4. Toray strictly adheres to its Toray Group CSR Procurement Policies and Toray Group CSR Procurement Guidelines, and works to promote distribution activities that uphold Toray's corporate social responsibilities on a company-wide basis.

Structure

To ensure socially responsible procurement across the Group and address today’s increasingly globalized procurement risks, Toray Industries, Inc. has established a working group to lead a group-wide risk management initiative. The working group strives to ascertain the status of CSR practices at suppliers, responds to customer inquiries about Toray Industries’ CSR practices, and supports group companies in this area. The working group also regularly reports on the progress of socially responsible procurement and related risk mitigation initiatives across the Group to the Risk Management Committee², which oversees overall risks. The issues reported are discussed by the committee members.

² As of July 2024, a senior vice president (member of the board) serves as the Risk Management Committee Chair.



Initiatives for Human Rights and Environmental Due Diligence³ in the Supply Chain

Due diligence concerning the human rights and environmental activities of suppliers is used to identify and evaluate human rights and environmental risks in the supply chain. It allows risk prevention and mitigation measures to be taken. Toray Group carries out this due diligence in accordance with the process stipulated in the “OECD Due Diligence Guidance for Responsible Business Conduct” issued by the Organisation for Economic Co-operation and Development (OECD).

Toray Group has established policies related to this activity. It has implemented the [Toray Group Policy for Human Rights](#), which prohibits child labor, forced labor, and unfair low-wage labor, and requires the respect for human rights throughout the entire supply chain. In the area of environmental preservation, the Group has also established [Ten Basic Environmental Rules](#), [Recycling Activity Principles](#), [Toray Group Biodiversity Basic Policy](#), and the [Toray Group's Basic Policy for Increasing Green Areas](#). The [Toray Group CSR Procurement Policies](#) and [Toray Group CSR Procurement Guidelines](#) have also been created to promote respect for human rights and environmental preservation throughout the supply chain.

Specific initiatives include regular implementation and analysis of the [CSR Procurement Survey](#) for business partners, establishment of the whistleblowing hotline system, surveys of high-risk issues related to CSR procurement, confirmation of business partner risks using a company search system, and identification of any negative impacts on human rights and the environment. Negative impacts are handled through measures such as requesting improvements from companies with low scores based on the CSR Procurement Survey, and conducting follow-up visits and confirmation.

Furthermore, even in the case of business partners that met the standards required by Toray Industries based on the CSR Procurement Survey results, on-site audits are progressively being carried out for those in industries where the risks of negative impacts are a concern.

Information about these activities is shared both in and outside the Company using the Group website and other means.

Toray Group will continue to promote initiatives to prevent and reduce any negative impacts on human rights and the environment that might occur in the supply chain.

³ Due Diligence: To prevent or reduce the negative impacts that a company may have on society, a continuous due diligence process is used. It involves proactively investigating and identifying problems, correcting them through appropriate measures, and publicly disclosing these activities.

Related Information

- > [Socially Responsible Procurement Initiatives at Toray Group](#)
- > [Initiatives to Mitigate Global CSR Procurement Risk](#)
- > [Statement on the UK's Modern Slavery Act](#)

CSR Roadmap 2025 Targets

CSR Roadmap goals

To ensure socially responsible procurement by the Toray Group, work with suppliers, processing vendors, subcontractors and other business partners to implement CSR initiatives that include compliance with laws and regulations, amelioration of global warming, environmental conservation, and respect for human rights

Main Initiatives and Key Performance Indicators

	KPI
(1) Request suppliers to comply with the Toray Group CSR Procurement Guidelines, and strive to ascertain the status of each company's CSR initiatives	9-①
(2) Identify high-risk areas that may have a negative impact on the environment and human rights, and promote supply chain due diligence to implement measures to prevent or mitigate the identified risks	9-②
(3) Promote procurement of responsibly sourced materials such as non-conflict minerals and sustainable palm oil	9-③
(4) Reduce CO ₂ emissions intensity from distribution activities	9-④
(5) Continually investigate and ascertain logistics risks related to natural disasters such as typhoons and heavy rains, and strive to reduce risks	9-⑤
(6) Continually work to reduce the environmental impact and improve the quality of distribution activities	-
(7) In accordance with the Declaration of Voluntary Activities for the White Logistics Movement ⁴ , contribute to sustainable logistics, for instance by selecting logistics companies that are engaged in working style reform, etc.	-

Key Performance Indicator (KPI)	Target			Fiscal 2023 Result
	Fiscal 2023	Fiscal 2024	Fiscal 2025	
9-① Suppliers agreeing to the Toray Group CSR Procurement Guidelines (%)	At least 75%	At least 85%	At least 90%	76.8%
9-② Implementation of supply chain due diligence (% of cases)	At least 60% (Fiscal 2024)		At least 90%	5
9-③ Oil procurement needs met by palm oil sourced in a manner that is environmentally responsible and respectful of human rights (% of oil purchased, by value)	At least 70% (Fiscal 2024)		At least 90%	6
9-④ Reduction in CO₂ emissions per unit of sales from distribution activities (year-on-year)	1%	1%	1%	11.5%
9-⑤ Key external inventory sites that have been assessed for natural disaster risk and have implemented measures to mitigate serious risks (%)	At least 60%	At least 75%	At least 90%	59%

Reporting scope: Toray Group (9-① and 9-②)

Toray Industries, Inc. (9-③ and 9-⑤)

Toray Group (Only specified consigners, Toray Industries, Inc., TAF) (9-④)

4 The White Logistics Movement: A movement aimed at ensuring stable logistics function necessary for people's lives and for industrial activities while also contributing to economic growth in response to the shortage of truck drivers

5 Since efforts to achieve the fiscal 2024 target began recently, there are no figures to report for fiscal 2023. During this year, measures were taken to determine the anticipated high-risk issues, countries, regions, and industries, and preparations were made to identify and investigate the relevant suppliers.

6 Since efforts to achieve the fiscal 2024 target began recently, there are no figures to report for fiscal 2023. The plan is to survey the Company's major suppliers of lubricants containing palm oil by investigating those that account for 90% or more of the Company's palm oil-related purchasing amount in fiscal 2023.

Related Materiality for CSR

- Developing in Collaboration with Stakeholders
- Establishing Sustainable Supply Chain

* Click [here](#) for the Materiality View of CSR Roadmap 2025 (PDF:392.4KB).

PDF

Looking to the Future

In recent years, there has been an increasing demand for companies to address social issues such as human rights and environmental problems throughout the supply chain. Toray Group believes that socially responsible procurement must be pursued together with all suppliers. The Group will continue to identify and evaluate progress on CSR practices in all processes, including the procurement of raw materials and supplies across the entire Group, as well as production activities by contractors and processing vendors. Toray Group will continue to promote CSR initiatives across its network of suppliers in order to build an even more sustainable supply chain.

Click [here](#) for the main initiatives and KPIs for CSR Guideline No. 9 “Establishing Sustainable Supply Chain” during the CSR Roadmap 2025 period (fiscal 2023–2025). [PDF](#)

CSR Activity Report (CSR Guideline Activity Reports) - Establishing Sustainable Supply Chain

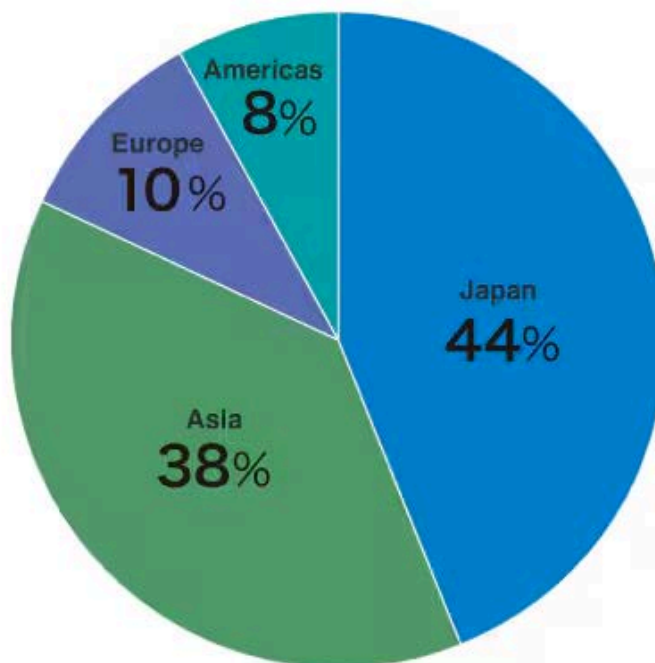
Socially Responsible Procurement Initiatives at Toray Group

Toray Group Supply Chain

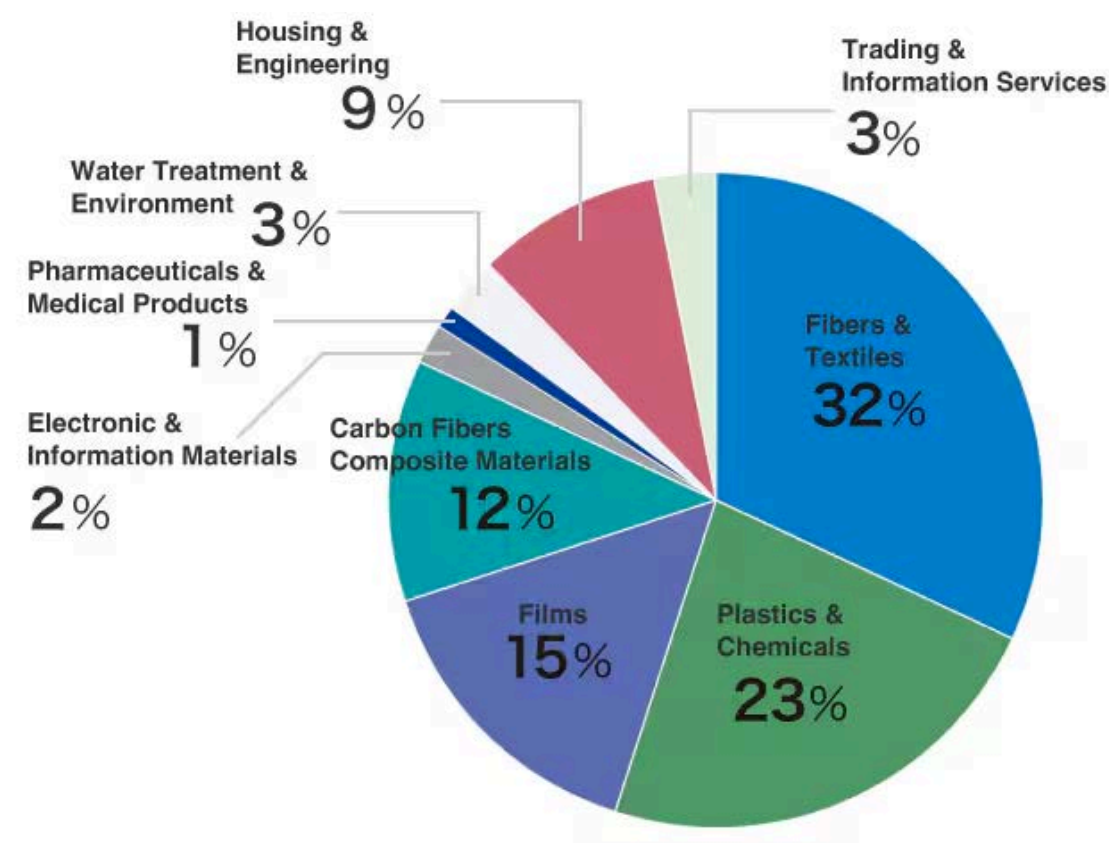
Toray Group's supply chain extends to diverse countries and regions around the world. In fiscal 2023, the Group's purchasing by region was 44% in Japan, 38% in the rest of Asia, 10% in Europe, and 8% in the Americas. Purchasing by business segment was 32% for Fibers & Textiles, 23% for Plastics & Chemicals, 15% for Films, 12% for Carbon Fibers Composite Materials, and 18% for others. Operating in a wide range of industries, the Group's suppliers include general trading companies, specialized trading companies, and worldwide producers of petrochemicals, fuels, pharmaceuticals, molded products, packaging materials, machine tools, precision equipment, machine parts, and processed materials. The Group conducts both regular and spot transactions.

Fiscal 2023 Purchasing Breakdowns by Region and Business Segment (Based on Transaction Value)

Purchasing Breakdown by Region



Purchasing Breakdown by Business Segment



Toray Group's Socially Responsible Procurement Activities

CSR Roadmap 2025
Main Initiatives (1)/(2)

Suppliers agreeing to the Toray Group CSR Procurement Guidelines (%)

■Reporting scope
Toray Group

■Target in fiscal 2023
At least 75%

Result in fiscal 2023

76.8%

Implementation of supply chain due diligence (% of cases)

■Reporting scope
Toray Group

■Target
At least 60% (Fiscal 2024)

Result in fiscal 2023

1

1 Since efforts to achieve the fiscal 2024 target began recently, there are no figures to report for fiscal 2023. During this year, measures were taken to determine the anticipated high-risk issues, countries, regions, and industries, and preparations were made to identify and investigate the relevant suppliers.

With its global supply chain, Toray Group places top priority on ascertaining suppliers' CSR activities and requesting them to implement the necessary initiatives. Toray Group is facilitating CSR initiatives across its supply chains, including at group companies in Japan and around the world. These efforts include developing a socially responsible procurement system, responding to customers' requests for CSR practices, ascertaining supplier CSR initiatives, educating suppliers, carrying out CSR surveys of suppliers, requesting compliance with the Toray Group CSR Procurement Guidelines, and conducting activities to obtain written agreements on these guidelines. Toray Group uses its own questionnaire survey system to conduct regular surveys of suppliers and monitor their CSR efforts. The Group assesses suppliers based on uniform group standards, provides feedback on the results to suppliers, and follows up on poor-performing suppliers. By maintaining this due diligence process, the Group endeavors to raise suppliers' awareness and efficiently and effectively ascertain, prevent, and lower CSR risks across the supply chain. Moreover, Toray Group has created its own Supply Chain CSR Promotion Guidebook, which is regularly distributed to suppliers as a reference material, along with feedback concerning the periodic CSR procurement surveys.

Initiatives to Mitigate Global CSR Procurement Risk

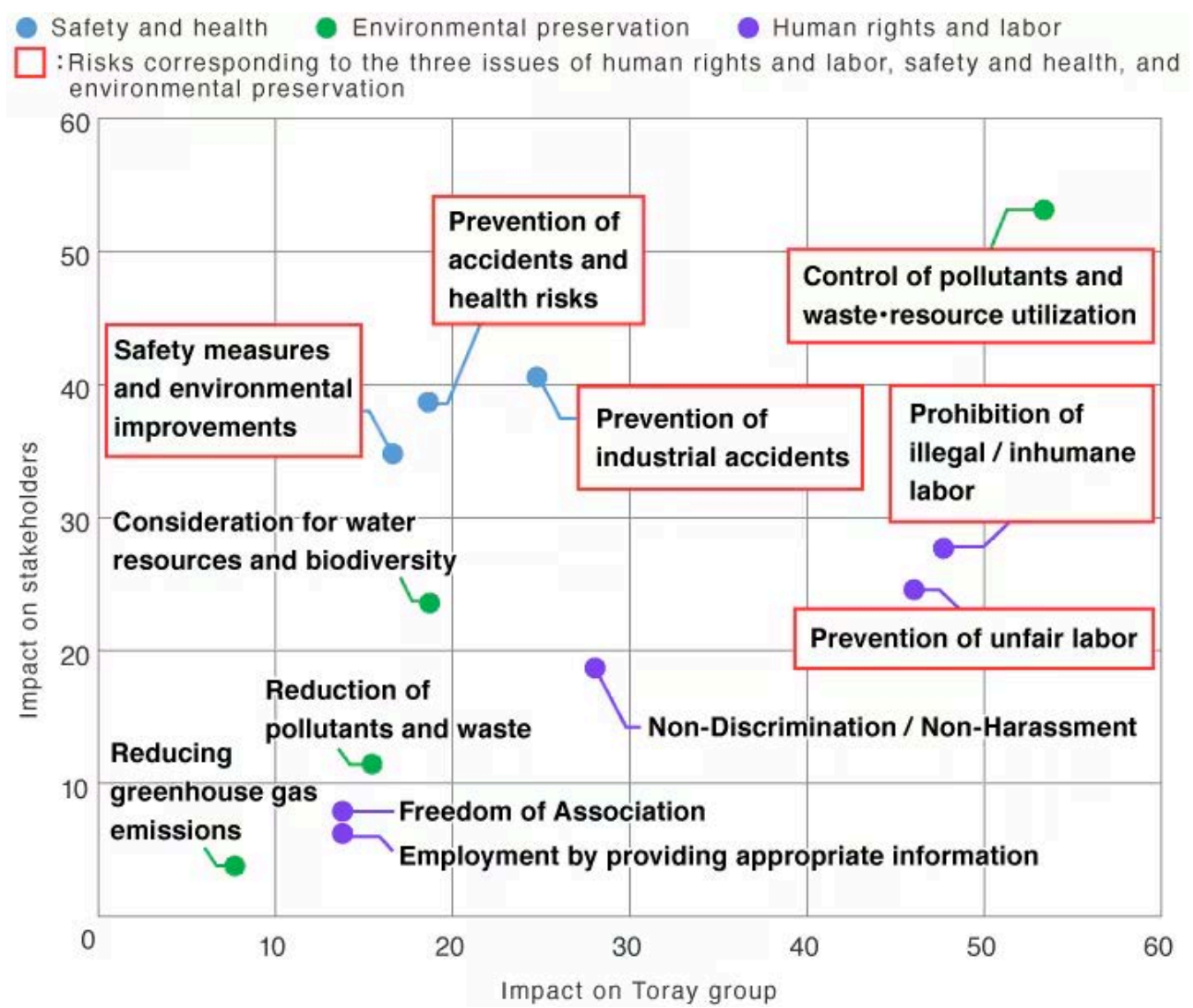
To mitigate CSR procurement risks within Toray Group, a process was developed to identify key CSR procurement risk factors such as country, region, and industry. The process identifies suppliers for investigation, followed by risk assessments, audits, and mitigation measures.

After identifying and prioritizing CSR procurement risks, the Group decided to focus on three key issues for detailed investigation: human rights and labor, safety and hygiene, and environmental protection. Questionnaires and audit procedures were created to investigate these issues with suppliers.

To evaluate the operational feasibility of the prepared questionnaires and audit procedures, tests were conducted together with group companies worldwide, in preparation for the actual implementation of the investigation process. To pick out suppliers requiring investigation, an identification process was created that narrows down suppliers based on information collected from group companies worldwide, taking into account factors such as the supplier country, region, and industry.

In fiscal 2024, the Group will establish the risk identification and investigation processes, conduct risk assessments of identified suppliers, and perform audits and follow-up actions in cases where risks are found. Through these efforts, CSR procurement risks will continue to be mitigated across the entire Toray Group.

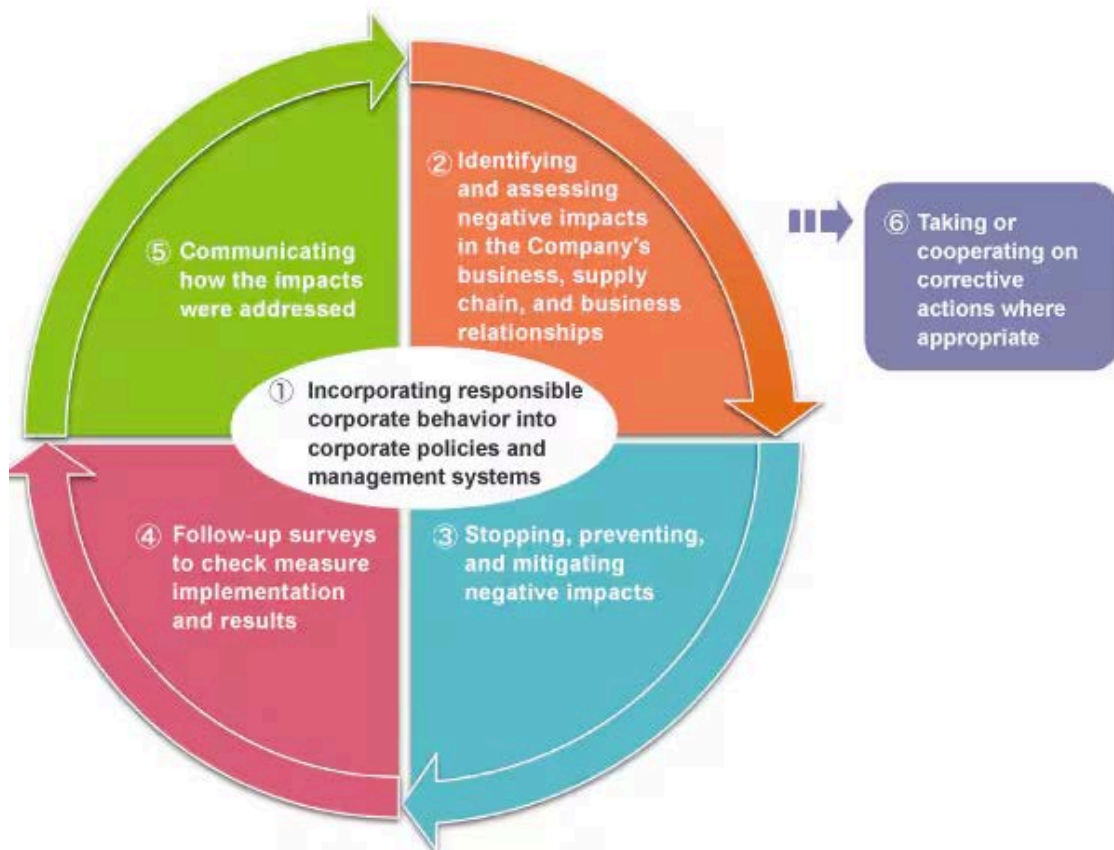
CSR Procurement Risk Map (High-Risk Issues in the Supply Chain)



As a KPI under its CSR Roadmap 2025, Toray Group has adopted the implementation rate for supply chain due diligence and is promoting efforts accordingly.

Each of the 80 group companies outside Japan is working to identify and survey suppliers deemed high-risk in terms of human rights and labor, safety and hygiene, and environmental protection. This applies to the 2,341 major suppliers that have received the Toray Group CSR Procurement Guidelines. The higher risk suppliers are identified based on factors such as the country, region, and industry. The goal is to achieve a due diligence implementation rate of 60% or higher by fiscal 2024 and 90% or higher by fiscal 2025.

Supply Chain Due Diligence Process



① Incorporating responsible corporate behavior into corporate policies and management systems

- Toray Group Policy for Human Rights
- Ten Basic Environmental Rules
- Recycling Activity Principles
- Toray Group Biodiversity Basic Policy
- Toray Group's Basic Policy for Increasing Green Areas
- Toray Group CSR Procurement Policies
- Presenting the Toray Group CSR Procurement Guidelines to business partners and obtaining written agreements for compliance

② Identifying and assessing negative impacts in the Company's business, supply chain, and business relationships

- Conducting and evaluating the CSR Procurement Survey
- Establishing a whistleblowing hotline system
- Investigating high-risk issues related to CSR procurement
- Confirming business partner risks using a corporate search system
- Auditing business partners

③ Stopping, preventing, and mitigating negative impacts

- Providing individual feedback to each business partner using the evaluation results of the CSR Procurement Survey
- Visiting low-score companies and requesting improvements

④ Follow-up surveys to check measure implementation and results

- Verifying improvement situations using the next CSR Procurement Survey and other means

⑤ Communicating how the impacts were addressed

- Public announcement in the Group's CSR Report and in the UK Modern Slavery Act statement

⑥ Taking or cooperating on corrective actions where appropriate

- Establishing a compliance violation reporting mechanism (setting up a whistleblowing hotline)

Main Items of CSR Surveys of Suppliers

I . CSR promotion system

- ☐ Establishment of and familiarity with policies and guidelines
- ☐ Establishment of internal system and selection of responsible parties
- ☐ Establishment of goals and plans, review of activity results

II . Corporate ethics and compliance

- ☐ Anti-corruption and bribery prevention
- ☐ Prevention of misuse of advantageous position and bid-rigging
- ☐ Thorough legal and ethical compliance
- ☐ Prevention of conflicts of interest
- ☐ Protection of confidential information and personal information
- ☐ Respect for and protection of intellectual property rights
- ☐ Avoidance of all involvement with organized criminal groups
- ☐ Prevention of use of technology barred under regulations and illegal exports
- ☐ Identification of use of conflict minerals and cobalt and country of origin

III. Occupational safety and health

- ☐ Safety measures in workplace and improvements to working environment
- ☐ Prevention of occupational accidents
- ☐ Prevention of accidents and health risks
- ☐ Adoption of management system related to occupational safety

IV. Disaster prevention and risk management

- ☐ Development of education, training and manuals for disasters
- ☐ Establishment of business continuity plan (BCP) for large-scale disasters
- ☐ Establishment of BCP for pandemic
- ☐ Defense against threats on computer network

V. Environmental conservation

- ☐ Obtaining and maintaining authorizations and registrations
- ☐ Prevention of pollutants and waste, promotion of resource use (3Rs: reduce, reuse, recycle)
- ☐ Appropriate management of chemical substances and pollutants in line with laws and regulations
- ☐ Greenhouse gas emissions management and reduction
- ☐ Green procurement, green purchasing, energy conservation activities
- ☐ Consideration for water resources and biodiversity and implementation of assessments
- ☐ Introduction of environmental conservation management system

VI. Interaction with stakeholders

- ☐ Disclosure of financial information and non-financial information
- ☐ Setting up hotlines for consultation and reporting, protection of whistleblowers
- ☐ Support for community activities and activities contributing to society, and encouragement of participation in such activities

VII. Product safety and quality assurance activities

- ☐ Assessment of product safety, management of substances contained in products
- ☐ Provision of information on specifications, quality and handling

VIII. Human rights and labor

- ☐ Prevention of child labor and measures for young workers
- ☐ Prevention of forced labor, slave labor, and other forms of illegal or inhumane labor practices
- ☐ Provision of appropriate information to foreign workers and employment
- ☐ Prevention of undue low wages and wage reductions, as well as labor that exceeds statutory limits
- ☐ Ban on harassment, physical punishment, abuse, etc.
- ☐ Protection for freedom of association and collective bargaining, etc.
- ☐ Responding to the impact of COVID-19

IX. CSR initiatives in supplier's own supply chain

- ☐ Requests for promotion of CSR along supply chain

Every two years, in principle, Toray Industries carries out a CSR survey of major suppliers, business partners and distribution companies which together are responsible for 90% of the Company's total procurement value.

Questions are established based on the Toray Group CSR Procurement Policies and the Toray Group CSR Procurement Guidelines. The surveys exhaustively confirm the extent to which suppliers are addressing CSR, requesting actions on a variety of social issues such as respect for human rights, reduction of greenhouse gas emissions, consideration for water resources and biodiversity, and implementation of environmental assessments. In fiscal 2022, Toray Industries carried out CSR surveys of major suppliers and received 448 responses (137 raw material suppliers, 157 equipment and material suppliers, 40 logistics companies, as well as 114 production and processing contractors). The results indicated that about 99% of companies surveyed were rated S, A or B² for CSR practices, thus meeting the Company's standards for business partners. The companies surveyed rated C or D, requiring further investigation of their CSR practices, accounted for just 1%. Analysis revealed that the average scores for the 448 companies improved compared to the previous survey with respect to most survey items such as environmental conservation, product safety and quality assurance activities, and human rights and labor. The results have reaffirmed that each company is promoting CSR initiatives. In addition, 80% of the companies that were rated C or D in the previous survey, visited to confirm actual conditions, and requested to make improvements earned to a B or higher rating in the current survey. The assessment results from the current survey have been shared with each company along with the contents of the analysis for fiscal 2023. The feedback was provided to each company in the form of a score sheet, which included not only their individual assessment, but also the overall averages, including the scores of other companies. In fiscal 2023, the Company individually visited all six suppliers that were rated C or D to confirm actual conditions and discussed measures for improvement. As a result, many improvements were made by these suppliers, such as establishing internal regulations on ethics and compliance and reflecting them in employee work rules, developing an internal business continuity plan (BCP) for disaster prevention and risk management, conducting internal training on human rights and labor, and using the Toray Group Supply Chain CSR Promotion Guidebook to request compliance measures from their own suppliers. Furthermore, in the case of business partners that met the standards required by Toray Industries based on the CSR Procurement Survey results, on-site audits are also progressively being carried out for those in industries where the risks of negative impacts are a concern.

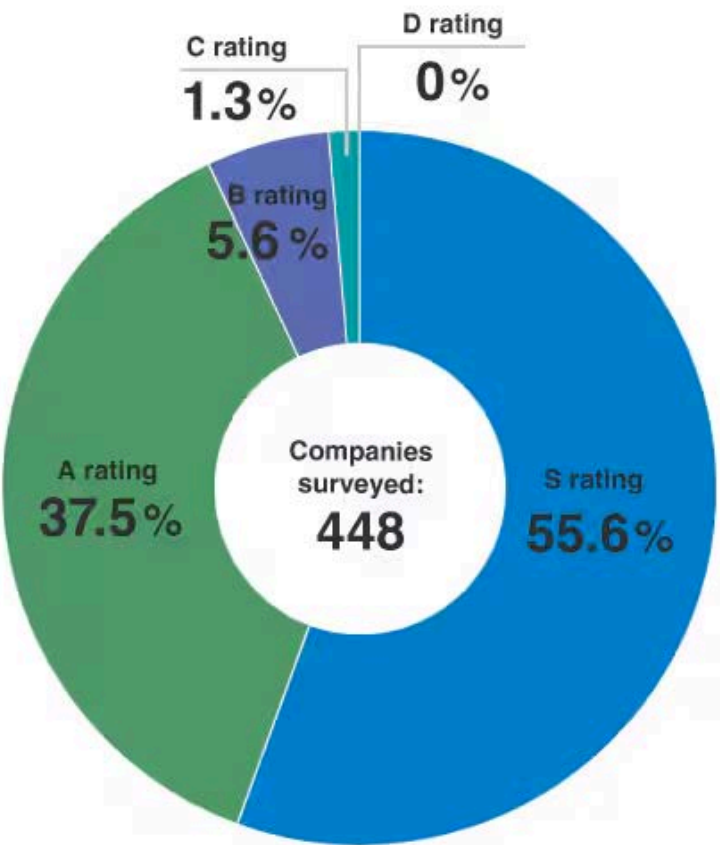
In parallel with efforts to understand, assess, and improve the current status through CSR Procurement Surveys, Toray Industries is mitigating CSR-related risks by asking its suppliers to understand and comply with the Toray Group CSR Procurement Guidelines, established in March 2022, as part of efforts to further enhance CSR activities throughout the entire supply chain. These guidelines outline specific and detailed requirements for areas such as ethics, compliance, safety, accident prevention, risk management, environmental preservation, product quality and safety, and human rights promotion. In fiscal 2022, the Company sent the Toray Group CSR Procurement Guidelines to the 476 major suppliers surveyed and requested their understanding and compliance. In fiscal 2023, the Company did the same for 26 suppliers (reaching a total of 502 suppliers by the end of March 2024). In addition to asking for suppliers' understanding and compliance, efforts have also been made to obtain written agreement from suppliers stating that they will adhere to the guidelines. As a result, 379 companies had provided such agreements by the end of fiscal 2023.

In addition, rules for responses to CSR surveys from customers are set and a system is in place to facilitate prompt and accurate responses.

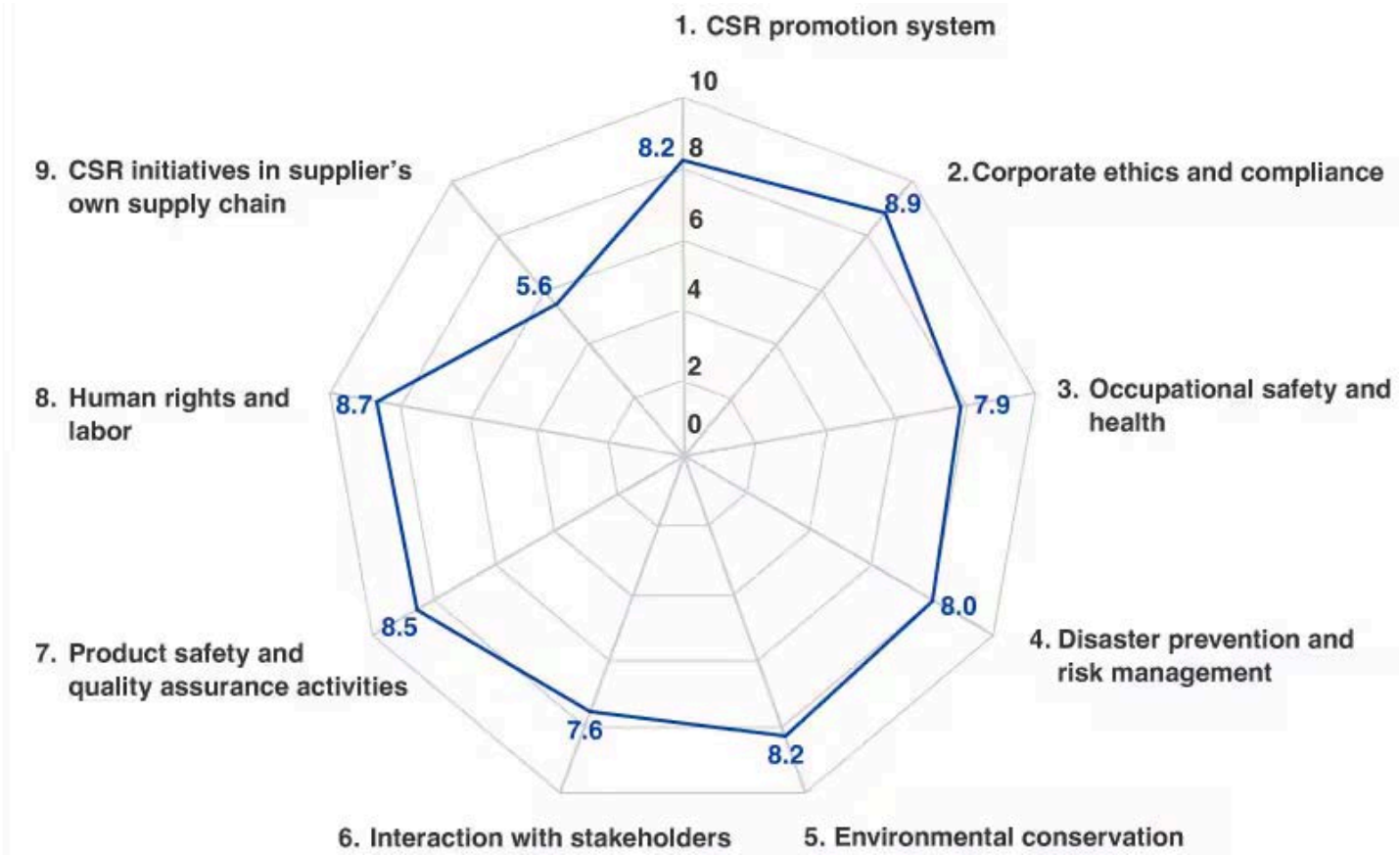
2 Survey responses are assessed on a 10-point scale for each of the nine survey items. Taking the average score for the nine items as the overall score, 8 or more points is rated as S, 6 or more points but less than 8 is rated as A, 5 or more points but less than 6 is rated as B, 3 or more points but less than 5 is rated as C, and less than 3 points is rated as D.

Percentage of suppliers with the level of efforts required by the Company (Rated as S, A, or B) 99%

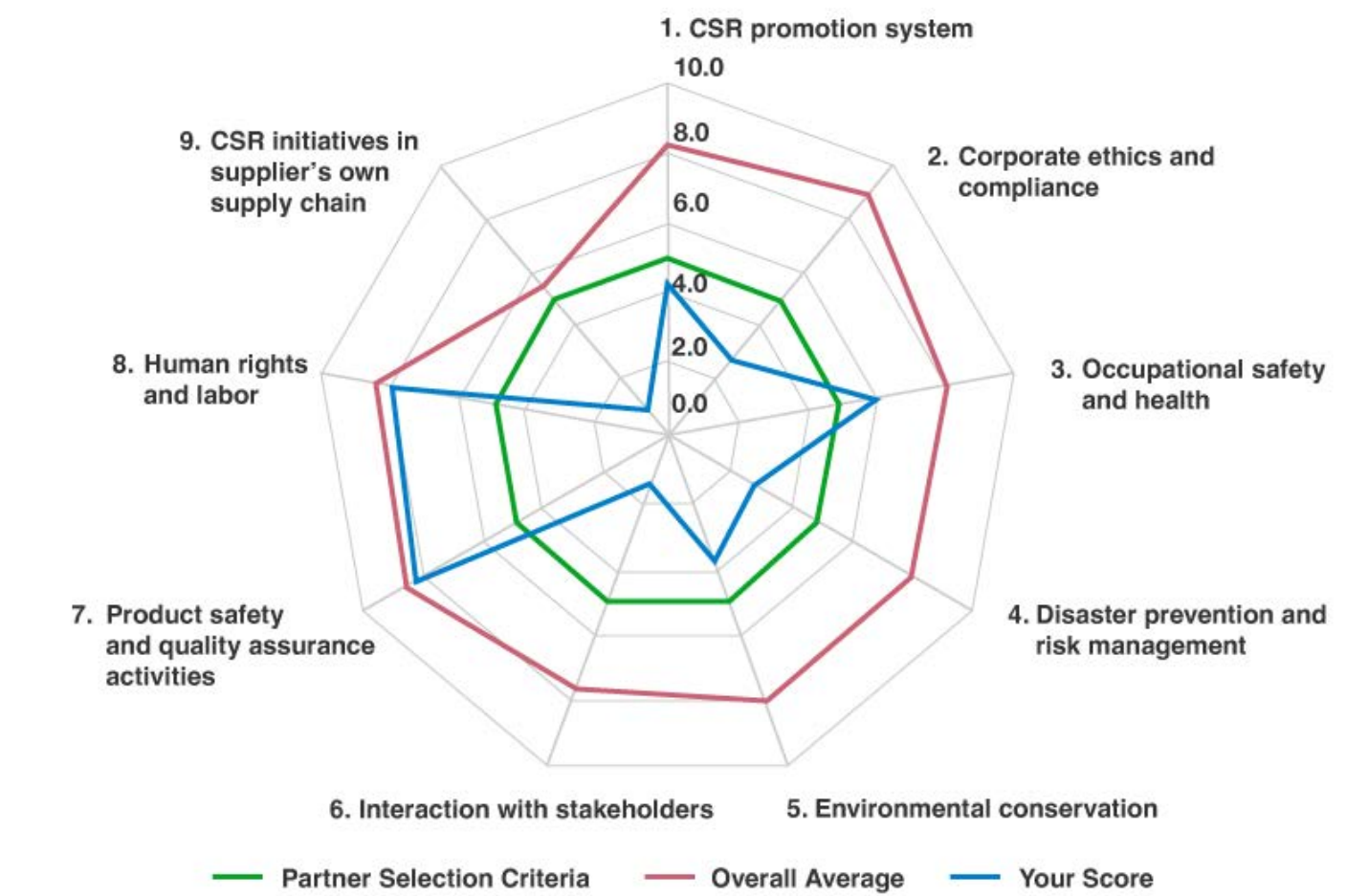
Fiscal 2022 CSR Status of Suppliers (Toray Industries, Inc.)



Fiscal 2022 Analysis of CSR Survey of Suppliers (Toray Industries, Inc.)



Feedback Using the Fiscal 2022 Toray Industries CSR Procurement Survey Evaluation Results (Example)



Socially Responsible Procurement Initiatives at Toray Group Companies in and outside Japan

Toray Group Companies in and outside Japan have also established their own internal systems and rules and are conducting CSR procurement surveys of their suppliers. They also ask suppliers to comply with the Toray Group CSR Procurement Guidelines, while conducting audits and other measures to continually ascertain the status of supplier CSR initiatives and to request improvements.

Group companies outside Japan ask their suppliers to implement CSR initiatives. For suppliers that have not received such requests, Toray Industries conducts CSR procurement surveys and other measures to support CSR procurement at overseas group companies. In fiscal 2022, 80 group companies outside Japan sent the Toray Group CSR Procurement Guidelines to 2,212 of their major suppliers. In fiscal 2023, 129 more business partners were contacted, reaching a total of 2,341 major suppliers as of March 31, 2024. In addition to requesting cooperation and compliance, the group companies are working to obtain written agreement from them stating they will adhere to the guidelines. As a result, by the end of fiscal 2023, they had obtained such agreements from 1,542 suppliers, excluding 121 companies that group companies do not expect to do business with in the future. With the support of Toray Industries, group companies outside Japan will continue to obtain written agreements from existing and new suppliers.

Group companies in Japan also continued to request CSR procurement measures from their suppliers. In fiscal 2023, these companies conducted a CSR procurement survey among their major suppliers and received 851 responses. In addition to checking the CSR promotion situation at each supplier using the questionnaire, the relevant evaluation results were shared with each supplier as feedback. The suppliers requiring further investigation of their CSR practices were subject to such investigation, and group companies in Japan requested that suppliers requiring further investigation of their CSR practices make improvements. In fiscal 2022, 41 group companies in Japan sent the Toray Group CSR Procurement Guidelines to 1,539 major suppliers and requested their cooperation and compliance. In fiscal 2023, 14 more business partners were contacted, reaching a total of 1,553 major suppliers as of March 31, 2024. Group companies in Japan have been carrying out activities to obtain written agreements from suppliers on adherence to the guidelines. As a result, by the end of fiscal 2023, these group companies obtained written agreements from 1,319 suppliers, excluding 57 suppliers that these group companies do not expect to do business with in the future. With the support of Toray Industries, the group companies in Japan will continue to obtain written agreements from existing and new suppliers.

Furthermore, the CSR Roadmap 2025 sets KPI for the percentage of group-wide suppliers that have agreed to follow the Toray Group CSR Procurement Guidelines. The targets for fiscal 2023, 2024, and 2025 are 75%, 85% and 90% or higher, respectively. In fiscal 2023, agreement was obtained from 3,240 out of 4,218 major Toray Group suppliers, representing 76.8% of business partners.

Examples of Workplace Initiatives in Fiscal 2023

Initiatives by the U.S. Toray Group Procurement Team

The Toray Group procurement team in the United States, consisting of procurement representatives from eight Toray Group companies in the country, participated in the annual conference held by the Institute for Supply Management in Dallas, Texas. The team also engaged in discussions regarding initiatives relating to Toray Group projects in 2023 and 2024.



Members of the U.S. Toray Group procurement team who attended the meeting

Human Rights in the Supply Chain

CSR Roadmap 2025
Main Initiatives (1)/(2)

Toray Group believes that respect for human rights and environmental preservation are especially crucial elements in ensuring that the supply chain is stable and sustainable.

The Toray Group CSR Procurement Policies state that Toray will work to build a supply chain that promotes human rights and preserves the environment. The Group requests that suppliers comply with the Toray Group CSR Procurement Guidelines and take measures to respect human rights; prohibit forced labor, slave labor, child labor, and unfair low-wage labor; and to protect the environment, including by reducing GHG emissions and conserving biodiversity.

With the CSR procurement questionnaire, the Company strives to understand and evaluate suppliers' initiatives related to human rights, labor practices, and environmental preservation. It also ascertains and prevents issues from arising in the supply chain.

Results of Fiscal 2022 CSR Survey of Suppliers Regarding Respect for Human Rights

The survey conducted by Toray Industries in fiscal 2022 confirmed a high rate of implementation of initiatives on 12 survey items, excluding those related to requests to secondary suppliers, out of 13 items related to human rights and labor. In fiscal 2023, the Company conducted individual status checks and requested responses from those suppliers who answered "Will address in one year" ([1] in the table below) and "Not addressed" ([0] in the table below). The Company will confirm the results of supplier improvement measures using the fiscal 2024 CSR Procurement Survey.

In addition, CSR procurement surveys have been used since fiscal 2020 to investigate whether suppliers had been responding appropriately to various issues related to human rights, such as employment and labor issues that could have arisen due to the pandemic, and to identify and prevent issues within the supply chain.

Survey Questions	Implementation rate	Survey results (The results are ranked from 0 to 4. 0 and 1 mean that the company has not addressed the issues.)
1. Have policies and guidelines been set and employees educated about respect for human rights, eliminating discrimination and improving the work environment?	99.2%	[4] 51% [3] 31% [2] 17% [1] 0% [0] 0%
2. Has an internal system been set up and people responsible for its promotion been designated in regards to respect for human rights, eliminating discrimination and improving the work environment?	98.6%	[4] 52% [3] 26% [2] 21% [1] 0% [0] 1%
3. Have goals and plans been set, activity results reviewed and mechanisms for making improvements and corrections devised in regards to respect for human rights, eliminating discrimination and improving the work environment?	98.4%	[4] 41% [3] 25% [2] 33% [1] 1% [0] 1%
4. Do you employ anyone under the working age stipulated by applicable laws and regulations? In the case of employees under the age of 18, are the working hours and health and safety of those employees given special consideration in accordance with relevant laws and regulations?	99.5%	[3] 100% [1] 0% [0] 0%
5. Do you use any form of labor that is, or is similar to, forced and bonded labor, involuntary or exploitative prison labor, or modern slavery, or that is linked to human trafficking? Do you guarantee that all your employees are free to leave their employment at any time they wish?	99.3%	[3] 99% [1] 0% [0] 0%
6. Do you provide each foreign worker with an employment contract, employment rules, and other relevant documents in a language the individual can understand? Also, do you ever confiscate, conceal, or destroy any identification documents, passports, work permits, or other similar documents belonging to such workers, or prevent them from using those documents?	96.2%	[3] 96% [1] 3% [0] 1%
7. Do you pay appropriate wages in accordance with relevant laws and regulations when it comes to minimum wages, overtime, wage deductions, piecework wages, and other benefits? Are unfair pay cuts ever used?	99.5%	[3] 100% [1] 0% [0] 0%
8. Are conditions appropriately managed and operated to ensure that sexual harassment, power harassment, physical punishment, emotion or physical abuse, pressure and other inhuman treatment and actions do not occur?	99.3%	[3] 99% [1] 0% [0] 0%
9. Are conditions appropriately managed and operated to ensure that in recruiting, hiring and employing people, race, the color of one's skin, age, gender, sexual orientation, nationality, religion and other factors do not result in discriminatory action?	98.8%	[3] 99% [1] 1% [0] 0%
10. In all employment activities, including recruitment, hiring, compensation, and retirement, do you have policies and rules in place to prohibit any discrimination based on race, creed, skin color, sex, religion, nationality, language, physical characteristics, wealth, or place of birth, etc.?	95.6%	[3] 96% [1] 3% [0] 1%
11. Do you recognize the rights of employees to freedom of association, in accordance with the laws and regulations of each country and region? Are arrangements made for employee representatives and employees to engage in dialogue and consultation with management without fear of retaliation, intimidation, or harassment?	97.0%	[3] 97% [1] 2% [0] 1%
12. Is due consideration given to various employment, human rights, and labor issues that may arise due to the spread of COVID-19 and appropriate responses taken?	98.8%	[3] 99% [1] 1% [0] 0%
13. Do you ask your suppliers to make improvements in regard to respect for human rights, the eradication of discrimination and improvement of the labor environment?	69.8%	[4] 18% [3] 24% [2] 29% [1] 8% [0] 22%

Supplemental information:

[4] Addressed well

[3] Addressed

[2] Addressed at minimum level

[1] Will address in one year

[0] Not addressed

For questions 4 to 12, only [3], [1], and [0] are used; no value has been set for [4] or [2].

Results of Fiscal 2022 CSR Survey of Suppliers Regarding Environmental Preservation

Toray Group considers the reduction of greenhouse gas emissions and biodiversity conservation to be important issues for preserving the global environment. Using CSR procurement surveys, the Group also checks the situation for supplier compliance with environmental laws, as well as supplier efforts to reduce GHG emissions and preserve biodiversity. The survey conducted by Toray Industries in fiscal 2022 confirmed a high rate of implementation of initiatives on 11 survey items, excluding those related to requests to secondary suppliers, out of 12 items related to environmental preservation. For example, the Company confirmed that 84% of its major suppliers are taking steps to reduce GHG emissions. Each supplier is provided with feedback on their questionnaire results, and those with insufficient CSR measures are asked to improve their compliance efforts. In fiscal 2023, the Company conducted individual status checks of those suppliers who answered “Will address in one year” ([1] in the table below) and “Not addressed” ([0] in the table below) in the fiscal 2022 questionnaire on questions concerning compliance with environmental laws, GHG emissions reduction, and biodiversity conservation initiatives. Improvements were requested as necessary, and the Company will confirm the results of supplier improvement measures using the fiscal 2024 CSR Procurement Survey.

Survey Questions	Implementation rate	Survey results (The results are ranked from 0 to 4. 0 and 1 mean that the company has not addressed the issues.)
1. Have you stipulated the policies or guidelines for promote environmental preservation and familiarized them with your employees?	97.9%	[4] 68% [3] 11% [2] 20% [1] 1% [0] 1%
2. Have you prepared the internal system and designated the responsible person to promote environmental preservation?	97.2%	[4] 65% [3] 14% [2] 18% [1] 1% [0] 2%
3. Do you have any mechanism to identify risks, institute the goals / plans, verify and improve / correct results of the activities in relation to environmental preservation?	97.7%	[4] 61% [3] 14% [2] 22% [1] 1% [0] 2%
4. Have you acquired and maintained, and kept up to date all permissions and registrations to be required by the laws and public administration, etc. for the environment?	94.4%	[3] 94% [1] 4% [0] 2%
5. Do you control discharge of pollutant and generation of waste and perform the efforts of saving resource and energy including reduction / reuse / recycle (3R) , etc.?	95.7%	[3] 96% [1] 3% [0] 1%
6. Do you comply with the applicable laws / regulations, (REACH, ROHS, etc.) for, and appropriately manage the procured chemical substances?	97.1%	[3] 97% [1] 2% [0] 1%
7. Do you appropriately manage discharge of chemical substances into environment including air pollutant and water pollutant and perform the efforts for reduction?	94.0%	[3] 94% [1] 5% [0] 2%
8. Do you appropriately manage emission of greenhouse gas and perform the efforts for reduction (prevention of global warming)?	84.1%	[3] 84% [0] 6% [1] 10%
9. Do you perform the activities concerning reduction of environmental load and energy saving including green procurement of raw materials and packing materials, green purchasing of office supplies office machinery, power saving of offices, use of EV cars?	95.8%	[4] 48% [3] 47% [1] 2% [0] 3%
10. Do you understand your business activities which may cause an impact on water resources and biodiversity, consider sustainable use of resources and perform the activities to minimize the impact for preservation of biodiversity?	91.0%	[4] 43% [3] 48% [1] 2% [0] 7%
11. Do you perform the environmental assessment regarding the products (assessment of the products' impact on the environment)?	84.8%	[4] 45% [3] 40% [1] 3% [0] 12%
12. Do you request the suppliers for promotion of environmental preservation?	76.4%	[4] 20% [3] 30% [2] 27% [1] 8% [0] 16%

[4] Addressed well
[3] Addressed
[2] Addressed at minimum level
[1] Will address in one year
[0] Not addressed

For questions 9 to 11, only [4] [3], [1], and [0] are used; no value has been set for [2].

Related Information

Addressing Conflict Minerals

In fiscal 2023, the Company also investigated products made with four raw materials: tin, tantalum, tungsten, and gold. It confirmed that none of the raw materials used were from conflict areas. Toray Industries has also set up an internal system for surveys and responses so that it can respond promptly and appropriately to requests from customers in regard to surveys on conflict minerals.

Sustainable Palm Oil Procurement

Oil procurement needs met by palm oil sourced in a manner that is environmentally responsible and respectful of human rights (% of oil purchased, by value)

■Target
At least 70% (Fiscal 2024)

3

3 Since efforts to achieve the fiscal 2024 target began recently, there are no figures to report for fiscal 2023. The plan is to survey the Company's major suppliers of lubricants containing palm oil by investigating those that account for 90% or more of the Company's palm oil-related purchasing amount in fiscal 2023.

Toray Industries is investigating whether certain oil products it procures are made from palm oil grown and harvested based on principles of environmental conservation and respect for human rights. The Company has set a target for fiscal 2024 of at least 70% for the proportion of relevant products it procures made from sustainable palm oil. This serves as a KPI under the CSR Roadmap 2025, and the aim is to achieve at least 90% by fiscal 2025.

Moreover, the Toray Group CSR Procurement Guidelines require that these products also meet criteria such as measures to help preserve biodiversity and ensure that no forced or slave labor is used.

Toray Industries has also set up an internal system for surveys and responses so that it can respond promptly and appropriately to requests from customers in regard to surveys on palm oil use.

CSR Procurement Training

CSR Roadmap 2025
Main Initiatives (2)

In November 2020 and February 2021, Toray Industries delivered two separate CSR e-learning modules to all executives and employees (including contractual workers, part-time staff, and temporary workers), which included content related to CSR procurement. A total of 13,947 individuals participated in the training. Special articles on CSR procurement have been featured in the Toray Group's internal newsletter to enhance group-wide awareness. In March 2024, Toray Industries invited an external consultant with expertise in CSR procurement to conduct a CSR webinar titled "The Importance of CSR Procurement and Due Diligence." The online seminar was for Toray Group employees, including procurement personnel, to enhance their understanding of this topic.

Group companies worldwide are also conducting similar awareness-raising activities through the distribution of internal educational materials. These cover the necessity of CSR procurement, required activities, and examples of risk incidents.

Related Information

> [Communication with Employees](#)

Human Rights Training for Contracted Security Companies

Toray Group outsources security services to companies specialized in that field, depending on the situation in the area where a business site is located.

In addition to training on the guard services required, the Group also provides training on human rights as necessary when contracting services.

Click [here](#) for the main initiatives for CSR Guideline 9, "Establishing Sustainable Supply Chain" in CSR Roadmap 2025.

CSR Activity Report (CSR Guideline Activity Reports) - Establishing Sustainable Supply Chain Toray Group Distribution Initiatives

Working Together with Business Partners

CSR Roadmap 2025
Main Initiatives (4)(6)(7)

Holding Basic Distribution Policy Briefings

Toray Industries, Inc. promotes understanding of Toray Group's distribution policies and works to improve distribution performance with annual Basic Distribution Policy Briefings for logistics companies as part of its ongoing effort to improve quality and reduce the environmental impact of its distribution process. In fiscal 2023, the briefing was held both online and in person, and 71 logistics companies participated.



Basic Distribution Policy Briefing (fiscal 2023)

Participation in White Logistics Movement and Efforts to Improve the Logistics Environment

Toray Industries participates in the White Logistics Movement¹, an initiative designed to ensure the provision of the stable logistics necessary for consumers' lives and for industrial activities, while also contributing to economic growth. In line with the declaration of voluntary activities given below, the Company is actively working to improve the logistics environment based on mutual understanding and cooperation with business partners and logistics companies.

¹ The White Logistics Movement: In response to the growing shortage of truck drivers in Japan, the Ministry of Land, Infrastructure, Transport and Tourism (MLIT), Ministry of Economy, Trade and Industry (METI) and Ministry of Agriculture, Forestry and Fisheries (MAFF) are working together to encourage the participation of shipping and logistics companies. The aim is to improve the productivity of truck transportation and raise logistical efficiency, while looking to realize a fairer labor environment, thereby making it easier for women and drivers over the age of 60 to work in the industry.

Initiative	Details
Cooperate with the logistics improvement and proposals	Seriously work on eliminating incidental work, etc. that leads to increased duty hours of truck drivers.
Use pallets, etc.	Expand use of packing styles (pallets, etc.) that enables loading using forklifts to reduce cargo loading time.
Extend lead time	Secure sufficient lead time corresponding to the transportation distance.
Take legal compliance status into account	Give utmost priority to assess compliance status with relevant laws upon selecting logistics companies for signing agreements.
Actively utilize logistics vendors engaged in working style reforms, etc.	Actively utilize logistics companies engaged in work-style reforms, improvement of transportation safety and logistics quality.
Suspend, discontinue, etc. of operation in case of adverse weather, etc.	Give utmost priority to the truck driver's safety in the event of adverse weather, earthquake, etc.

Addressing the 2024 Logistics Problem Through the Physical Internet Realization Conference and the Chemical Products Working Group

The logistics industry in Japan is experiencing an increase in small parcel logistics, while simultaneously facing a shortage of transportation capacity due to the aging of drivers and boat crews and a lack of human resources. The situation for transportation capacity continues to be challenging as a result. Additionally, with Japan's so-called "2024 problem", predictions indicate a 34% shortfall in logistics transportation capacity by 2030. This makes logistics one of the most critical challenges for the chemical industry. Furthermore, chemical products have unique properties, packaging formats, and are often heavy. This results in diverse transport methods and conditions, making it difficult for individual companies to implement effective measures to combat the 2024 problem.

To address these challenges, Toray Industries, alongside Mitsubishi Chemical Group Corporation, Mitsui Chemicals, Inc., and Tosoh Corporation, established the Chemical Products Working Group in July 2023, under the Physical Internet Realization Conference, organized by the Ministry of Economy, Trade and Industry and the Ministry of Land, Infrastructure, Transport and Tourism.

The Chemical Products Working Group currently includes 79 companies primarily comprising shippers and logistics providers (as of July 2024), as well as participants from the Japan Chemical Industry Association, the Japan Petrochemical Industry Association, and relevant departments of the Ministry of Economy, Trade and Industry and the Ministry of Land, Infrastructure, Transport and Tourism. The working group announced a voluntary action plan on March 29, 2024. For more details (in Japanese only), please click [here](#).

Improving Loading Operations Through Plant Logistics Innovation

The Mishima Plant of Toray Industries has faced the issue of trucks waiting for excessive periods of time at the plant's film warehouse before being able to load. As part of Japan's White Logistics Movement to enhance logistics efficiency, Toray Industries introduced a new digital system to shorten waiting times in fiscal 2021. The drivers can now check the waiting times online before heading to the warehouse and reserve an appropriate time slot. Also, shipping forms that had been printed out were shifted in fiscal 2022 to electronic form using tablet devices. The elimination of paper forms has reduced the burden on workers and drivers, while also helping to create a paperless society.

Initiative	Effect
• Reduction of average truck waiting times	56 minutes per vehicle before implementation 15 minutes per vehicle after implementation (73% reduction)
• Digitization of shipping documents	Before implementation: 120 sheets of paper per day After implementation: 0 sheets of paper per day

Toray Industries is also advancing similar initiatives at its other plants. The Gifu Plant adopted a loading reservation system and implemented paperless procedures in fiscal 2022 and 2023. The Nagoya, Okazaki, and Chiba Plants have also implemented their own loading reservation systems. The Company will continue to promote internal logistics reforms, thereby helping to improve logistics efficiency as a consignor.

Improving Logistics Productivity by Using Smart Pallets

Toray Industries is the first in the industry to use smart pallets equipped with active RFID tags developed by UPR Co., Ltd. Typically, pallets must be replaced with different pallets during transportation and storage to prevent their loss or outflow, and the loaded products must be reloaded each time. Smart pallets, on the other hand, do not need to be replaced, since the coming, going, and inventory of pallets can be managed from a distance with the embedded active RFID tags. Adoption of these smart pallets allows Toray's products to go on the same pallet from production to storage, transportation, and use by the customer. This has eliminated cargo handling work by truck drivers and warehouse personnel, shortened loading and unloading time, improved the working environment, and increased logistics productivity. Moreover, the Company is reducing CO₂ emissions related to pallet recovery by using its packaging materials recovery system to recover empty pallets.

Reduction in CO₂ emissions per unit of sales from distribution activities (year-on-year)

Result in fiscal 2023

11.5%

■Reporting scope

Toray Group (Only specified consigners, Toray Industries, Inc., TAF)

■Target in fiscal

2023
1%

Toray Group is working hard to reduce CO₂ emissions in transport. These initiatives include reducing transport distances, shifting modes of transport to those which have less environmental impact such as sea and rail (modal shift), and raising transportation efficiency.

In fiscal 2023, at Toray Group (only specified consigners² in Japan), CO₂ emissions from distribution activities³ were 25,400 tons, down 2,400 tons (8.7%) from the previous fiscal year, due primarily to a decrease in transport volume.

Due to an increase in net sales, which is the denominator, at Toray Industries and other group companies, CO₂ emissions intensity⁴ decreased for Toray Group. With the fiscal 2014 level (set at 100) as the base, the change in the Group's CO₂ emissions intensity was 70.6 in fiscal 2023, representing a decrease of 11.5% from the previous fiscal year (fiscal 2022).

In fiscal 2023, Toray Industries' CO₂ emissions from distribution activities totaled 21,900 tons, down 114 tons from the previous fiscal year. This was primarily due to efforts for full-load transport, increased loading rates and modal shift achievement. In addition, transport volume fell for resin and film products in particular, resulting in an emissions decrease of 2,100 tons (8.9%) from the previous year.

Toray Industries' CO₂ emissions intensity from distribution activities decreased by 13.6% year on year (from fiscal 2022) because, CO₂ emissions decreased, while net sales, the base unit denominator, increased. Over the past five years, however, CO₂ emissions intensity decreased an average of 6.2% per year. As a result, Toray Industries is reliably meeting its legal mandate to reduce CO₂ emissions intensity by an average of at least 1% every year. Toray Group will continue to seek CO₂ emissions reductions by pursuing environmentally responsible distribution.

² Toray Industries, Inc. and Toray Advanced Film Co., Ltd., which have annual cargo transport totaling 30 million ton-kilometers or more, are "specified consigners" under Japanese law.

³ CO₂ emissions from distribution activities refers to "CO₂ emissions related to the transportation of cargo entrusted to freight carriers" stipulated in the Act on Rationalizing Energy Use (Revised Energy Conservation Act)

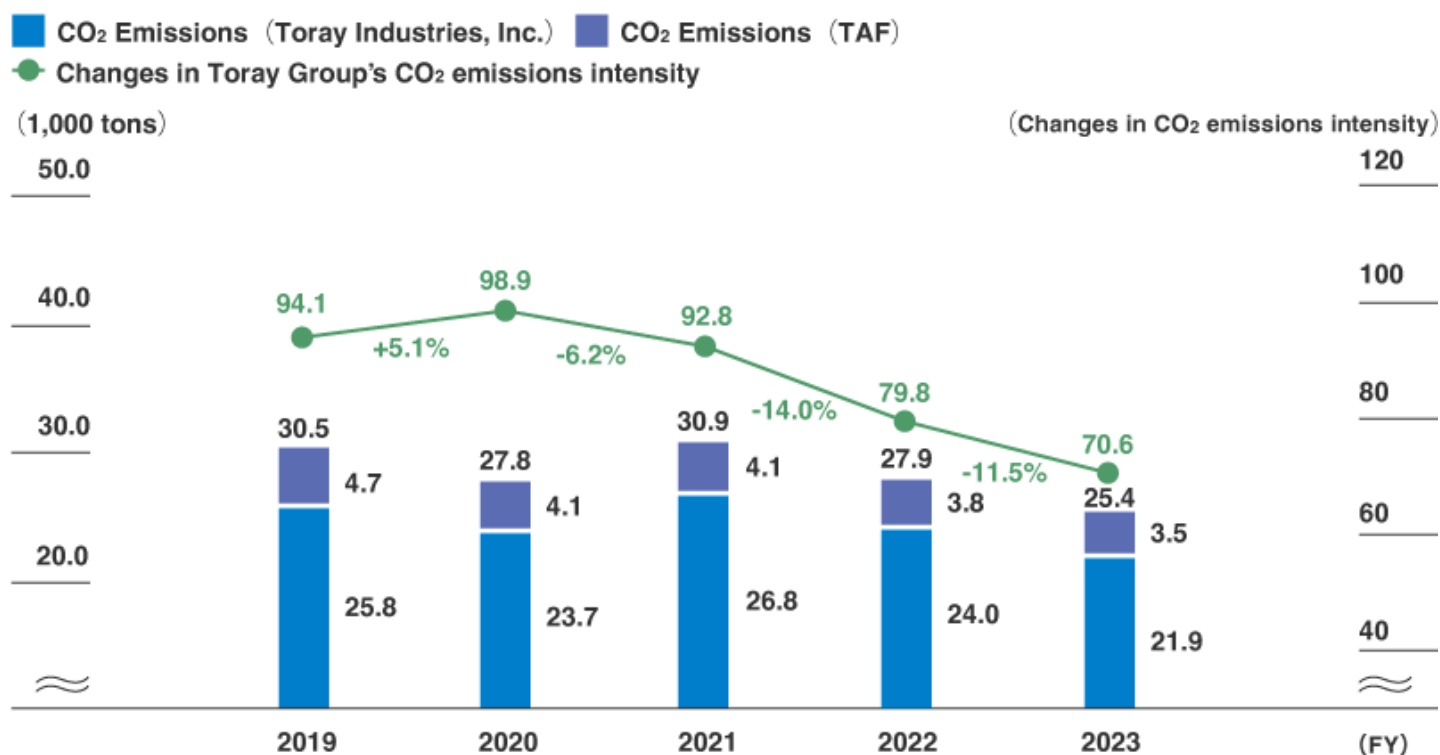
⁴ CO₂ emissions from distribution activities ÷ the following transport-related indexes

Toray Industries, Inc. = Net sales

Toray Advanced Film Co., Ltd. (TAF) = Shipping volume

Specified consigners are required to endeavor to meet the legal mandate to reduce CO₂ emissions intensity by an average of at least 1% every year over the medium- and long-term.

CO₂ Emissions Resulting from Distribution Activities and CO₂ emissions intensity (Toray Group's Specified Consigners in Japan)



Graph data revised:

Due to revisions made to TAF's CO₂ emissions and CO₂ emissions intensity figures from fiscal 2019 to fiscal 2022, the applicable figures in the graph for that period have also been corrected retroactively.

Notes:

1 Changes in Toray Group's CO₂ emissions intensity = Change in CO₂ emissions intensity at each specified consigner group company × Each group company's CO₂ emissions / Total Toray Group CO₂ emissions

2 Change in CO₂ emissions intensity at each group company = CO₂ emissions / Change in transport-related indexes (Fiscal 2014 = 100)

CO₂ Reduction Through Modal Shift Promotion (Toray Industries, Inc.)

Details of initiatives	CO ₂ Reduction (1,000 tons)
Full-load transport, and increased loading rates, etc.	0.070
Revision of inventory storage locations, and loading at the nearest port, etc.	0.036
Modal Shift	0.008
Total	0.114

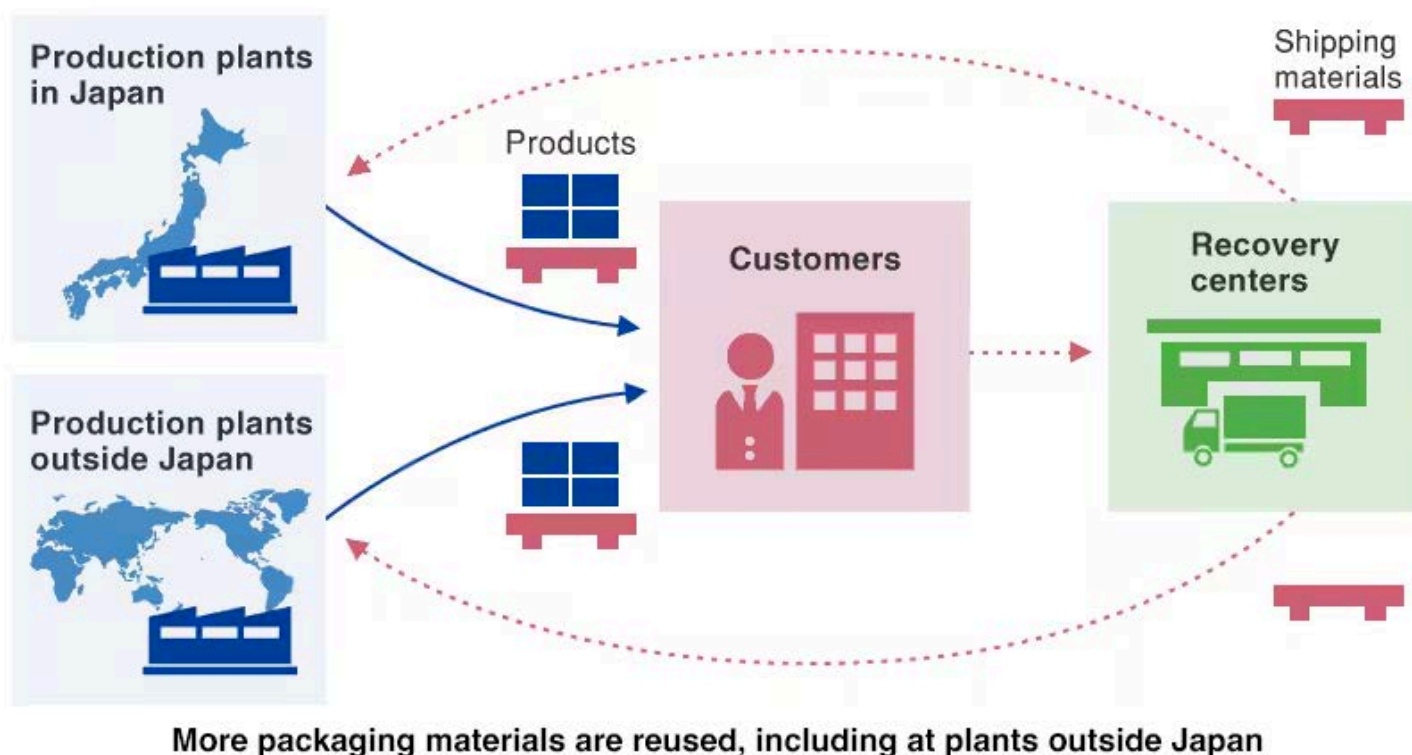
Expanding Collection and Reuse of Packaging Materials

Toray Group is establishing a global framework to collect and recycle packaging and shipping materials that are included with products used by customers.

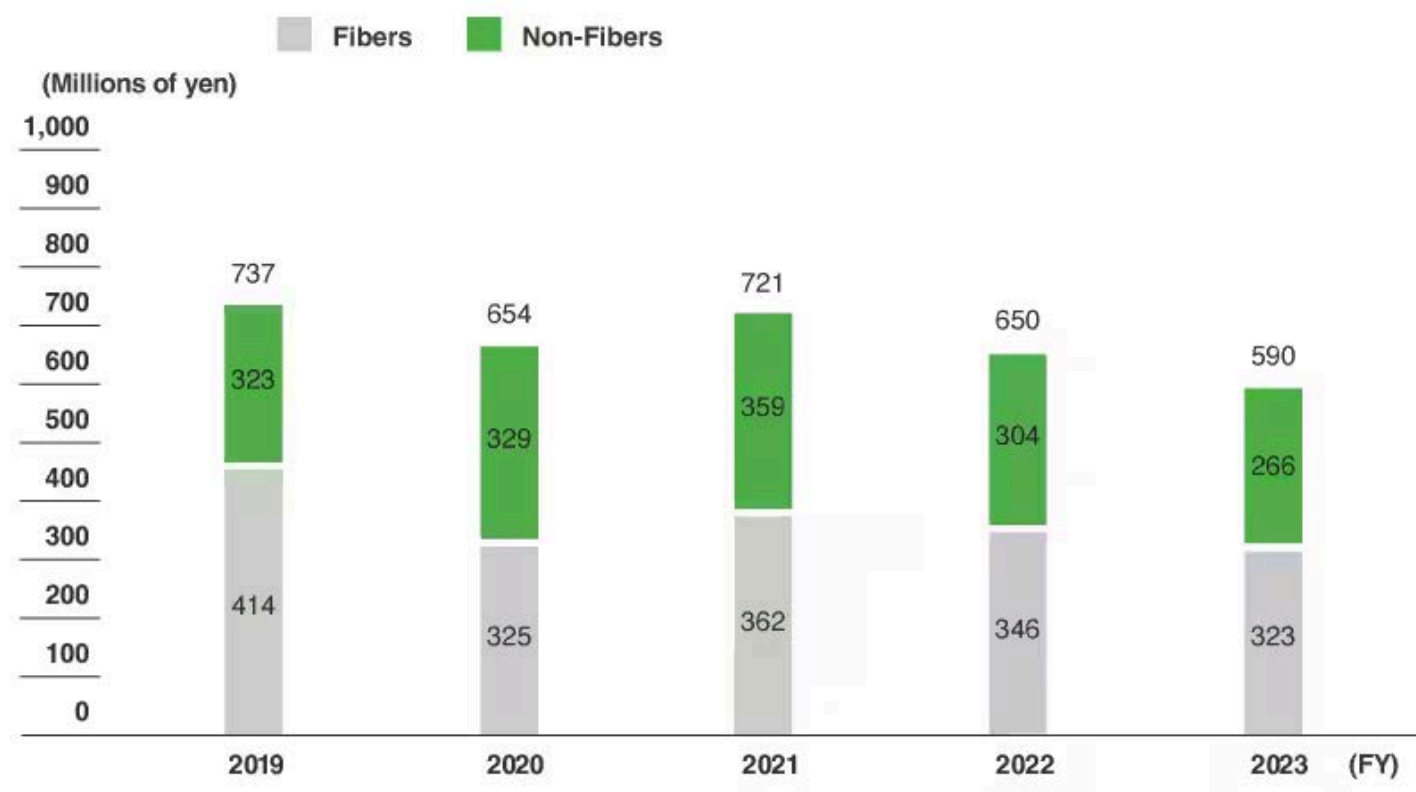
The value of these materials collected by Toray Industries in fiscal 2023 was 590 million yen, a decrease of 60 million yen (9.2%) from the previous fiscal year.

The volume of the materials collected also decreased due to a drop in shipment volumes for fibers and films. In order to reduce the amount of new material purchasing, the Group internally shares information on the inventories of used shipping materials being collected, such as temporary inventories at collection centers.

System for Reusing Shipping Materials (Toray Industries, Inc.)



Monetary Amounts Recovered for Packaging Materials (Toray Industries, Inc.)



Related Information

> [Recycling of Film Packing Materials](#)

Promoting a Modal Shift

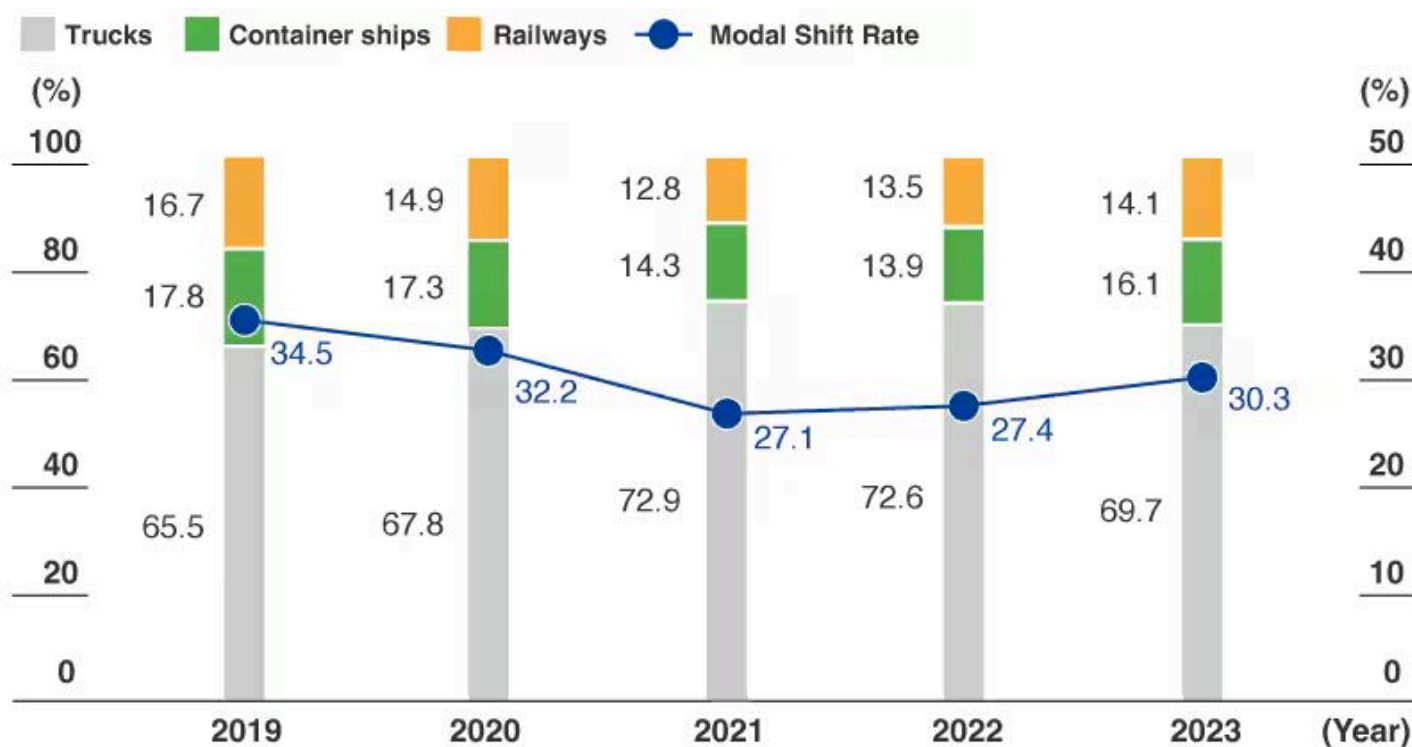
CSR Roadmap 2025
Main Initiatives (4)

Toray Industries laid out its commitment to environmentally friendly distribution in its Basic Distribution Policies (Revised in March 2022), in which it aimed to balance consideration for the environment in the distribution process with better competition achieved by cost-cutting. Toward this end, the Company has actively pursued modal shift (switching from trucks to rail and ship transport). In addition, modal shift is also effective as a measure to address the recent vulnerabilities in truck transport caused by a shortage of drivers.

In 2023 (Jan – Dec), the modal shift rate increased by 2.9 points from the previous year to 30.3%, by actively investigating opportunities for switching from truck to rail transport and expanding the use of rail.

Toray Group will continue pursuing modal shift in diverse product and materials transport and will work more closely with distribution partners. Through these efforts, the Group will promote environmentally responsible distribution while taking into consideration the environmental impact of the distribution process.

Modal Shift Rate (Toray Industries, Inc.)



Acquisition of Eco Rail Mark and Eco Ship Mark

CSR Roadmap 2025
Main Initiatives (6)

Toray Industries has certified as an Eco Rail Mark Company by Japan's Ministry of Land, Infrastructure, Transport and Tourism and the Railway Freight Association. This recognizes Toray's active efforts to use rail freight transport, a relatively environmentally friendly means of transportation. The Company also obtained Eco Rail Mark Product certifications for its TORAY TETORON™ fiber and TORAYCON™ polybutylene terephthalate (PBT) resin. Moreover, in fiscal 2017 Toray Industries achieved the Eco Ship Mark certification related to its film products, which are difficult to ship by rail. This program recognizes companies that are switching to ship transport and use maritime transport, which has a low environmental impact, to a certain extent.



Eco Rail Mark

Toray Industries, Inc.
(certification for company)

Toray TETORON™ fiber
(certification for products)

TORAYCON™ resin
(certification for products)



Eco Ship Mark

Toray Industries, Inc.
(certification for company)

Minimizing Natural Disaster Risks

CSR Roadmap 2025
Main Initiatives (1)(5)

Key external inventory sites that have been assessed for natural disaster risk and have implemented measures to mitigate serious risks (%)

Result in fiscal 2023

59%

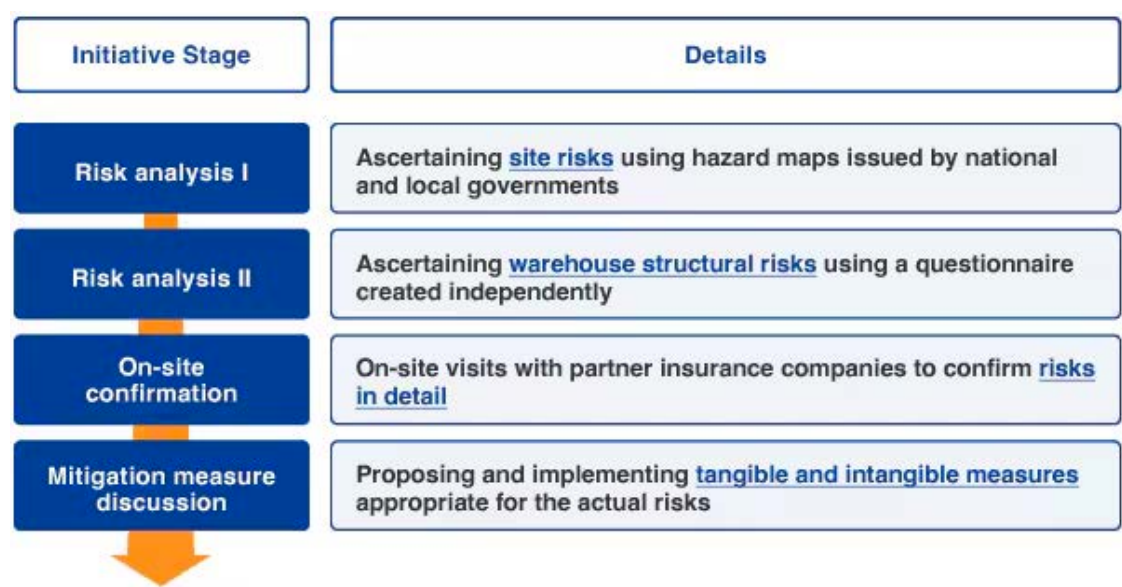
■Reporting scope
Toray Industries, Inc.

■Target in fiscal 2023
At least 60%

Toray Industries implements measures to prevent or minimize the damage caused by natural disasters such as typhoons and heavy rains, which have been increasing in frequency in recent years. It does this by continually investigating and identifying natural disaster risks at external warehouse sites in Japan, and by implementing response measures together with warehouse operators.

The Company ascertained the natural disaster risks at 68 main external warehouse sites. This was determined based on the structure of the warehouse buildings and the site environments, using tools such as hazard maps issued by the national and local governments. Some sites were determined to be at high risk, and on-site inspections were conducted. Based on the results of the investigation, mitigation measures were discussed with the warehouse operators and improvements are being made. Specifically, disaster prevention manuals were created based on flood risk information released by the Japan Meteorological Agency, while water gate barriers were prepared, the floor was leveled, and pallets were raised off of warehouse floors.

From fiscal 2021 to fiscal 2023, inspections were completed at 47 out of the 68 main warehouse sites. Of these, 28 sites were assessed as safe, while 19 sites were found to be at risk. Mitigation measures have been completed for 12 of the 19 sites at risk. As a result, 40 of the 68 sites (59%) are now either risk-free or have completed the appropriate mitigation measures. In fiscal 2024, further on-site inspections and discussions will be carried out to better mitigate risks.



Portable water dam (measure example)



Pallets raised above the floor level (measure example)

Initiatives to Improve Safety and Quality in Distribution

CSR Roadmap 2025
Main Initiatives (6)

Toray Industries is working on a project to improve transport quality. The Company works with distribution partners to improve distribution quality and safety and to reduce the incidence of problems by sharing accident analysis data and distribution quality enhancement reports, conducting on-site inspections and holding quality control meetings with partners. Partners that make outstanding contributions to improving quality are recognized through annual awards⁵. These initiatives are aimed at reducing the number of problems such as those involving breakage, and reducing transport delays and incorrect shipments of Toray products.

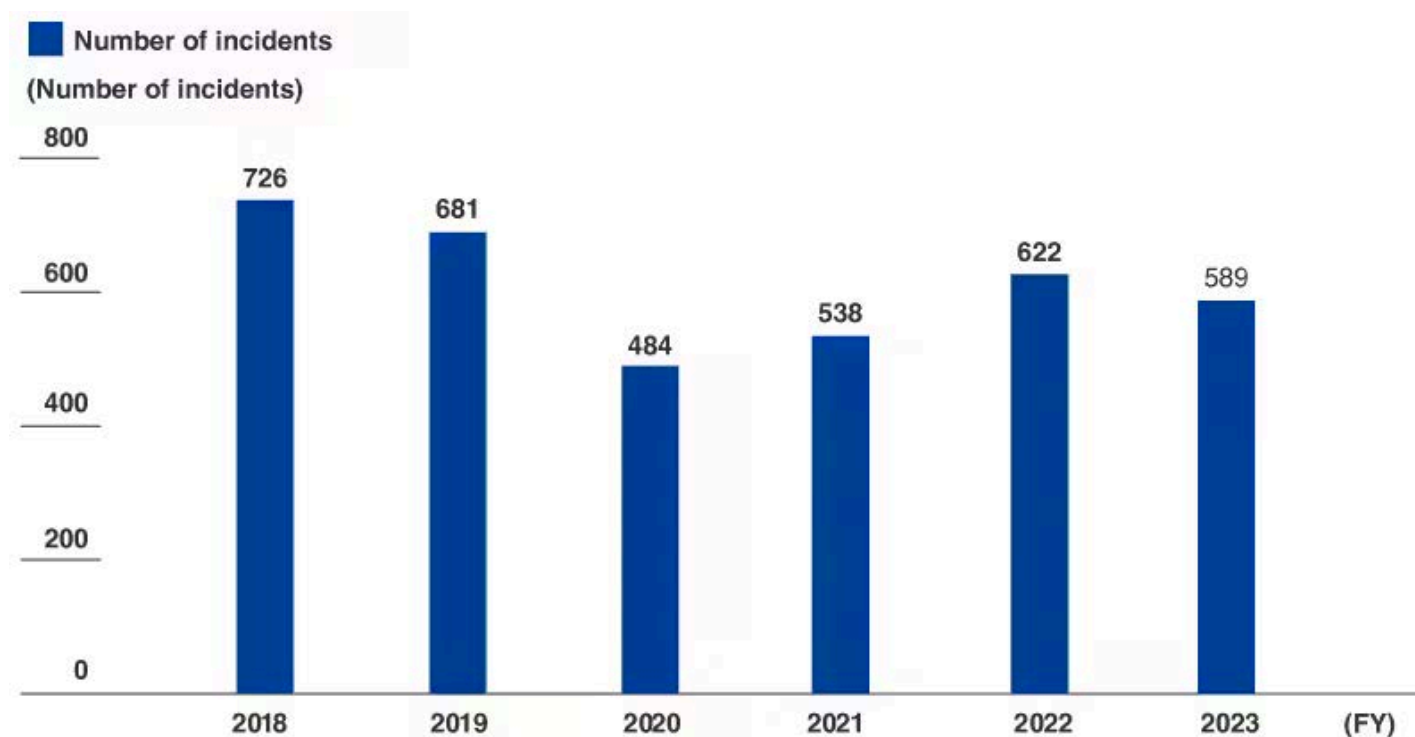
⁵ Distribution-partner companies receiving awards in fiscal 2023 (alphabetical order):

Iyoshoun Inc., KUSUHARA Transportation Co., Ltd., Shikoku Meitetsu Transportation Co., Ltd., The Shibusawa Warehouse Co., Ltd., Daisei Warehousing & Transportation Co., Ltd., Nagahama-Reizou, Fuji Logitech Holdings, Inc.

Distribution Incidents

Recently, logistics companies in Japan have experienced a labor shortage, and incidents such as product damage during transport have become more common.

Consequently, Toray Industries has seen an increase in product damage and misdelivery during transport on routes for smaller packages. In order to improve distribution quality, the Company approached distribution partners with high incident rates. Discussions were held on improvement measures, on-site visits were made, and educational activities were carried out. As a result, the number of distribution incidents in fiscal 2023 was 589, a reduction of 5% compared to the previous year. The Company will continue working with partner companies to improve distribution quality.



Logistics Efforts for Security Trade Control

In order to ensure thorough compliance with security trade controls relating to the export of its products, Toray Industries provides ongoing security trade control training to external warehouses where regulated items are stored. In fiscal 2023, in addition to explaining security trade control measures to seven sites belonging to six companies, important points were highlighted regarding the handling of regulated items, based on past near-miss incidents. Through this training, Toray once again stressed the importance of managing and handling regulated products appropriately.

Recommending that Distribution Partners Acquire Third Party Certification

Toray Industries recommends that its distribution partner acquire external certifications such as ISO 9001, ISO 14001, Green Management Certification⁶ and G Mark⁷. These certifications require companies to achieve legal compliance, improve quality, and practice environmental conservation in distribution processes. Toray Industries also pursues CSR initiatives in collaboration with distribution partners.

⁶ Green Management Certification: Certification is awarded by the Foundation for Promoting Personal Mobility and Ecological Transportation to companies that demonstrate a certain level of environmental improvement activities based on a manual for implementing green management (business management with a low environmental impact)

⁷ G Mark: A system that recognizes companies that meet certain criteria and demonstrate excellent safety, based on an assessment by the Safety Evaluation Committee established by the Japan Trucking Association of proactive initiatives for legal compliance and safety recommended by the Ministry of Land, Infrastructure, Transport and Tourism

Yellow Card Emergency Response Measures

Drivers of shipping vehicles carry a yellow card⁸ detailing emergency measures to be taken to minimize damage in the event of an accident. Toray Industries has also established an emergency communication system and carries out emergency training. In the unlikely event of such an accident, the Company has procedures in place enabling the necessary staff to be dispatched as swiftly as possible to the accident site for assistance.

⁸ A yellow card: A card listing the names of any hazardous substances, applicable laws and regulations, hazardous properties, procedures in case of accident, emergency reporting and contact information, methods for minimizing the spread of damage, and other relevant information.

Initiatives to Prevent Overloading

The overloading of trucks causes vibration, noise, damage to roads and facilities, and also creates driving hazards. Consequently, Toray Industries is putting considerable effort into the prevention of overloading.

Compliance and Security Measures for Importing and Exporting

As a measure to ensure the legality and safety of imports and exports as part of Toray Group's expanding global operations, a US subsidiary of Toray International, Inc. enrolled in the Customs-Trade Partnership Against Terrorism (C-TPAT)⁹ with the aim of strengthening global supply chain compliance. In order to realize more efficient imports and exports of materials and to strengthen supply chain compliance and security measures, Toray Group is also encouraging its worldwide distribution partners to obtain Authorized Economic Operator (AEO)¹⁰ status.

⁹ C-TPAT: A voluntary program introduced by United States Customs and Border Protection in November 2004. The aim of the program is to ensure and strengthen security through the global supply chain, based on international cooperation with private operators importing goods into the US.

¹⁰ AEO: A status implemented by the EU in December 2006 that gives priority in customs procedures to importers and exporters with a high level of compliance for cargo security. The Japanese Customs Act was also revised in 2007, and a similar qualification system was established to provide priority in customs procedures to highly compliant operators.

Two-Star Certification From a Driver-Friendly Workplace Program [Toyo Logistics Co., Ltd. (TLS)]

In February 2022, TLS obtained a one-star certification as a Certified Excellent Workplace for Drivers and in 2023, achieved a two-star certification for all of its transport business sites.

This program was established by the Ministry of Land, Infrastructure, Transport and Tourism as part of a comprehensive initiative to address the shortage of drivers in the road transport industry, in collaboration with the Ministry of Health, Labour and Welfare. The goal is to promote recruitment at certified businesses. Moreover, being publicly listed as a driver-friendly workplace on the program website enhances confidence in certified company among its business partners. To obtain certification, businesses must meet benchmark scores in categories such as working hours and days off for truck drivers, physical and mental health measures, safety and security, and efforts to recruit and train diverse personnel. TLS is committed to further improving its work environments and is striving to achieve three-star certification.



Driver-Friendly Workplace Certificate

Click [here](#) for the main initiatives for CSR Guideline 9, “Establishing Sustainable Supply Chain” in CSR Roadmap 2025.

CSR Activity Report (CSR Guideline Activity Reports)

Social Contribution Activities as a Good Corporate Citizen

Proactively participate in local communities and the larger society in order to contribute to development in a way befitting a good corporate citizen.



Basic Approach

As the foundation of its business activities, Toray Group works to build ties with local communities and contribute to society through its core businesses. Embracing a corporate philosophy of contributing to society as the ultimate objective of its corporate activities, Toray Industries, Inc. has worked to foster social development since its founding. The Group's Corporate Missions were set out in 1995 and include "For society: To establish ties and develop mutual trust as a responsible corporate citizen." Social contribution activities were included in Toray Group's CSR Guidelines established in 2004, and these activities have been a part of the Group's CSR activities ever since.

Today, the Group is working to achieve the Toray Group Sustainability Vision, which calls for solving social issues by expanding its Sustainability Innovation Business. These efforts are driven by the Medium-Term Management Program, Project AP-G 2025, and the Long-Term Corporate Vision, TORAY VISION 2030.

While contributing to society through these business activities, the Group also aims with its CSR Roadmap 2025 to promote social contribution activities uniquely suited to the Toray Group as a materials manufacturer and to implement activities that help solve global issues such as those addressed by the United Nations Sustainable Development Goals (SDGs)¹. The focus for these social contribution activities has been set on three priority areas, namely "science and technology promotion," "environment and communities," and "health and welfare." As indicated in the Toray Group Sustainability Vision, the Group works to increase people's interest in the environment. Toward this end, Toray develops educational support activities in such areas as science, the environment, and career education. The Group contributes to the development of future generations and actively supports the improvement and development of science and technology and promotion of science education through the activities of Toray science foundations around the world.

Established by resolution of the Board of Directors, the Toray Group Social Initiative Policies state, “Using company awards and other measures, we will create a culture that encourages employees to participate in society in constructive ways such as engaging in voluntary activities with an eye to local needs.” Accordingly, employees who wish to engage in volunteer work may take advantage of internal support systems such as absence from work and leave. Those who engage in volunteer activities are also eligible for special awards presented by each business site and plant. For example, in fiscal 2023, awards were presented to employees who continuously participated in clean-up activities, who donated blood more than 30 times, and who volunteered on a coastal forest restoration project as part of recovery efforts following the Great East Japan Earthquake.

¹ The Sustainable Development Goals (SDGs) were adopted in September 2015 at the UN Sustainable Development Summit attended by more than 150 Heads of State. These 17 goals and 169 targets are worldwide objectives to be reached by 2030.

Related Policies

Toray Group Social Initiative Policies Revised Sep 2020

- 1. Based on its Corporate Philosophy of “Contributing to society through the creation of new value with innovative ideas, technologies, and products,” we will contribute to sustainable development of local and global society as a good corporate citizen, while continuously supporting social initiatives among employees.
- 2. We will pursue original programs dedicated to the improvement of social welfare in local communities, international exchange through traditional culture, sports promotion, and especially the advancement of science.
- 3. Using company awards and other measures, we will create a culture that encourages employees to participate in society in constructive ways such as engaging in voluntary activities with an eye to local needs.
- 4. We will examine all marketing and advertising activities from the perspective of social contribution before finalizing them.

Priority Areas for Social Contribution



Science and Technology Promotion: Toray Group strives to live up to its corporate philosophy of “Contributing to society through the creation of new value with innovative ideas, technologies and products” by providing innovative technologies and advanced materials. The Group is committed to taking on the challenge of innovation across all of its corporate activities. That is why the Group must develop and retain human resources who can generate this continual innovation. Also, via the Toray science foundations around the world, the Group is providing research

grants, promoting science education, and fostering public interest in science, looking to make a long-term contribution.

Environment and Communities: Toray Group is pursuing the Sustainability Innovation Business that help solve global issues relating to the environment, resources and energy. Utilizing its expertise and human resources, the Group is continuously engaged in environmental conservation activities while collaborating with local communities.

Health and Welfare: Toray Group's Sustainability Innovation Business contribute to better medical care and longevity, foster public health, and support personal safety. To help build a world where people everywhere can live long, healthy lives, the Group promotes sports and cancer screening awareness. Individual business sites support education programs for children and social welfare initiatives.

Social Contribution and the Sustainable Development Goals

Toray Industries has from the beginning engaged in corporate activities with the ultimate purpose of contributing to society, viewing itself as a public entity. The Company considers the growth of its business as an indication that it has earned the recognition and support of society as a corporation that is endeavoring to practice its philosophy of contributing to society.

In 1955, Toray Industries established the company principle that “Toyo Rayon contributes to communities” as an explicit statement of its founding principles. From around that time, everyone at Toray Industries, from management to employees, began pursuing diverse initiatives to realize the philosophy of contributing to society. These activities ranged from making donations to various organizations and institutions, providing humanitarian assistance and financial aid to disaster-stricken areas, and inviting students to visit Toray's manufacturing sites and providing them with informational materials.

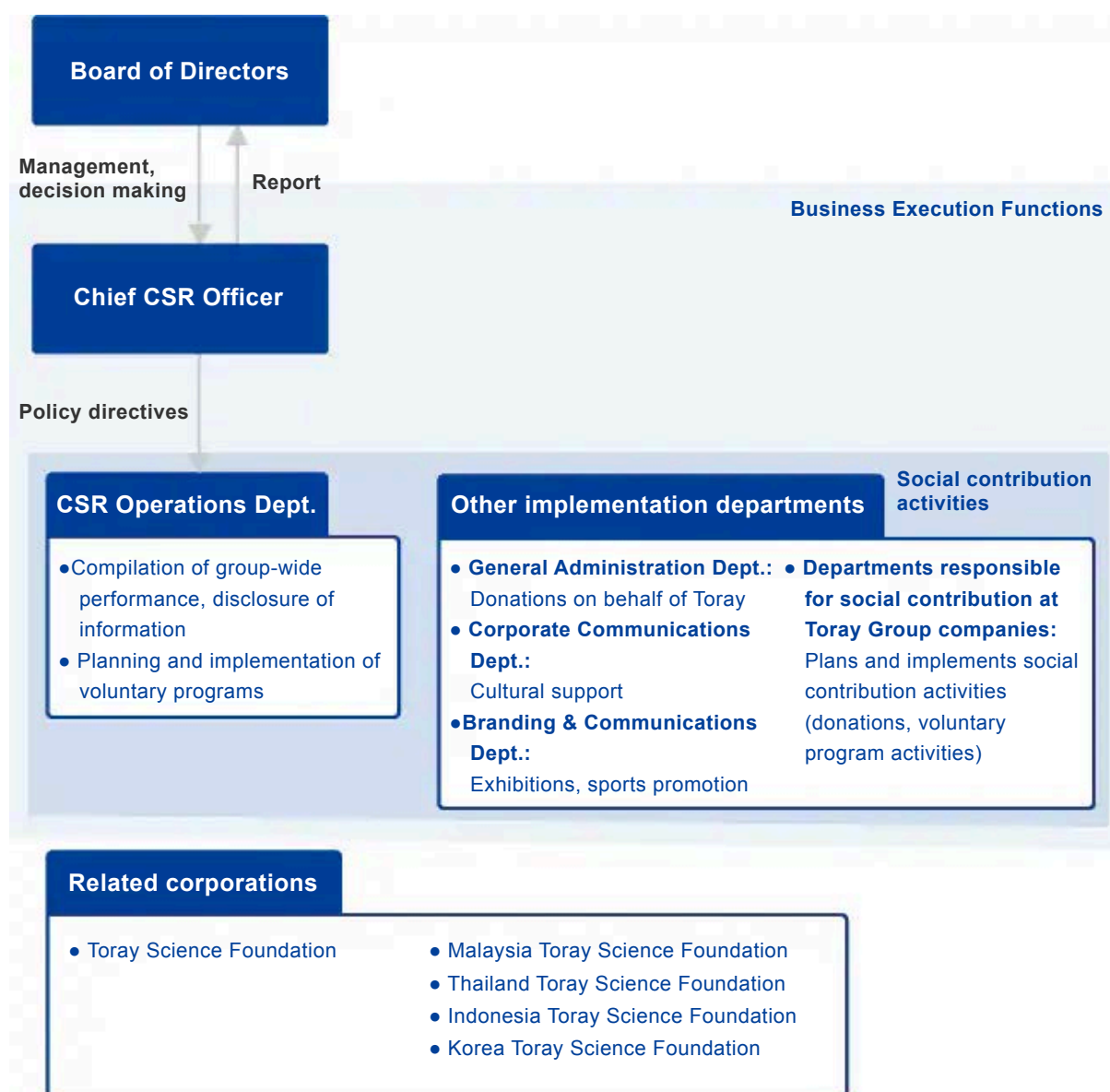
In 1986, Toray Industries established the corporate philosophy of “Contributing to society through the creation of new value with innovative ideas, technologies and products,” which carries on the core concept of the previous company principle. Toray Group pursues this corporate philosophy by emphasizing the social contributions of its businesses in making business decisions. The Group considers every aspect of its corporate conduct and the conduct of its employees through the lens of contributing to society.

It is for this reason that Toray Group's core businesses naturally align with the United Nations Sustainable Development Goals (SDGs), whose themes include resolving global environmental issues and contributing to health and longevity. While the SDGs have recently become the focus of international development efforts, Toray Group has been working since the beginning to resolve global social issues like these, as it strives to live up to its corporate philosophy.

Structure

Since April 2012, Toray Industries has positioned the CSR Operations Department as a specialized department focusing on social contribution activities. The department is responsible for planning and promoting its own voluntary programs implemented independently, as well as aggregating CSR performance across Toray Group. Policy is communicated to Toray Group sites in and outside Japan through CSR discussion meetings held with each company and department, as well as at meetings attended by representatives from each country where the Group operates outside Japan that are held to promote activities suitable for the particular circumstances of each country and company.

Social Contribution Activities Operational Structure



CSR Roadmap 2025 Targets

CSR Roadmap goals

1. Promote social contribution activities in ways that are unique to Toray, voluntarily and continuously engaging in the priority areas of “science and technology promotion,” “environment and communities,” and “health and welfare”
2. As a responsible member of society, implement social contribution activities that help to solve the global issues addressed by the SDGs and other initiatives

Main Initiatives and Key Performance Indicators

	KPI
(1) Implement social contribution activities at the appropriate scale	10-①
(2) Actively engage in social contribution activities that are distinctive of Toray Group, focusing on science and technology promotion	-
(3) Promote active planning and implementation of voluntary social contribution activities at each Group site, on an ongoing basis	10-②
(4) Implement a range of educational support activities that capture the interest and curiosity of youngsters through school visits and company tours focusing on areas such as science, the environment, and career opportunities, thereby helping to inspire upcoming generations	10-③
(5) Educate employees at Toray Group in order to instill the significance of social contribution	-
(6) Support the improvement and development of science and technology and the promotion of science education through the activities of Toray science foundations in and outside Japan	-
(7) Share information with internal and external stakeholders on Toray Group's social contribution activities via websites and other means	-

Key Performance Indicator (KPI)	Target			Fiscal 2023 Result
	Fiscal 2023	Fiscal 2024	Fiscal 2025	
10-① Social contribution expenditure (% change from average expenditure over last six years)	100% or higher	100% or higher	100% or higher	124%
10-② Social contribution activities (number)	2,500 or more	2,500 or more	2,500 or more	2,173
10-③ Beneficiaries of educational support activities such as science classes for schools and career education (number)	15,000 or more	15,000 or more	15,000 or more	18,816

Reporting scope: Toray Group

Related Materiality for CSR

- Developing in Collaboration with Stakeholders

* Click [here](#) for the Materiality View of CSR Roadmap 2025 (PDF:392.4KB).

[PDF](#)

Looking to the Future

In working to build relationships of trust with our stakeholders, Toray Group continues to voluntarily implement social contribution activities that leverage its attributes as a materials manufacturer, as well as contribute to society through its businesses. The Group promotes activities in its priority areas of “science and technology promotion,” “environment and communities,” and “health and welfare,” and conducts educational support activities to raise awareness related to the environment in order to achieve the Toray Group Sustainability Vision. In this way, Toray continues to actively participate in and contribute to the development of society and local communities as a good corporate citizen.

Click [here](#) for the main initiatives and KPIs for CSR Guideline No. 10 “Social Contribution Activities as a Good Corporate Citizen” during the CSR Roadmap 2025 period (fiscal 2023–2025).

[PDF](#)

CSR Activity Report (CSR Guideline Activity Reports) - Social Contribution Activities as a Good Corporate Citizen

Fiscal 2023 Results (Data edition)

CSR Roadmap 2025
Main Initiatives (1)(2)(3)(4)(5)(6)(7)

Social contribution expenditure (% change from average expenditure over last six years)

■Reporting scope
Toray Group

■Target in fiscal 2023
100% or higher

Result in fiscal 2023

124%

Social contribution activities (number)

■Reporting scope
Toray Group

■Target in fiscal 2023
2,500 or more

Result in fiscal 2023

2,173

Beneficiaries of educational support activities such as science classes for schools and career education (number)

■Reporting scope
Toray Group

■Target in fiscal 2023
15,000 or more

Result in fiscal 2023

18,816

As a good corporate citizen, Toray Group is helping to promote the sustainable development of local and international communities based on its corporate philosophy. The Group also supports the social contribution activities of its employees under the Toray Group Social Initiative Policies.

The CSR Roadmap 2025 sets KPIs for social contribution expenditures, such as donations and personnel expenses associated with social contribution activities, and Toray Group maintains initiatives at the designated scale.

Consolidated social contribution expenditures in fiscal 2023 were 2.08 billion yen, while such expenditures were approximately 1.16 billion yen at Toray Industries alone. This figure is 124% of average expenditures over the last six years (fiscal 2017-2022, 1.68 billion yen), surpassing the target of 100% or higher set in the CSR Roadmap 2025.

In fiscal 2023, the main beneficiaries were Toray Science Foundation, Toray science foundations in Malaysia, Thailand, Indonesia, and the Republic of Korea, sponsorship of the Shanghai International Marathon, and donations and supplies for the repair of damage caused by the 2024 Noto Peninsula earthquake.

In fiscal 2023, Toray Industries Inc., on behalf of Toray Group, donated approximately 220million yen to Toray Science Foundation. Toray Group companies outside Japan donated approximately 280 million yen to Toray science foundations around the world.

In its CSR Roadmap 2025, Toray Group sets KPIs for the number of social contribution activities to be implemented in order to ensure that the Group continues to actively contribute to society. In addition, the roadmap sets KPIs for the number of beneficiaries of educational support activities, such as science classes for schools and career education, with the aim of developing a solid educational support program, which has been a long-term Toray Group focus.

The number of social contribution activities implemented in fiscal 2023 was 2,173 (221 more than the previous year), short of the Group target of 2,500 or more.

With the reclassification of the COVID virus as a category 5 infectious disease, progress has been made in returning to normal levels of social contribution activities. This has meant a reinvigoration of such activities, with the number of social contribution activities steadily increasing each year.

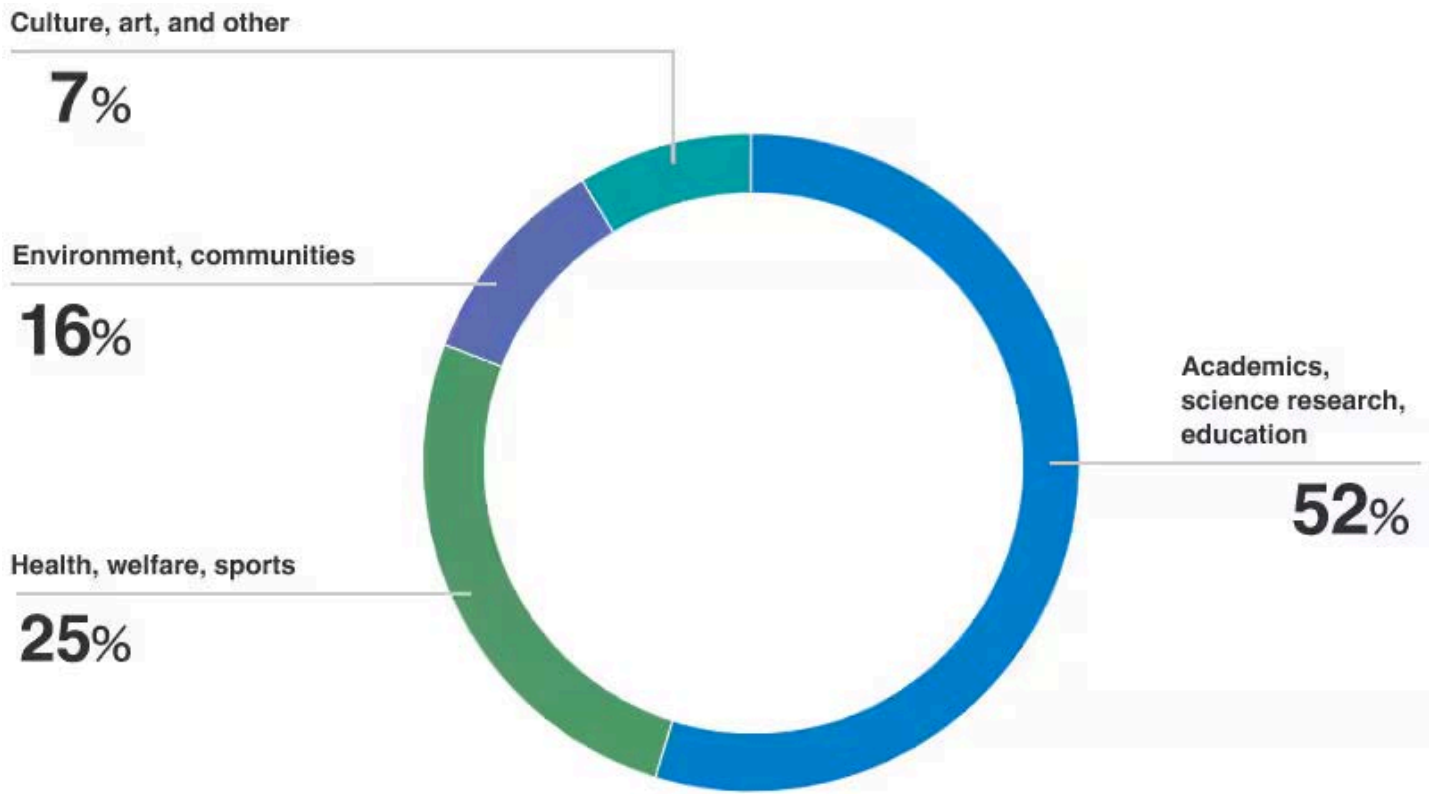
The beneficiaries of educational support activities numbered 18,816 (3,086 more than the previous year), higher than the Group target of 15,000 or more.

This was due to an increase in requests from elementary, junior high, and high schools in Japan for Toray science classes and educational materials, as well as increase in Toray Group cooperation on educational events such as plant tours and vocational lectures in and outside of Japan.

Related Information

[> Toray Science Foundations around the World](#)

Breakdown of Expenditure in Fiscal 2023



Click [here](#) for the main initiatives for CSR Guideline 10, “Social Contribution Activities as a Good Corporate Citizen” in CSR Roadmap 2025.

CSR Activity Report (CSR Guideline Activity Reports) - Social Contribution Activities as a Good Corporate Citizen

Activities Carried Out in Fiscal 2023

Toray Group's Educational Support Activities

CSR Roadmap 2025
Main Initiatives (1)(2)(3)(4)(6)(7)



Toray Group conducts educational support activities to guide those who will become the leaders of a sustainable world. These activities include science and environmental programs to spark more interest in science among elementary and junior high school students, as well as career education and Toray plant tours.

Supporting Science Education in Schools (Sending Employees to Teach Classes, Providing Educational Materials)

In order to raise awareness of the environment and interest in the sciences, Toray Group has developed environmental education and science experiment programs that employ some of its products. Delivering these programs, Toray Group employees teach classes at local elementary, junior and senior high schools. With the return to normalcy after the COVID-19 pandemic, there has been a gradual increase in requests from schools for program participation. In fiscal 2023, Toray instructors conducted in-person classes at 19 schools.

The teachers who hosted school visits by Toray instructors completed a survey, which revealed an extremely high level of satisfaction with the program. One elementary school teacher noted that the students participated in the experiments enthusiastically, and gained a deeper understanding of filtration. Another primary school teacher indicated that the class was presented as an opportunity to think about the SDGs, which is something the school focusses on. The teacher got a sense that the class content was relevant to the students' future careers. A junior high school teacher said the class was excellent and "It was very compelling and inspiring to have visitors who are working on the frontlines of production and research." A similar survey of the Toray employees who taught classes at the schools revealed that it provided a good opportunity to renew their appreciation of Toray Group initiatives, and it was good practice for communicating ideas clearly to others. The feedback confirmed that the program is having a positive impact.

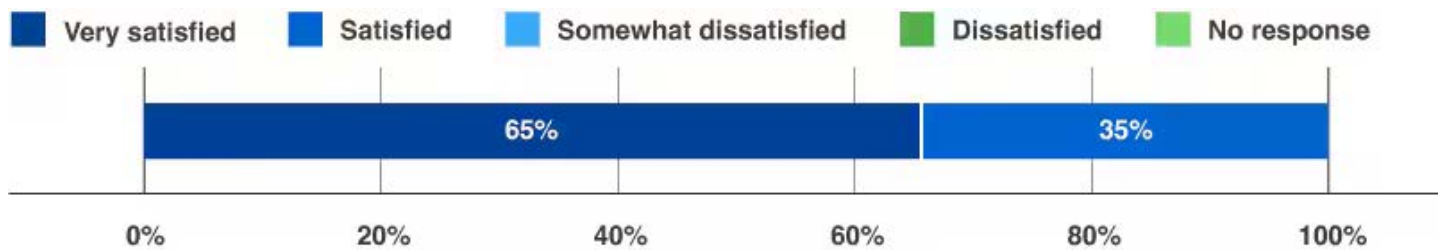
The Group also provided teaching materials and lent laboratory equipment to 72 elementary, junior high, and senior high schools across Japan. The materials are not only used in science classes but, thanks to the creativity of teachers, they have also been used in other classes such as integrated studies, social studies, SDG education, and environmental studies. The materials were described as "very convenient and easy for teachers to use, making them easy to incorporate into lessons," and some schools have repeatedly applied for the program year after year.



Toray employees delivering science lessons

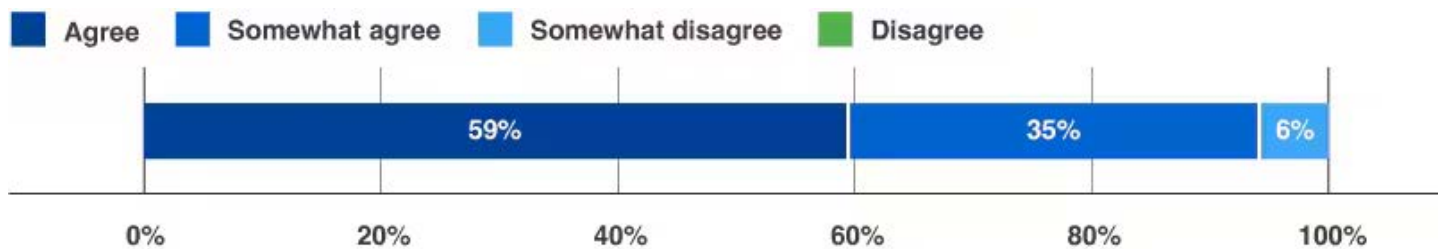
■ Results of Questionnaire on Science Classes and Teaching Materials Provided by Toray Group

Teacher satisfaction with Toray classes

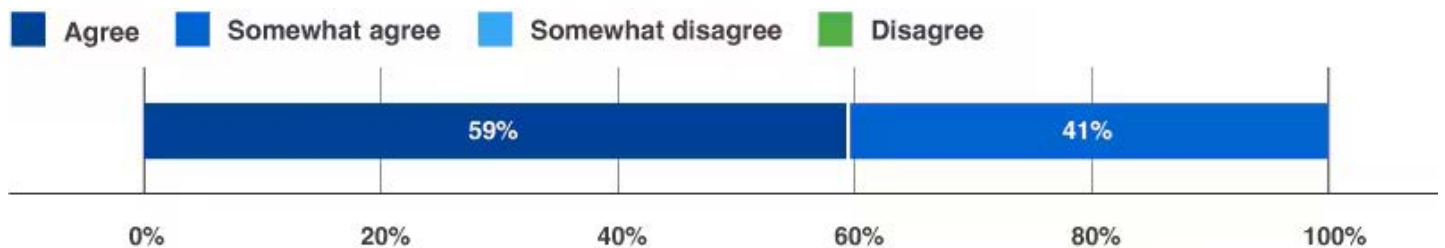


Survey responses by employee participants

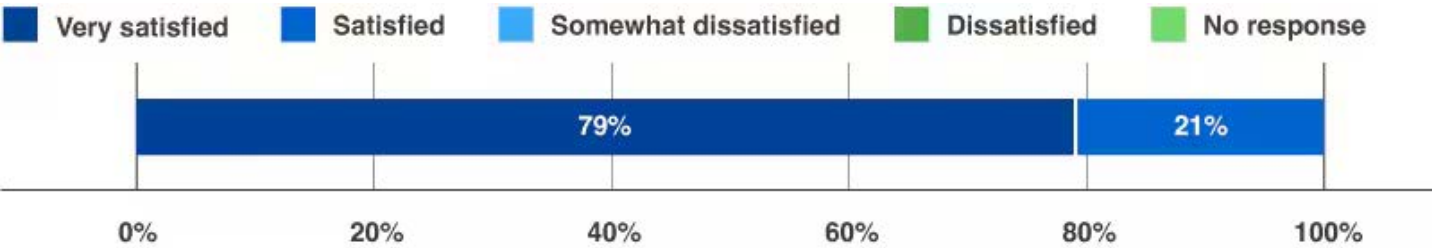
1. It increased my work motivation



2. It made me proud to be a Toray employee



Teacher satisfaction with classes using materials provided by Toray



Education Support Activities for Career Education, Company Tours, and Other Programs

In addition to science experiment lessons and environmental education programs, Toray Group responds to requests from local schools, boards of education, and non-profit organizations, collaborating on career education, office and plant tours, and online interviews regarding certain professions and businesses. Along with lessons that feature Toray Group's SDG initiatives, Toray Industries provided career-related talks to junior high and high school students by explaining job descriptions at Toray. The instructors also shared stories from their own school days and covered other topics that would be useful for students when considering their future career paths. Group companies also welcomed local elementary, junior high, and senior high school students for company visits and plant tours. Among group companies in Japan, Toray Research Center Inc. collaborated with an active learning program at a college of technology, providing online lectures and technical advice on group work projects. Other group companies in Japan carried out a range of activities such as career education sessions and plant tours for young people. Group companies outside Japan also give career-related talks and plant tours to local students and provide education to foster awareness of safety, disaster prevention, and the environment. Toray Group employees in Malaysia gave talks on plastic (PET) bottle recycling at elementary and junior high schools in Penang, as well as at the Penang Japanese School. They focused on education to raise youth environmental awareness. Toray Textiles Central Europe s.r.o. in the Czech Republic also actively welcomed local students for plant tours. The Group has also long been committed to promoting sport. Its volleyball team, Toray Arrows Inc., and the Group's Kendo (Japanese fencing) club have been involved in supporting children's physical development through coaching and on-site instruction at schools.



Toray Industries welcomed junior and senior high school students from across Japan for a talk on career opportunities and the Toray Group's SDG initiatives. (Toray Industries, Inc. CSR Operations Dept.)



Elementary school students visited Toray for a factory tour. The children were very interested to see inside the factory, which was a completely new experience for them. (Toray Industries, Inc. Shiga Plant, Seta Plant and Chiba Plant)



University students on a factory tour of Toray Industries research and development operations experienced the power of materials through concept car test drives and opportunities to touch actual product samples. (Toray Industries, Inc. Nagoya Plant)



To foster interest in the technology and innovation that North Alabama is known for, an employee from the Decatur Plant gave a presentation at a local university. He explained the history of carbon fiber development and gave an overview of the Toray plant's business activities. (Toray Composite Materials America, Inc.)



As part of a used clothing collection project, The Power of Clothing, being promoted by UNIQLO Malaysia Sdn. Bhd., Toray gave a talk on PET bottle recycling for students in grades 5 to 9 at the Penang Japanese School. (Toray Group Companies in Malaysia)



In response to a request from the Shanghai Japanese School, the Group welcomed some of its high school students. The aim was to help them experience the excitement of research and development and discover the connection between R&D activities in business and the chemistry and physics they study in high school. The visit helped to inspire students as they consider their future career paths. [Toray Advanced Materials Research Laboratories (China) Co., Ltd.]



Toray Industries was contacted by high school students expressing their support for the &+™ brand concept and the related initiatives encouraging public participation in its Recycling Story. In response, an employee visited their school and gave a presentation to explain how Toray obtains recycled fiber from collected PET bottles. (Toray Industries, Inc. Fibers & Textiles Circular Economy Strategic Planning Dept.)



To convey the appeal of the manufacturing industry in Fukushima Prefecture to local high school students about to enter the workforce, the Group collaborated with the Fukushima Prefectural government on the “Kando! Fukushima” (Exciting Fukushima!) project. Toray Building Materials hosted a factory tour for the Fukushima Governor and local high school students. (Toray Building Materials Co., Ltd.)



Workplace tours were given to students of a nearby industrial high school. After a presentation on Toray Engineering, students visited the fiber manufacturing line at the Toray Industries Mishima Plant. (Toray Engineering Co., Ltd.)



The Group participated in the “Exciting and Thrilling (Wakuwaku Dokidoki) SDG Junior Project” being promoted by the Osaka Prefectural Board of Education. A Chori employee visited a junior high school in Osaka Prefecture and provided advice on solutions to SDG challenges that the students had researched and considered. (Chori Co., Ltd.)



Toray Arrows team members visited an elementary school in Mishima City to teach the fundamentals of volleyball during a physical education class. They also conveyed the importance and enjoyment of connecting with each other through the game and teamwork. (Toray Arrows Volleyball Club Shizuoka)



A Toray Arrows team member gave a career talk to junior high school students about the excitement of being a professional athlete and the meaning of work. (Toray Arrows Volleyball Club Shizuoka)



Toray Arrows members collaborated with local governments and volleyball associations across Japan to conduct volleyball clinics and school visits. (Toray Arrows Volleyball Club Shiga)



In addition to their own training activities, the Toray Kendo Club provides Japanese fencing instruction to local elementary and junior high school students. Through the martial art of Kendo, they contribute to the development of children and promote interaction with the local community. (Toray Industries, Inc. Okazaki Plant)

Related Information

> [Developing the Next Generation of Talent](#)

Toray Program for the Summer Riko Challenge 2023

Toray Industries supports the Riko Challenge initiative led by the Gender Equality Bureau of Japan's Cabinet Office. At the R&D Innovation Center for the Future located in Toray's Shiga Plant, the Company hosted an event for junior and senior high school students called, "Summer Riko Challenge 2023: Creating a Prosperous Future Society through the Power of Science—Toray's Research Experience Program." The event provided students with the opportunity to learn about Toray research and the science and engineering work that the company does. Along with a tour of the R&D Innovation Center, the participants made their own rubber stamps using Toray materials, listened to a talk on research-related jobs, and had roundtable discussions with researchers. The students were able to enjoy meaningful interactions with employees working at various research facilities. The junior and senior high school students who participated in the event shared their thoughts afterwards. One said they were interested in becoming a researcher, so it was great for them to listen to someone actually conducting research. Another student expressed their excitement to see the lab where experiments are actually carried out.



Tour of the R&D Innovation Center for the Future



Discussions with researchers



Group photo

Promoting Communication Between Education and Business Worlds

Through its participation in the Business Training for Japanese School Teachers program offered by the Keizai Koho Center, and with the cooperation of the Shizuoka Prefectural Board of Education, Toray Industries' Mishima Plant welcomes some 10 teachers each year. During the training, the participants learn that, since its founding, Toray Industries has emphasized people-centric management and is focused on human resource development. At its production sites, the Company prioritizes employee safety as well as environmental disaster prevention, thereby promoting greater safety and security for society while coexisting with the local community. Through lectures, group work, and site tours, the teachers come to understand that Toray values each employee and emphasizes human resource development. They also gain an appreciation of how the manufacturing industry operates in cooperation with local communities. In this way, they discover similarities and differences between manufacturing and classroom education. In feedback provided by the participating teachers each year, they often express their intention to utilize the lessons and insights they have gained in the classroom, enabling them to provide better guidance to students. They frequently describe the training as an extremely valuable experience.

(Toray Industries, Inc. Toray Human Resources Development Center, Mishima Plant)



Teachers listening to a lecture on human resource development



Conducting hazard prediction training

Workshops at the Science Museum

Since 2012, Toray Industries has been conducting two workshops, which use filtration experiments to examine the importance of the Earth's water, and the amazing properties of fibers, at the Science Museum located in Kitanomaru Park in Tokyo, every day that the museum is open. In fiscal 2023, approximately 6,500 people, from young children to adults, attended the workshops.

Supporting the Biology Olympiad

Since 2007, Toray Industries has helped to send students to the International Biology Olympiad (IBO) through the Japan Science Foundation. In 2023, four high school students represented Japan at the 34th IBO held in Al Ain, United Arab Emirates. With 304 students competing at the event, the Japanese students achieved excellent results, winning two gold and two silver medals.



The four students representing Japan at IBO 2023
(Photo courtesy of the Japan Biology Olympiad Committee)

Aozora Science School

Since 2015, Toray Industries has organized the Aozora Science School¹, a hands-on learning program to foster children's interest in and an affinity for science by offering fun activities to learn about science in the natural environment. In fiscal 2023, 180 elementary school students participated in the program online and in-person. The outdoor activities were conducted at "Mori To Mizuumi No Rakuen," a camp resort near Lake Kawaguchi, not far from Mt. Fuji.

The outdoor program, which included an overnight stay for the first time in four years, featured unique activities designed to make science fun through play. These included a water purification experiment using Toray's hollow fiber membranes to purify water from Lake Kawaguchi, as well as colorful palette-creation activity, where participants produced colors from natural materials. The 2023 program also featured lessons on how to run faster and jump farther by the trainer who coaches Toray's Abdul Hakim Sani Brown, a world-class sprinter. Sani Brown also provided a personal video message for the participants along with autographed stickers.

In the online classroom, students learned using experiment kits sent to them in advance. The activities included a "water dance experiment," which involved dripping water on a Toray water-repellent textile and observing how water drops roll around on the fabric surface, as well as a "seed plane experiment," in which participants take hints from how plants grow as inspiration to make model airplanes. There was also a "sparkling spectrum experiment" using Toray's nano-layered polyester film PICASUS™ to create colors.

In both the outdoor and online classrooms, the children were full of lively opinions and questions. They demonstrated a high level of awareness, a natural sense of wonder, and were amazed by their learning discoveries.

¹ Aozora Science School: A hands-on educational camp designed by Toray Industries, supervised by Leave a Nest Co., Ltd. and provided by JTB Corporation.



Discovering how water purification works using a model



Students participating online



Group photo of participants

Related Information

- > [Aozora Science School official website \(Japanese site\)](#) 
- > [Aozora Science School Facebook page \(Japanese site\)](#) 

Toray Science Foundations around the World

CSR Roadmap 2025
Main Initiatives (1)(2)(6)(7)



Toray Group has outlined a corporate philosophy of “contributing to society through the creation of new value with innovative ideas, technologies and products,” which the Group delivers on by practicing innovation. In order to continuously deliver innovation, the Group must secure and develop talented human resources. For this reason, the Group takes a long-term perspective on human resource development. One way it does this is by contributing to the promotion and support of basic science and science education in society, which is one of the main social contribution activities of the Group, through the activities of Toray Science Foundation and Toray Science Foundations in Malaysia, Indonesia, Thailand, and the Republic of Korea.

Related Information

> [Toray Science Foundations around the World](#)

Toray Science Foundation

Toray Science Foundation was established way back in 1960 to help advance science, technology and culture. The Foundation created quite a stir when it was first established, as it was a pioneering foundation of its kind, and its activities continue to win high praise today. Its support activities include grants and prizes in the fields of basic science and science education that are offered by no other similar organizations.

2023 Presentation Ceremony

In February 2024, the Toray Science Foundation chose the latest recipients of the 64th Toray Science and Technology Prizes, Toray Science and Technology Grants and the 55th Toray Science Education Prizes. At the 2023 presentation ceremony held in March 2024, the minister of education, culture, sports, science and technology and the president of the Japan academy gave congratulatory remarks. Toray Science and Technology Prizes were awarded to Dr. Akihiko Yoshimura (Professor, School of Medicine, Keio University) and Dr. Jian-Ren Shen (Dean and Professor, Research Institute for Interdisciplinary Science, Okayama University) They and the science educators who were awarded Toray Science Education Prizes, including the Minister of Education, Culture, Sports, Science and Technology Prize, received certificates, medals, and prize money. Grants totaling 130 million yen were awarded to 11 recipients of Science and Technology Grants.

In his address, Toray Industries Chairman of the Board and Toray Science Foundation Chairman Akihiro Nikkaku gave the following remarks. “In addition to the issues identified by the UN Sustainable Development Goals (SDGs), Japan faces numerous challenges as an aging society with a declining population. We are resource-poor nation that wants to maintain healthy and fulfilling lifestyles while continuing to grow and develop. That is why basic research to generate outstanding scientific and technological achievements has become increasingly critical. Through its research grant programs and recognition initiatives for researchers and educators, the Toray Science Foundation will continue advancing the development and promotion of basic science and science education in Japan.”



Speech by Toray Industries Chairman of the Board and Toray Science Foundation Chairman Akihiro Nikkaku



Recipients of the 2023 Science and Technology Grants



Dr. Akihiko Yoshimura

Cytokine signal regulation mechanisms and their pathophysiological roles

Dr. Yoshimura discovered the main pathways of cytokine signal transduction and elucidated their regulatory mechanisms, revealing their relationship to diseases. This achievement, from basic research to the clarification of disease mechanisms, has been globally recognized.



Dr. Jian-Ren Shen

The mechanisms of water-splitting and high light-energy utilization efficiency in photosynthesis

Dr. Shen achieved outstanding results in elucidating the structure of large membrane protein complexes involved in water splitting and oxygen evolution reactions, as well as light energy capture in photosynthesis. He has provided important design guidelines for catalytic synthesis in artificial photosynthesis.

The Toray Science Education Prize's Minister of Education, Culture, Sports, Science and Technology Award, honors teachers who have achieved remarkable educational outcomes in junior and senior high school science education through creativity and ingenuity. The 2023 prize was awarded to Mr. Atsushi Shinozaki, Vice-Principal of Sano City Nishi Junior High School.



Mr. Atsushi Shinozaki

Enhancing learning activities through observations of the sun's movement and energy

Mr. Shinozaki was recognized for combining the creation of a sundial set, which can be adjusted according to the observer's position on Earth, with the development of a time-lapse measuring device that uses infrared thermometers to measure the solar incidence angle and the amount of energy captured.

Related Information

> [Toray Science Foundation](#) 

Malaysia Toray Science Foundation (MTSF)

In October 2023, MTSF held the 30th Malaysia Toray Science Foundation Presentation Ceremony in Kuala Lumpur. MTSF awarded a total of 309,000 ringgit (equivalent to approx. 9.88 million yen) in prize money and grants to a total of 27 Malaysian recipients, including two scientists, 12 young researchers, and 13 science educators.

The memorable 30th Presentation Ceremony was held in grand style with approximately 140 attendees, including the Malaysian Minister of Science, Technology and Innovation, Chang Lih Kang, and the Japanese Ambassador to Malaysia, Katsuhiko Takahashi.

In their congratulatory speeches, both Minister Chang and Ambassador Takahashi praised MTSF for its significant contribution to the development of science and technology in Malaysia over the past 30 years. Shigeki Taniguchi, Senior Vice President of Toray Industries, was also in attendance as a guest. He delivered a congratulatory message, remarking, “The corporate philosophy of Toray Group calls for contributing to society through the creation of new value. Under this philosophy we will continue our unwavering efforts to support the development of science and technology in Malaysia.” Afterward, MTSF’s 30th anniversary commemorative publication, which had just been released, was presented to Minister Chang, followed by a cake-cutting ceremony.



Commemorative photo with award winners



Release of MTSF's 30th anniversary commemorative publication

Related Information

> [Malaysia Toray Science Foundation](#) 

Indonesia Toray Science Foundation (ITSF)

The 30th Indonesia Toray Science Foundation Presentation Ceremony was held in February 2024. ITSF awarded one Science and Technology Prize, 18 Science and Technology Research Grants, and 9 Science Education Prizes totaling 1.030 billion rupia (equivalent to approx. 9.95 million yen).

Shigeki Taniguchi, Senior Vice President at Toray Industries, was in attendance, and the event began with an address from ITSF Chairman Dr. Laksana Tri Handoko, who also serves as Chairman of Indonesia's National Research and Innovation Agency. Congratulatory video messages were presented from Yasushi Masaki, the Japanese Ambassador to Indonesia, and Professor Nizam, Acting Director-General of Higher Education, Research and Technology, at the Indonesian Ministry of Education, Culture, Research and Technology.



Commemorative photo with award winners



Toray Industries Senior Vice President Shigeki Taniguchi and two Science and Technology Prize winners

Related Information

> [Indonesia Toray Science Foundation](#) 

Thailand Toray Science Foundation (TTSF)

The 30th Thailand Toray Science Foundation Presentation Ceremony was held in March 2024. TTSF awarded two Science and Technology Prizes (one to an individual and the other to an organization), 20 Science and Technology Research Grants, and eight Science Education Prizes totaling 5.53 million baht (equivalent to approx. 23.3 million yen) in prize money and grants.

At the Presentation Ceremony, Professor Suksun Horpibulsuk from Suranaree University of Technology delivered a speech on behalf of the awardees. He expressed gratitude for the recognition and research grants provided by TTSF, which have helped produce outstanding talent over the years in the field of science and technology in Thailand. He noted that TTSF's rigorous selection and review process is widely known among Thai researchers, making the prestigious award a great honor. Toray Industries Chairman and TTSF Honorary Chairman Akihiro Nikkaku delivered a congratulatory message to the award winners and expressed his support for the promotion of science and technology in Thailand through TTSF's activities. He expressed his desire for TTSF to contribute to the country's development and to work with the Thai people to help realize a more sustainable world. The ceremony concluded with a speech from the President of the Privy Council, General Surayud Chulanont, who, as the Chairman of the Ceremony Committee, expressed his deep appreciation for Toray's business activities in Thailand over the decades and for TTSF's 30-year contribution to the development of science and technology in Thailand. He also thanked TTSF for honoring outstanding researchers while developing the next generation of talent.



Toray Industries Chairman of the Board and TTSF Honorary Chairman Akihiro Nikkaku presents his remarks.



Commemorative photo of Science and Technology Prize winners

Related Information

> [Thailand Toray Science Foundation](#) 

Korea Toray Science Foundation (KTSF)

The 6th Korea Toray Science Foundation Presentation Ceremony was held in October 2023. About 170 participants, including award recipients, academics, industry representatives, and students, attended the event. KTSF awarded Science and Technology Prizes to two researchers for their outstanding research results and announced the selection of five young fellowship researchers aiming to promote new research activities. Each Science and Technology Prize recipient received 100 million won (approximately 11 million yen), and the selected fellowship researchers will receive 50 million won (approximately 5.5 million yen) each year for three years to support their research.

During the Presentation Ceremony, an academic symposium was held where six individuals, who have received a Science and Technology Prize or fellowship within in the past five years, presented their research achievements engaged in discussion. The participants included Distinguished Professor Jang Seok-bok from Korea Advanced Institute of Science and Technology (KAIST) and Professor Kilwon Cho from Pohang University of Science and Technology (POSTECH).

In his welcoming remarks during the ceremony, Toray Industries Chairman of the Board Akihiro Nikkaku expressed his hope that the Foundation will continue to promote science and technology and nurture scientists while contributing to mutual understanding, friendship and goodwill between the Republic of Korea and Japan.



Commemorative photo with award winners



Academic symposium

Related Information

> [Korea Toray Science Foundation](#) 

Environmental Conservation in Communities

CSR Roadmap 2025
Main Initiatives (1)(2)(3)(4)(5)(7)



In addition to implementing initiatives to conserve the environment around its production sites, Toray Group companies collaborate with non-profits and municipal governments on ongoing efforts to clean up rivers and shorelines and maintain forests.

Toray Group Arakawa Clean Aid

Since 2014, the Toray Industries Tokyo Head Office has partnered with the non-profit Arakawa Clean Aid Forum to hold the Toray Group Arakawa Clean Aid event. This activity involves cleaning up litter along the banks of the Arakawa River, while learning about the impact of rubbish in rivers on the global environment and local ecosystems. However, this activity is not just about picking up trash, but rather gathering and identifying each piece of litter by type on a River Rubbish Survey Card, and then sorting it accordingly. Before the day of the clean-up, participants attended an environmental lecture by the Arakawa Clean Aid Forum. By learning about the current situation for river and marine debris, the impact of garbage on living things, and how living things are connected to our lives, the participants realized the significance of clean-up activities and became more interested in the nature and biodiversity around them. This event is a meaningful way to learn how the problem of plastic waste is connected to our daily lives.

Previously, the clean-up was held once a year, but due to its popularity among participants, in 2023 it was increased to twice a year to provide more opportunities for participation. At the 9th Arakawa Clean Aid event held in April 2024, 52 participants carried out clean-up work, including Toray Group employees and their families, and the 2024 Toray Campaign Girl, Haruka Mase. They picked up a total of 52 bags of trash, including 26 bags of combustible garbage, two bags of non-combustible garbage, 13 bags of plastic bottles, and 11 bags of cans and bottles, along with 11 large waste items. In a questionnaire filled out after the event, the participants expressed their positive feelings about the experience. Comments included: “The environmental talk at the start was informative, and I think it changed my awareness during the clean-up,” “I found it interesting to learn not just about the clean-up campaign but also about ecosystems,” “It was great to connect with people from departments I don’t usually interact with,” and “It was a good opportunity to reflect on my own life.” Ms. Mase also provided feedback saying, “It was my first environmental clean-up event, and I was surprised by how much trash we found. I kept wondering how it all ended up here.” Her comment resonated with many participants.



Clean-up participants



The nature observation activity enabled participants to observe the various types of wildlife that live in the Arakawa River and to think about the importance of preserving biodiversity.



2024 Toray Campaign Girl Haruka Mase also participated in the clean-up



Group photo of the clean-up participants

Biodiversity Conservation Activities in Green Spaces at Toray Facilities

The Tokai Plant of Toray Industries is promoting activities based on the Toray Group Greening Guidelines in order to maintain and nurture the green space that it has preserved since it began operating in 1971. Based on a deep awareness of the importance of social contribution, the Tokai Plant is expanding its initiatives for biodiversity conservation and ecosystem preservation.

As part of these efforts, the plant joined Project Linking Life with One Another², which aims to form an ecological network of corporate greenbelts along the coast of the Chita Peninsula and foster the next generation of leadership. The project works with students, companies, government agencies, and experts from the local community to engage in activities that promote the coexistence of people and nature and the preservation of biodiversity. The plant is working to foster future talent using its green space, such as giving students access to these spaces for environmental research fieldwork. This also plays an important role as a tool for communicating with the local community. In September 2023, the plant participated in an event called LOVE! GREEN DAY 2023, sponsored by the Project Linking Life with One Another, which allows the public to experience the green spaces of participating companies. The facility welcomed 40 participants, including local children and their parents, experts, and the university student members of the project executive committee. They participated in fieldwork activities such as observing wildlife in the waterside biotope and learned about the plant's biodiversity initiatives.

As a result of its efforts to conserve biodiversity and help develop the next generation of human resources, the plant was certified as Excellent Stage 2 in the OMA (Operation, Management and Active use) category of the Social and Environmental Green Evaluation System (SEGES)³, a green certification program provided by Japan's Organization for Landscape and Urban Green Infrastructure.

Moreover, Aichi Prefecture, where the Tokai Plant is located, adopted the Aichi Biodiversity Strategy 2030 in February 2021. This strategy aims to promote initiatives related to biodiversity conservation through collaboration among a variety of entities such as companies, universities, environmental organizations, and government agencies. Companies are expected to play a central role in local communities by contributing to biodiversity conservation through activities such as developing biotopes on company premises and having employees participate in conservation activities. Therefore, in order to promote corporate initiatives related to biodiversity conservation, in 2022, Aichi Prefecture established the Aichi Biodiversity Company Certification Program to recognize companies that are implementing outstanding initiatives in this area. The Tokai Plant is collaborating with university students to conserve the rare southern Japanese rice fish that lives in the plant biotope, along with an

herbaceous plant Fujibakama that helps provide a network of ecosystems for the chestnut tiger butterfly. As a result, Toray Industries has been recognized as an Aichi Biodiversity Certified Company.

In 2023, the Chita Peninsula Greenbelt, a collaborative initiative involving various stakeholders including Toray Group, was certified as a “nature symbiosis site” by Japan’s Ministry of the Environment. This kind of site is certified by the government as an area where biodiversity conservation is being promoted through private initiatives. The designation is part of Japan's 30by30 Roadmap initiative, based on the 2030 Nature Compact agreed upon at the G7 Summit in June 2021. The certification system was launched in fiscal 2023, and the Chita Peninsula Greenbelt was recognized as one of the first certified sites.



LOVE! GREEN DAY 2023 participants



An owl visiting the waterside biotope



Fujibakama (*Eupatorium japonicum*) being cultivated at the Tokai Plant



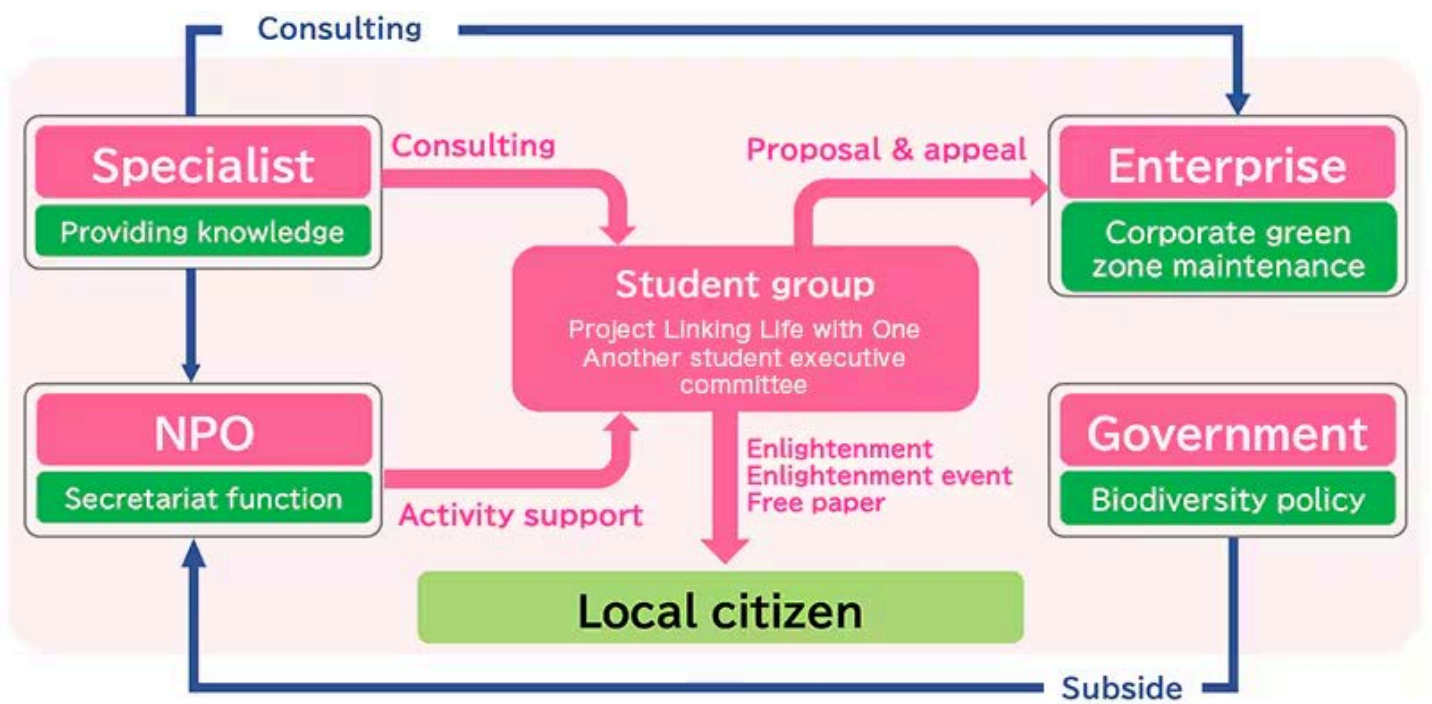
SEGES Excellent Stage 2 certification



Aichi Biodiversity Certified Company logo

2 Project Linking Life with One Another: A project based primarily in the corporate greenbelt along the coast of the Chita Peninsula that aims to form a network of ecosystems and nurture the next generation of leadership. Led by the student members of the Project Linking Life with One Another student executive committee, the project involves the collaboration of 12 companies, local government agencies, non-profit organizations, and experts who work together on a variety of activities to boost biodiversity in corporate green spaces and raise environmental awareness among local residents. The Project Linking Life with One Another student executive committee received the Prime Minister's Award for the 2020 Greening Promotion Movement, which is awarded to individuals and groups that have made outstanding contributions to the greening promotion movement.

Conceptual schematic of Project Linking Life with One Another



3 The Social and Environmental Green Evaluation System (SEGES): This system evaluates and certifies outstanding corporate green space initiatives that contribute to society and the environment. These initiatives include daily activities and efforts to help alleviate global warming and the heat island phenomenon, as well as conservation of local ecosystems, preservation and creation of good landscapes, building relationships with local communities, and safe and secure urban development. After being evaluated by a third-party review committee, successful candidates are certified by the Organization for Landscape and Urban Green Infrastructure. SEGES consists of three categories. In the SEGES OMA (Operation, Management and Active use) category, companies are evaluated and certified for outstanding activities to create or conserve their own green spaces. In the SEGES PDC (Planning, Designing and Construction) category, companies are evaluated and certified for outstanding green space environmental planning relating to property development and construction. In the SEGES ESW (Environmental Friendliness, Safety and Well-Being) category, companies are evaluated and certified for their efforts to provide comfortable and safe urban green spaces. As of April 2024, 154 corporate green spaces have been certified.

Environmental Activities at Offices and Plants



Employees participated in a river clean-up organized by the Nagaizumi Town Environmental Beautification Promotion Council and tidied the banks of the Matsukawa River, which flows south of the plant. (Toray Industries, Inc. Mishima Plant)



Employees conducted a clean-up activity on the Maekawa River embankment, adjacent to the plant. The collected waste was sorted and properly disposed. (Toray Industries, Inc. Chiba Plant)



Employees picked up litter along roads leading to the plant and cleaned up Yahagi Minami Elementary School, which many of the employees' children attend. These efforts were planned to commemorate the third year of the plant's neighborhood clean-up activities, which began in 2021 as part of local community contribution efforts. (Toray Industries, Inc. Okazaki Plant)



Alongside participants from neighboring companies, Toray Industries employees participated in an event to scrub Nihonbashi Bridge, organized by the Nihonbashi Preservation Society. (Toray Industries, Inc. Head Office)



As part of an event called "Kosugi iHUG Trefarm Citizen Volunteer Day" at the KOSUGI iHUG commercial complex, employees planted flowers along the facility's green path. Together with local residents, they planted 110 pansy seedlings grown at the facility's TOREFARM™ raised-bed sand cultivation farm. (Toray Construction Co., Ltd.)



Students participated in the Lake Biwa Clean Campaign, which coordinates prefecture-wide clean-up activities to protect the environment of Lake Biwa. (Toray School of Technology & Business)



In collaboration with Gumi city, where its plants are located, the company held a “plogging” event in which 1,400 employees walked through major areas of the city and picked up litter. (Toray Advanced Materials Korea Inc.)



An award ceremony was held for the Toray &+ Recycling Competition 2023 Penang. The competition for the largest amount of PET bottles collected is open to elementary and middle schools in the Malaysian state of Penang, in partnership with the NPO Penang Green Council, which works to address environmental issues in the state. (Toray Group Companies in Malaysia)



As part of greening efforts, employees participated in a tree-planting activity in collaboration with the local industry community. [Toray Film Products (Zhongshan) Ltd.]



To mark Labor Day 2023, employees carried out tree planting and clean-up along the seaside promenade at nearby Bang Pu Recreation Center. They also installed sprinklers for automatic watering of the plants. [Toray Textile (Thailand) Public Company Limited]



Employees participated in a clean-up activity at Lake Miramar in San Diego to commemorate Earth Day. The aim was to raise environmental awareness and help protect the planet. (Toray Membrane USA, Inc.)



Sponsorship of the Tokyo Marathon and Initiatives for Sustainability

Toray Industries has sponsored the Tokyo Marathon since 2011 as a way to contribute to society through the promotion of sporting events. The Tokyo Marathon also promotes sustainability initiatives as part of its activities. As an ongoing joint sustainability initiative with the Tokyo Marathon, Toray Industries provides its Ecodear™ plant-based polyester fiber to produce eco-friendly volunteer clothing, as well as carrier bags distributed to runners. At the Tokyo Marathon 2024, volunteers wore official clothing made from Toray's &+™ recycled fiber. This fiber was made from PET bottles used to provide water to runners during the Tokyo Marathon 2021, held in March 2022.



Volunteer staff wearing official clothing made from &+™ fiber



Related Information

> [&+™ \(product site\)](#) 

> [Realizing a Circular Economy](#)

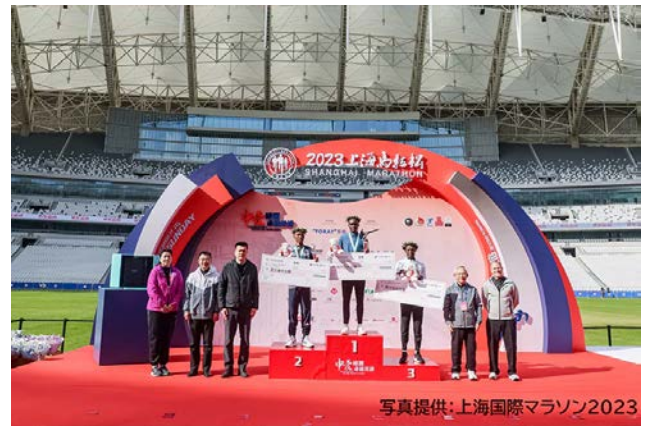
Promoting Sports Participation by Sponsoring the Shanghai Marathon

Toray Industries and Toray Industries (China) Co., Ltd. are helping to promote sports in China by sponsoring the Shanghai Marathon. The event is designated as a Platinum Label Road Race by World Athletics, a classification reserved for the leading road races around the world. Toray Group has sponsored the event since its second year and currently provides support as a Founding Sponsor, the highest level of sponsorship.

The 2023 Shanghai Marathon, the 27th such event, saw 38,000 participants run through the streets of Shanghai, marking a return to the pre-2020 scale following years of safety measures, such as complete cancellations or reduced participant numbers, during the COVID pandemic.



Runners carrying Toray team flags as they run through the streets of Shanghai



Medal ceremony for the men's full marathon. Toru Kutsuzawa, chairman of Toray Industries (China) Co., Ltd. (second from right), presented the medals.

Supporting Fureai Concerts

CSR Roadmap 2025
Main Initiatives (1)(3)(7)



To support culture, education, and welfare, Toray Industries co-sponsors Fureai Concerts. These concerts at venues across Japan, including elementary schools and social welfare facilities, bring music to the people through music instruction, concerts, and audience participation.

In fiscal 2023, an invitation-only performance for people with disabilities was held again as an annual part of the Fureai Concert program. Volunteers were on hand to assist attendees at the nearest train station and to help guide attendees inside the venue. The concert was thoroughly enjoyed by the many people who came.



Concert performance



Performers and volunteers



Based on the corporate philosophy of “contributing to society through the creation of new value with innovative ideas, technologies and products,” Toray Group contributes to society through its business activities, and in other ways as well.

Relief Efforts for the 2024 Noto Peninsula Earthquake

A major earthquake struck Ishikawa Prefecture in January 2024, with the epicenter in the Noto Peninsula. To provide emergency relief, Toray Group provided donations and supplies, and also dispatched employee volunteers. Toray Industries established the Ishikawa Plant in Nomi City, in 1975, and the Company has been operating there ever since. Ishikawa Prefecture is also where Toray affiliates such as Ichimura Sangyo Co., Ltd., headquartered in Kanazawa, and Sowa Textile Co., Ltd., the largest Toray Group textile manufacturer in Japan, are located. The wider Hokuriku region is home to textile-related consortiums such as the Toray Synthetic Textile Cluster.

Accordingly, Toray is deeply rooted in this part of Japan, which is a critical region for its business.

Toray Industries, Chori Co., Ltd., Toray International, Inc., and Toray Opelontex Co., Ltd., along with other group companies, donated approximately 120 million yen via various organizations, including Ishikawa Prefecture, the Japanese Red Cross Society, the Nagoya Chamber of Commerce and Industry, and the Chunichi Shimbun Social Welfare Foundation.

As part of these efforts, in response to requests for help from various medical organizations, Toray Medical Co., Ltd. made donations and dispatched volunteers to help restore medical facilities affected by the major earthquake. To assist one facility that had suspended dialysis, the company provided activated carbon filters to deal with water contamination once damaged infrastructure was restored. It also provided communication devices to enable remote support services for dialysis machines once network environments were back online.

At the request of the Japan Hemodialysis Assistance Team in Disaster (JHAT), the company also arranged for a vehicle and employees to deliver relief supplies to medical institutions in the Noto Peninsula. Moreover, after being contacted by the Japanese Society of Phlebology, Toray Industries and Toray Medical donated 2,000 pairs of medical compression stockings (Fine Support), as deep vein thrombosis is a concern for evacuees from disaster-hit areas.

Suido Kiko Kaisha, Ltd. provided Makusesu Safety emergency water purification systems free of charge to the cities of Komatsu, Suzu, and Wajima to help restore drinking water.



Toray Medical employees making deliveries from the JHAT site



Makusesu Safety systems drawing water from a nearby river

Please click [here](#) for more information on Toray Group's disaster relief efforts after the 2024 Noto Peninsula Earthquake.

As a good corporate citizen, the Group supports local Volleyball Clinic to Support Great East Japan Earthquake Recovery

Since 2013, the Tohoku Branch of Toray Industries has used volleyball as a means of providing support for local reconstruction efforts. In June 2023, a volleyball clinic was held for fifth and sixth graders at Ōshio Elementary School in Higashi Matsushima City, Miyagi Prefecture. A former member of the Japanese national volleyball team and the Toray Arrows team, Kana Oyama, gave a talk to the sixth graders, and a practical training was provided by fellow former Arrows Azusa Futami, who now works at Toray Engineering Co., Ltd.

During the training, the students enjoyed creative games and practiced tosses and serves using soft volleyballs. The venue was filled with smiles and excited voices. During her talk, Kana Oyama focused on the theme of “connecting with others” illustrated by passing and receiving a volleyball. She emphasized the importance of being considerate and mindful of others and then using these feelings to connect with them. She was able to convey her message very effectively to the students.



Ms. Oyama (right) and Ms. Futami (left) answer students' questions.



Support for Local Community Development



Toray Group donated a total of 100,000 yuan to a local charity association for community development in Nantong, China. This annual activity began in 2012 and the 12th such donation was made in fiscal 2023. (Five Toray Group companies in the Nantong area)



As part of a community contribution activity by the Sri City Industrial Park Japanese Companies Association, together with other Japanese firms, Toray donated smart boards (multifunctional electronic blackboards) to nearby schools. [Toray Industries (India) Private Limited]



Employees organized seasonal programs such as autumn foliage viewing for 50 residents living in the Cheongae-won long-term care facility and served as volunteers for the activities. [STEMCO, Ltd. (Korea)]



Toray supports the Shenandoah Apple Blossom Festival, held every spring in the U.S. state of Virginia. The festival features over 40 events over 10 days and attracts more than 250,000 visitors. Toray sponsored the Kids' Bloomin' Mile Race for children aged 6 to 14, and six children of Toray employees participated. [Toray Plastics (America), Inc.]



As a sponsor of the local Main Festival aimed at fostering and deepening German-Japanese cultural exchange, Toray presented Japanese culture using kimonos made from Sillook™ silk-texture polyester fiber. At the event, Japanese dancers and models performed wearing these kimono, an iconic symbol of Japanese culture, made of Sillook™. [Toray International Europe GmbH (Germany)]



Toray is supporting the operation of the local Japanese supplementary school in Guadalajara. (Toray Group Companies in Mexico)



Toray participated in a local cultural promotion project by donating children's books to the Hemu Village Library in Guangning County, Zhaoqing City. [Toray Film Products (Zhongshan) Ltd.]



In cooperation with the local Seberang Jaya Hospital, Toray conducted a blood donation campaign at the headquarters of Penfabric Sdn. Berhad, with 97 employees participating. (Toray Group Companies in Malaysia)



Working with the Red Cross, this group company conducted a blood donation campaign. In Korea, blood donors receive a certificate that entitles them to free transfusions when needed. Since the certificate can also be transferred or donated, the company donated its certificates to Kyungpook National University Hospital to help save lives and support a healthy, sustainable society. (Toray Battery Separator Film Korea Limited)



Toray was a sponsor of the "We with you" project organized by Auser (Associazione per l'invecchiamento attivo) and the Italian city of Legnano, aimed at promoting active aging for the elderly and increasing their involvement in society. The project provided wheelchair-accessible transport vehicles to support the daily lives of people with disabilities. [Composite Materials (Italy) s.r.l.]

Click [here](#) for the main initiatives for CSR Guideline 10, “Social Contribution Activities as a Good Corporate Citizen” in CSR Roadmap 2025.

Toray Group's Approach to Climate Change

Toray Group is committed to its current corporate philosophy of “contributing to society through the creation of new value.” This is in keeping with a principle since Toray's foundation in 1926 that corporations are public institutions that should contribute to society through business. Based on this corporate philosophy, Toray Group has for many decades focused on creating innovative technologies and advanced materials that provide solutions to various social challenges, including global environmental issues, and has helped to build a sustainable world.

Based on this approach, the Toray Group Sustainability Vision was established in 2018. As part of vision objectives to be achieved by 2050, the Group is aiming to help achieve a net zero emissions world, where greenhouse gas emissions are completely offset by absorption—in other words, a net zero emissions, carbon-neutral world.

The Group will help to reduce global greenhouse gas emissions and help to realize a carbon neutral world by 2050 by expanding the Sustainability Innovation (SI) Business¹ that have long been a Toray focus, including renewable energy, hydrogen, and materials for electrification, and by developing products that help with greenhouse gas absorption, such as CO₂ separation membranes.

In addition, Toray Group aims to reduce its own greenhouse gas emissions (Scope 1 and 2) and become carbon neutral by 2050. It will do this by expanding the Sustainability Innovation Business, which in return will provide Toray Group with sustainable energy and raw materials, as well as by developing and introducing innovative processes and CO₂ recycling technology that utilize CO₂ as a resource. Moreover, by promoting initiatives such as bio-based raw materials and recycling, the Group is also committed to promoting the reduction of Scope 3 emissions that will reduce greenhouse gas emissions throughout the entire supply chain.

¹ Sustainability Innovation (SI) Business: Business areas and product lines that can help realize the Toray Group Sustainability Vision

To accelerate initiatives to address climate change, in April 2021 the Group established the Sustainability Committee, chaired by the president, as an organization that oversees measures to combat climate change, as well as the Climate Change Subcommittee.

In April 2022, the Circular Economy Subcommittee was added to further accelerate efforts to address climate change. In fiscal 2022, the Climate Change Subcommittee reviewed Toray Group's reduction targets for greenhouse gas emissions (Scope 1 and 2) to be achieved by fiscal 2030. The subcommittee also discussed a number of topics including the basic policy for ascertaining and reducing GHG emissions (Scope 3) throughout the supply chain, a digitalization promotion plan for calculating and visualizing product carbon footprints, and the 2023 internal carbon price (10,000 yen per ton of CO₂) and how it should be used. Based on this, the Sustainability Committee deliberated and decided on the appropriate policies.

In addition, the Group partially revised its implementation system in 2023 and promotes initiatives by focusing on the following two projects: (1) the Sustainability Innovation Business Expansion Project (SI Business Expansion PJ below), which will contribute to reducing the GHG emissions of society in general through its business, and (2) the Climate Change Action Project (Climate Change Project below), which aims to reduce GHG emissions in its own business activities.

The SI Business Expansion PJ is primarily promoted by each of the business divisions. Meanwhile, subcommittees have been established separately in cross-business areas such as mobility, circular economy, and hydrogen, working together to expand the SI business.

The Climate Change Project promotes group-wide initiatives aimed at achieving the fiscal 2030 targets for Scope 1 and Scope 2 GHG emissions reductions as the Challenge 50+ Project. The project's GHG Reduction Subcommittee (formerly the Climate Change Subcommittee) discusses overall strategy for making further reductions in GHG emissions, reductions in Scope 3 emissions, external communications, carbon pricing, and other topics.

Progress on these activities is regularly reported to the Board of Directors, which appropriately monitors the Group's climate change prevention measures. The Board also considers opportunities and risks related to climate change as part of important factors when making business decisions and conducts appropriate oversight and comprehensive decision-making.

Further, in order to achieve carbon neutrality in 2050, Toray Group recognizes the need to make changes and take a leap in technological innovation based on non-conventional ideas, as well as the need for efforts that are not limited to single corporations, but involve industry, government, and broader society working together to achieve this goal. The Group holds discussions and pursues dialogue with affiliated economic organizations, industry associations, and government, working with these entities to achieve the goals of carbon neutrality and the Paris Agreement by 2050.

Through this dialogue, the Group collects information released by the government and conducts interviews with the relevant ministries. Toray shares its opinions and make recommendations as part of efforts to understand, confirm, and apply the relevant information to its internal policies.

Toray Group also participates in relevant industry organizations, which make recommendations to the government based on the consensus regarding initiatives needed to promote carbon neutrality.

Toray also participates in the GX League, a collaborative industry-government initiative to promote carbon neutrality. Accordingly, the Group discloses information related to its carbon neutrality activities, which includes the setting of GHG emission reduction targets and follow-up on the results achieved.

Major Affiliations: Organizations / Initiatives / Committees / Subcommittees (partial list)

- [Nippon Keidanren \(Japan Business Federation\): Sub-Committee on Global Environment, Committee on Environment](#)
- [Japan Association of Corporate Executives: Environment and Energy Committee \(Report in Japanese\)](#)
- [Japan Chemical Industry Association: Technical Affairs Committee](#)
- [Japan Chemical Fibers Association](#)
- [Japan Environmental Management Association for Industry](#)
- [GX League](#)

In order to reduce Category 1 emissions (from purchased goods and services), which account for the largest share of the Group's Scope 3 emissions, Toray is promoting engagement with major suppliers in an effort to reduce the carbon footprint of purchased raw materials. This involves confirming their basic policies, reduction plans and targets, as well as relevant issues, while establishing constructive dialogues with the suppliers.

Carbon Neutrality Initiatives

Helping the broader society to reduce overall greenhouse gas emissions through the Sustainability Innovation (SI) Business. Also reducing Toray Group greenhouse gas emissions* by maximizing the use of renewable electricity, hydrogen, and low carbon-footprint raw materials, based on expansion of the SI Business. (*Scope 1, 2, 3)

Contributing to build a carbon neutral world

Increasing the Volume of Greenhouse Gas Emissions Avoided through the Sustainability Innovation(SI) Business

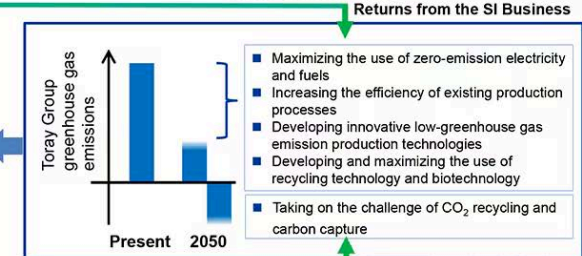


(Corresponding KPIs)

	FY2030 Target [Compared to FY2013]
Supply of Sustainability Innovation products	4.5-fold
CO ₂ emissions avoided in value chain	25-fold

Achieving carbon neutrality for the Toray Group by 2050

Adopting greenhouse gas emissions reduction technology in business activities

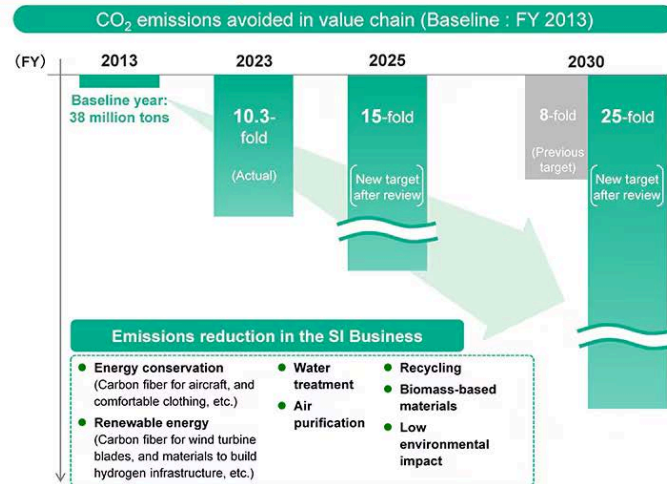


(Corresponding KPIs)

	FY2030 Target [Compared to FY2013]
GHG emissions in production activities	Over 50% reduction
GHG emissions per unit of revenue for the entire Toray Group	Over 40% reduction
GHG emissions of Toray Group in Japan	Over 40% reduction

Promote carbon neutrality for the planet

CO₂ emissions avoided in value chain



Volume CO₂ emissions avoided through use of Toray products

- CO₂ emissions avoided by lowering life cycle emissions with materials reduce aircraft weight*1



- CO₂ emissions avoided by using RO membranes for seawater desalination*1



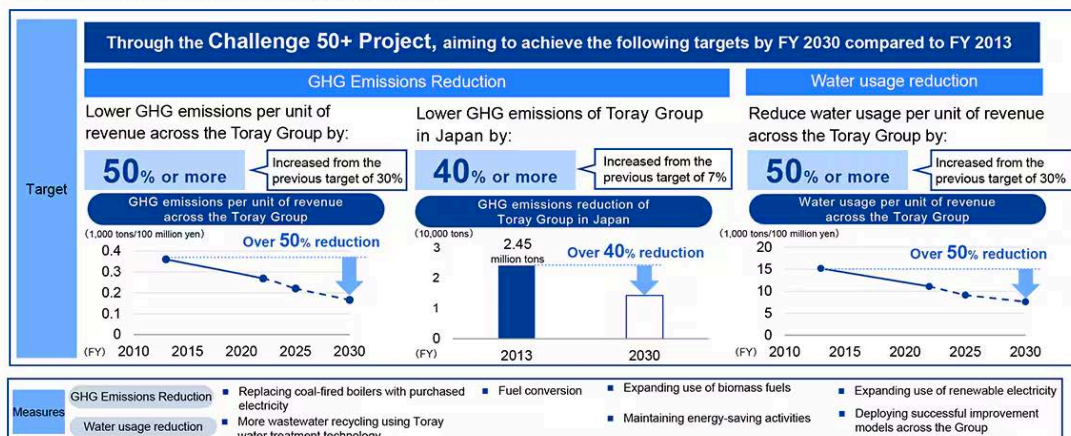
*1 Figures in the circles above represent CO₂ emissions for the entire product life cycle

Source: Innovations for Greenhouse Gas reductions, Japan Chemical Industry Association (JCIA)

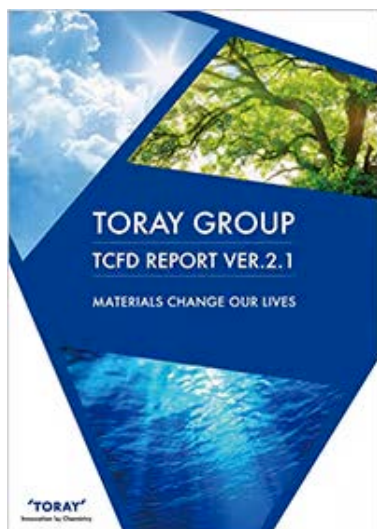
Achieving Carbon Neutrality across the Toray Group

Emission Reductions in Production Activities

Toray Group will reduce greenhouse gas emissions in the production stage by switching to cleaner fuels and leveraging the Group's proprietary knowledge and technologies. We have raised our emissions reduction target for FY 2030 because our own carbon neutralization and sustainability initiatives are progressing ahead of plan.



In May 2019, Toray Group declared its support for the Task Force on Climate-related Financial Disclosures (TCFD) recommendations. In April 2021, the Toray Group TCFD Report 2021 was released in accordance with these TCFD recommendations. Toray analyzed its opportunities and risks associated with climate change and disclosed the results. The analysis covered activities not only within the Group, but also across its supply chain and product life cycles, from upstream raw material procurement to downstream processing, product use, and disposal. Subsequently, in November 2023, the Toray Group TCFD Report Ver. 2 was released. Toray Group TCFD Report Ver. 2 includes new quantitative analysis of major climate change-related risks around the 2040 timeframe, as well as information on efforts to combat climate change in business activities, engagement with external partners, and other matters. Then, an updated version, the Toray Group TCFD Report Ver. 2.1 was released in June 2024.



[Toray Group TCFD Report Ver.2.1](#) [PDF](#)
(2.60MB)

Toray Group will continue to accelerate its pursuit of sustainable growth for the Group and initiatives to address climate change, as well as actively disclose information in accordance with the TCFD recommendations.

Click [here](#) for the Group's past TCFD Reports.

Related Information

[Toray Group Sustainability Vision](#) [PDF](#)

- [Conserving Energy and Reducing Greenhouse Gas Emissions](#)
- [Risk Management](#)
- [Contributing Solutions to Social Issues through Business Activities](#)
- [Establishing Sustainable Supply Chain](#)

Click [here \(PDF:2.15MB\)](#) [PDF](#) for Toray answers to the CDP Climate Change 2023 questionnaire.

Click [here \(PDF:980KB\)](#) [PDF](#) for Toray answers to the CDP Water Security 2023 questionnaire.

<Toray Group Efforts to Date>

One of the corporate commitments presented in Toray Group's Long-Term Corporate Vision, AP-G 2000, introduced in 1991, was to play an active role in protecting the global environment, and in the same year, the Group established the Global Environment Research Laboratory. In the following year (1992), the management of Toray Group affirmed its determination to take active steps to address global environmental issues, one of which was the formation of the company-wide Global Environment Committee.

In 2000, Toray Group formulated its Three-Year Environmental Plan of medium-term environmental preservation goals, which included targets for reducing greenhouse gas emissions. The Group continued to pursue activities in line with this plan through its Fifth Medium-Term Environmental Plan (targets set for FY2020).

In 2009, Toray Group established its Global Environment Business Strategic Planning Department under the direct control of the president for the purpose of promoting and supporting company-wide plans, development, and business integration of Toray Group global environment business strategies. Since 2011, under the Group's Long-Term Corporate Vision AP-Growth Toray 2020, this department has been central in efforts to expand the Group's Green Innovation businesses and promote Toray products and services that provide solutions to global environmental challenges and issues related to resources and energy.

Moreover, in the face of the increasing severity of such global environmental challenges as climate change, in July 2018 Toray Group announced the Toray Group Sustainability Vision, which sets out Toray Group initiatives and quantitative targets for fiscal 2030 with a view to realizing the World as Envisioned by Toray Group in 2050. The Group has continued to focus on promoting efforts to achieve this vision. In May 2020, Toray Group announced its Long-Term Corporate Vision, TORAY VISION 2030—Achieving sound, sustainable growth and creating social value, which runs through the end of fiscal 2030. At the same time, the Group released its Medium-Term Management Program, Project AP-G 2022 “Resilience and Proactive Management”—Sustainable Growth and New Development, which covers the three-year period starting in fiscal 2020.

As part of this effort, the Group's Green Innovation businesses, which help solve global environmental problems and resource- and energy-related issues, and its Life Innovation businesses, which contribute to better medical care and long, healthy lives and promote public health and human safety, including measures to counter disasters and abnormal weather, were integrated and redefined as the Sustainability Innovation (SI) Business. The Group is expanding the SI Business while strengthening its sustainability efforts, as shown by the integration of the Global Environment Business Strategic Planning Department into the Corporate Strategic Planning Division. By expanding the products supplied by the SI Business, Toray Group aims to promote Group growth and will contribute to the sustainable development of society through means such as greater CO₂ emissions avoided in the value chain. Moreover, based on its core values of contributing to society through its business activities, people-centric management, and management from a long-term perspective, Toray Group has established TORAY VISION 2030 with the aim of providing new value to society and focusing on the four perspectives of the world envisioned under the Toray Group Sustainability Vision. This will be achieved by sharing Toray's management strengths in R&D, sales & marketing, and production, and by pursuing co-creation with the customers and business partners that make up the supply chain, all with a materials-oriented approach.

<Progress on Project AP-G 2025 Sustainability Goals and on the Fiscal 2030 Goals of the Toray Group Sustainability Vision>

	FY 2023 Actual ²	FY 2025 Target ²	FY 2030 Target ²
Revenue from Sustainability Innovation (SI) Business	1,311.5 billion yen (2.3-fold)	1,600.0 billion yen (2.8-fold)	4.5-fold
CO ₂ emissions avoided in value chain	10.3-fold	15.0-fold	25-fold
Water filtration throughput contribution by Toray's water treatment membranes	2.7-fold	2.9-fold	3.5-fold
Greenhouse gas emissions per unit of revenue in production activities	228 tons/100 million yen (36% reduction ³)	40% reduction	50% or more reduction
Greenhouse gas emissions of Toray Group in Japan	1.83 million tons (26% reduction ³)	20% reduction	40% or more reduction
Water usage per unit of revenue in production activities	9,500 tons/100 million yen (35% reduction ³)	40% reduction	50% or more reduction

² Each relative ratio is calculated in comparison to FY 2013.

³ The calculation of the figure for the baseline of FY 2013 includes data for companies that joined the Toray Group in FY 2014 or later.

In 2022, Toray Group newly established the Environmental Solutions Department within the Corporate Marketing Planning Division for the purpose of promoting and supporting Group-wide plans, development, and business integration of Toray Group circular economy strategies.

<Cross-Industry Metrics from the 2021 TCFD Annex “Implementing the Recommendations of the Task Force on Climate-related Financial Disclosures”>

1. GHG emissions: Absolute Scope 1, Scope 2, and Scope 3 emissions intensity <tons-CO ₂ , basic unit>	• Scope 1 and 2 reduction targets Medium-Term Management Program Project AP-G 2025 (p.18, 42, 43, 45) • Scope 1,2 and 3 emissions Toray Group TCFD Report Ver.2.1 (p.32-35)
2. Transition Risks: Amount and extent of assets or business activities vulnerable to transition risks <Percentage>	• Opportunities and risks Toray Group TCFD Report Ver.2.1 (p.10-18) • Reducing coal use at factories outside Japan Conserving Energy and Reducing Greenhouse Gas Emissions
3. Physical Risks: Amount and extent of assets or business activities vulnerable to physical risks <Percentage>	• Opportunities and risks Toray Group TCFD Report Ver.2.1 (p.10-18) • Handling Water Hazard Risks (Floods, Storm Surges, Etc.) Business Continuity Plan Initiatives
4. Climate-Related Opportunities: Proportion of revenue, assets, or other business activities aligned with climate-related opportunities <Percentage>	• Revenue from Sustainability Innovation (SI) Business Medium-Term Management Program Project AP-G 2025 (p.20, 21)
5. Capital Deployment: Amount of capital expenditure, financing, or investment deployed toward climate-related risks and opportunities <Yen>	• Capital investment and R&D expenses Toray Group TCFD Report Ver.2.1 (p.27, 28) Medium-Term Management Program Project AP-G 2025 (p.40)
6. Internal Carbon Prices: Price on each ton of GHG emissions used internally by an organization <Yen/ton-CO ₂ >	• Internal carbon pricing Toray Group TCFD Report Ver.2.1 (p.33)

7. Remuneration: Proportion of executive management remuneration linked to climate considerations <Percentage, weighting, description, or amount in reporting currency>	• Remuneration for Members of the Board Integrated Annual Report 2023 (p.84)
---	--

<Disclosure with Respect to Section 44475.2 of Division 26 Part 10 of California Health and Safety Code (California AB1305)>

[Disclosure with Respect to Section 44475.2 of Division 26 Part 10 of California Health and Safety Code \(California AB1305\)](#) (PDF : 90.7KB) [PDF](#)

Comments from Thought Leaders

Comments are made on the basis of information publicly available as of September 2024.



Sachiko Kishimoto

Representative Director and Managing Director
Public Resources Foundation

Profile of Sachiko Kishimoto

Graduated from, College of Arts and Sciences, The University of Tokyo. After working for a trading company and think tank, she pursued studies outside Japan and then in 2000 established the Public Resource Center, which became the Public Resources Foundation in 2013. She has served as the foundation's Representative Director and Managing Director since it was established. With the aim of promoting a culture of philanthropy in Japan, she is involved in programs to efficiently match endowments from individuals and companies with recipients in the social sector. She also helps companies to pursue CSR and assess the impacts of their efforts. She has edited such works as *The Scientific Approach to Donations*, and *Financial Methods and Practices for Solving Social Issues: From Donations and Grants to Innovative Philanthropy*.

These comments focus on the three sections of the Toray Group CSR Report 2024 entitled “Contributing Solutions to Social Issues through Business Activities” “Social Contribution Activities as a Good Corporate Citizen” “Human Rights Promotion and Human Resources Development,” and “Establishing Sustainable Supply Chain.”

The section “Contributing Solutions to Social Issues through Business Activities” describes Toray Group efforts to respond to diversifying sustainability needs. Under the Medium-Term Management Program, Project AP-G 2025, announced by the Group in March 2023, the Green Innovation (GR) and Life Innovation (LI) businesses were consolidated to form the current Sustainability Innovation (SI) business. The Group has established and is actively applying specific KPIs to this business, which is highly commendable. I have high expectations that the Group will make progress on these indicators and exceed 2025 targets for SI business revenue, CO₂ emissions reduction in the value chain, and water filtration throughput.

In the section “Social Contribution Activities as a Good Corporate Citizen,” the Group cites steady increases each year in the number of its social contribution initiatives and beneficiaries of its educational support activities. The Group also provided rapid assistance for areas affected by the Noto Peninsula earthquake in January 2024. The ecosystem conservation project targeting its corporate green spaces on the coast of the Chita Peninsula were recognized by the Ministry of the Environment as one of its Nationally Certified Sustainably Managed Natural Sites. These are positive efforts to meet the needs of society. As global environmental issues become increasingly serious, the need for the environmental and science education that Toray employees participate in as instructors is higher than ever. I therefore expect a great deal of these Group initiatives in terms of enhancing the environmental awareness of students, while giving individual employees more autonomy.

I was impressed with the section “Human Rights Promotion and Human Resources Development” as the Group has quickly established human rights policy, along with clear policies for securing and developing human resources. I was pleased to note the Group’s transparency in sharing the number of hotline reports and inquiries concerning possible human rights violations, as well as the increase in educational investment per employee. However, the Group has not yet achieved the statutory employment rate for people with disabilities. Moreover, proactive promotion of women remains an issue. Along with future promotions of women to managerial positions and specialized roles, I would like to see the Group continue to take action on creating work environments where everyone is able to thrive. This includes further reduction of overtime, flexible adoption of remote work, implementation of employee stress checks, and prevention of employee turnover.

Finally, with regard to the section “Establishing Sustainable Supply Chain,” it is critical, given the global scale of its supply chain, that Toray Group engage with suppliers on CSR initiatives. I look forward to the Group’s continued efforts to increase its implementation rate for supply chain due diligence. This means identifying suppliers from countries, regions, and industries deemed to pose higher human rights, labor, health and safety, and environmental conservation risks and expediting compliance investigations.



Shunsuke Managi

Director, Urban Institute

Distinguished Professor, Assistant to the President,
Kyushu University

Profile of Shunsuke Managi

Professor, Department of Civil Engineering (Kyushu University), Faculty Fellow at the Research Institute of Economy, Trade and Industry, and Visiting Researcher at the Policy Research Institute, Ministry of Agriculture, Forestry and Fisheries. Awarded the 2019 Japan Society for the Promotion of Science Prize, and Member of the 25th and 26th terms of the Science Council of Japan. Listed as a Highly Cited Researcher in 2023 by Clarivate. Director for the UN Environment Programme's *Inclusive Wealth Report 2018, 2023*, ISC working group member for UN' The Global Sustainable Development Report 2023, Member of the United Nations New Capital Roundtable for Sustainability, Temporary Member of the Ministry of Economy, Trade and Industry's Industrial Structure Council, and Temporary Member of the Ministry of the Environment's Central Environmental Council.

Toray Group aims to develop high added-value products while being mindful of the environment, and I expect the Group to implement this through supply chain initiatives. For example, in terms of its net zero efforts, the Group aims to achieve carbon neutrality for its own operations, as well as help realize a carbon-neutral world by reducing CO₂ emissions throughout the life cycles of its products and across the entire supply chain. The Group has endorsed the recommendations of the Taskforce on Nature-related Financial Disclosures in January 2024, and I look forward to its efforts to address Nature Positive with the same measures.

The Sustainability Innovation (SI) business, a group of businesses and products that can help realize the Toray Group Sustainability Vision, is the Group's main vehicle for promoting these efforts. The SI business has performed outstandingly well, with revenue already exceeding 1.3 trillion yen in fiscal 2023. This success boosts the resource efficiency of society at large, with 10.3 times the contribution to CO₂ reduction in the value chain over fiscal 2013 and 2.7 times the contribution from Toray water treatment products, and means there is potential for further expanding the Group business. I am confident that Toray Group will continue to build a sustainable value chain by addressing various environmental and social issues through the expansion of its businesses.

My expectations for Toray Group have now grown to include the tackling of not only international challenges, but also issues specific to Japan. For example, I have high hopes for the Group's initiatives aimed at realizing a "physical internet" for logistics. With the tight labor market in the transport sector, compounded by Japan's "2024 problem," the lack of transportation capacity is a serious challenge for the chemical industry and its quest for sustainable logistics. In response to this challenge, in July 2023, the Group helped establish, as one of the secretariat members, the Chemical Products Working Group under the Physical Internet Realization Conference, which was held by Japan's Ministry of Economy, Trade and Industry and Ministry of Land, Infrastructure, Transport and Tourism. If the current transportation capacity shortage continues, regions of Japan where transportation access is particularly difficult will surely be significantly impacted. As part of its responsibilities toward domestic stakeholders, I would like to see the Group put forward feasible proposals, indicate the extent to which they could be achieved, and work toward realistic solutions.

The Toray Group's top-level commitment to sustainability shows its determination to realize the four perspectives of the world as envisioned by the Toray Group: 1) a net zero emissions world, where greenhouse gas emissions are completely offset by absorption—in other words, a carbon-neutral world, 2) a world where resources are

sustainably managed, 3) a world with a restored natural environment, with clean water and air for everyone, and 4) a world where everyone enjoys good health and hygiene. The Group's Medium-Term Management Program, Project AP-G 2025, comprehensively outlines its vision for its own sustainable development, as well as that of society as a whole. Toray Group has clear objectives for manufacturing, human resource development, and environmental protection. My expectations remain high when it comes to the Group's ability to help solve both international challenges and unique domestic issues.

CSR-Related Policies and Guidelines

Policies and guidelines related to Toray Group CSR are listed below.

Management

[Toray Philosophy](#) >

Governance

[Basic Policy on Corporate Governance](#) >

[Basic Policy on Internal Control System](#) >

[CSR Activity Report \(CSR Guideline Activity Reports\)](#) >

[Information Disclosure Principles](#) >

[Toray Group Information Security Basic Policy](#) >

Ethics and Compliance

[Ethics & Compliance Code of Conduct](#) >

[Toray Group Tax Policy](#) >

[Toray Group Policy for Human Rights](#) >

Safety and Environment

[Ten Basic Environmental Rules](#)



[Recycling Activity Principles](#)



[Toray Group's Basic Policy for Increasing Green Areas](#)



[Toray Group Biodiversity Basic Policy](#)



Quality Assurance and Product Safety

[Product Safety Management Basic Policy](#)



[Toray Group Quality Policy](#)



Purchasing and Procurement

[Basic Purchasing Policies](#)



[Basic Distribution Policies](#)



[Toray Group CSR Procurement Policies](#)



[Toray Group CSR Procurement Guidelines](#)



Others

[Basic Policies to Promote Dialogue with Stakeholders](#)



[Toray Global HR Management \("G-HRM"\) Fundamental Policy](#)



[Toray Group Social Initiative Policies](#)



[Statement on the UK's Modern Slavery Act](#)



ESG Data

Environment-Related

		Scope	Period	2020	2021	2022	2023	Unit
Environment conservation costs	Investment	Toray Industries, Inc.	FY	1.52	1.82	1.49	1.80	billion Yen
	Cost			7.56	6.75	9.26	9.70	
Economic impact of environmental initiatives		Toray Industries, Inc.	FY	0.60	0.73	0.88	0.85	billion Yen
Energy consumption	Total energy consumption	Toray Group total	FY	81.5	96.4	92.3	93.3	million gigajoules
	Consumption from non-renewable energy sources		FY	80.1	95.1	90.6	91.6	
	Consumption from renewable energy sources		FY	1.4	1.3	1.7	1.7	
	Total energy consumption	Toray Industries, Inc.	FY	25.3	27.3	25.6	24.2	
	Consumption from non-renewable energy sources		FY	24.0	26.1	24.6	22.9	
	Consumption from renewable energy sources		FY	1.2	1.2	1.1	1.3	
	Total energy consumption	Group companies in Japan	FY	5.3	5.8	5.4	5.1	
	Consumption from non-renewable energy sources		FY	5.3	5.8	5.0	5.1	
	Consumption from renewable energy sources		FY	0.0	0.0	0.4	0.0	

		Scope	Period	2020	2021	2022	2023	Unit
	Total energy consumption	Group companies outside Japan	FY	50.9	63.4	61.3	64.0	
	Consumption from non-renewable energy sources		FY	50.7	63.2	61.1	63.6	
	Consumption from renewable energy sources		FY	0.2	0.1	0.3	0.4	
Unit energy consumption index (% compared to fiscal 1990)		Toray Industries, Inc.	FY	90.9	79.9	85.4	91.8	—
Water		Toray Group total	FY	214.7	223.8	213.9	206.8	million tons
		Toray Industries, Inc.	FY	165.7	171.8	166.2	160.9	
		Group companies in Japan	FY	11.5	11.5	8.6	8.2	
		Group companies outside Japan	FY	37.6	40.5	39.1	37.7	
Industrial wastewater		Toray Group total	FY	182.1	188.2	178.6	168.3	million tons
		Toray Industries, Inc.	FY	150.1	154.4	143.9	139.1	
		Group companies in Japan	FY	7.7	8.2	5.6	5.3	
		Group companies outside Japan	FY	24.3	25.7	29.1	23.9	
Greenhouse gas emissions ^{1,2}	Scope1	Toray Group total	FY	281.7	304.4	253.8	249.1	10,000 tons CO ₂ eq
	Scope2		FY	215.2	244.9	235.5	246.0	
	Scope1+Scope2		FY	496.9	549.2	489.3	495.1	
	Scope1	Toray Industries, Inc.	FY	140.3	157.9	137.3	136.7	
	Scope2		FY	25.5	28.3	27.4	25.9	
	Scope1+Scope2		FY	165.7	186.2	164.7	162.6	

		Scope	Period	2020	2021	2022	2023	Unit
	Scope1	Group companies in Japan	FY	4.1	5.5	3.4	3.2	
	Scope2		FY	26.6	27.7	16.1	16.9	
	Scope1+Scope2		FY	30.7	33.3	19.5	20.1	
	Scope1	Group companies outside Japan	FY	137.3	140.9	113.1	109.3	
	Scope2		FY	163.1	188.8	192.0	203.2	
	Scope1+Scope2		FY	300.5	329.8	305.1	312.4	
Greenhouse gas emissions (Scope3)		FY2020 and FY2021 (Toray Industries, Inc.) FY2022 and FY2023 (Toray Group)	FY	77.1	267.5	1,057.1	1,755.6	10,000 tons CO ₂ eq
	Category 1: Purchased goods and services		FY	—	231.5	898.0	859.7	
	Category 2: Capital goods		FY	10.2	9.2	39.6	51.8	
	Category 3: Fuel and energy related activities		FY	63.1	19.0	94.5	95.6	
	Category 4: Upstream transportation and distribution		FY	3.8	4.3	21.0	18.4	
	Category 5: Waste generated in operations		FY	—	2.0	1.1	0.9	
	Category 6: Business travel		FY	—	1.3	0.6	0.6	
	Category 7: Employee commuting		FY	—	0.2	2.2	2.1	
	Category 8: Upstream Leased Assets		FY	—	—	0.2	0.4	
	Category 9: Transportation and delivery (downstream)		FY	—	—	—	3.0	
	Category 10: Processing of sold products		FY	—	—	—	—	
	Category 11: Use of sold products		FY	—	—	—	274.6	

		Scope	Period	2020	2021	2022	2023	Unit
	Category 12: End-of-life treatment of sold products		FY	—	—	—	447.5	
	Category 13: Leased assets (downstream)		FY	—	—	—	1.1	
	Category 14: Franchises		FY	—	—	—	0.0	
	Category 15: Investments		FY	—	—	—	—	
Atmospheric emissions (NOx)		Toray Group total	FY	2,189.5	2,689.9	2,936.9	2,712.0	tons
		Toray Industries, Inc.	FY	1,139.2	1,302.6	1,186.0	1,135.0	
		Group companies in Japan	FY	29.7	14.3	4.2	23.3	
		Group companies outside Japan	FY	1,020.7	1,372.9	1,746.7	1,553.8	
Atmospheric emissions (SOx)		Toray Group total	FY	1,582.7	1,333.1	658.7	479.6	tons
		Toray Industries, Inc.	FY	160.1	219.4	232.0	226.2	
		Group companies in Japan	FY	17.9	2.4	1.6	6.1	
		Group companies outside Japan	FY	1,404.7	1,111.3	425.1	247.3	
Emissions of substances subject to the PRTR Act (Atmospheric Emissions)		Toray Group total	FY	796.1	715.9	820.6	924.0	tons
		Toray Industries, Inc.	FY	211.0	183.3	145.1	153.0	
		Group companies in Japan	FY	104.4	89.8	111.3	120.6	
		Group companies outside Japan	FY	480.6	442.8	564.2	650.3	

	Scope	Period	2020	2021	2022	2023	Unit
Emissions of substances subject to the PRTR Act (Water Emissions)	Toray Group total	FY	26.0	30.2	31.1	16.5	tons
	Toray Industries, Inc.	FY	22.2	26.5	28.0	13.5	
	Group companies in Japan	FY	3.1	0.0	0.0	2.7	
	Group companies outside Japan	FY	0.7	3.7	3.1	0.3	
Emissions of substances subject to the PRTR Act (transfers)	Toray Group total	FY	7,323.2	6,067.7	6,938.6	3,399.3	tons
	Toray Industries, Inc.	FY	577.4	499.1	733.4	1,396.5	
	Group companies in Japan	FY	2,468.9	957.4	917.5	969.0	
	Group companies outside Japan	FY	4,276.9	4,611.1	5,287.7	1,033.7	
VOC atmospheric emissions	Toray Group total	FY	1,039.2	888.4	1,157.3	1,092.2	tons
	Toray Industries, Inc.	FY	309.2	266.1	361.0	306.9	
	Group companies in Japan	FY	172.2	136.4	52.7	134.6	
	Group companies outside Japan	FY	557.8	485.9	743.5	650.7	
Atmospheric emissions (Dust)	Toray Group total	FY	195.8	314.7	521.5	631.9	tons
	Toray Industries, Inc.	FY	60.9	102.6	77.0	86.0	
	Group companies in Japan	FY	1.5	4.7	1.0	6.1	
	Group companies outside Japan	FY	133.3	207.4	443.5	539.8	

	Scope	Period	2020	2021	2022	2023	Unit
Coal ash (recycled)	Toray Industries, Inc.	FY	66.6	69.0	67.5	62.3	1,000 tons
	Group companies in Japan	FY	—	—	—	—	
	Group companies outside Japan	FY	12.5	15.8	11.6	8.0	
Waste (direct landfill disposal)	Toray Group total	FY	18.6	19.5	19.4	16.0	1,000 tons
	Toray Industries, Inc.	FY	0.0	0.0	0.0	0.0	
	Group companies in Japan	FY	0.9	0.3	0.3	0.2	
	Group companies outside Japan	FY	17.7	19.2	19.1	15.8	
Waste (hazardous)	Toray Group total	FY	—	5.1	2.9	3.8	1,000 tons
	Toray Industries, Inc.	FY	2.1	2.3	0.9	1.7	
	Group companies in Japan	FY	2.8	2.7	2.0	2.2	
	Group companies outside Japan	FY	—	0.0	0.0	0.0	
Waste (non-hazardous)	Toray Group total	FY	—	169.5	187.5	147.2	1,000 tons
	Toray Industries, Inc.	FY	25.0	25.7	26.0	22.2	
	Group companies in Japan	FY	12.5	9.2	9.8	7.8	
	Group companies outside Japan	FY	—	134.6	151.7	117.3	

	Scope	Period	2020	2021	2022	2023	Unit
Water emissions (BOD)	Toray Group total	FY	733.4	655.0	651.1	624.9	tons
	Toray Industries, Inc.	FY	523.5	464.7	447.9	415.3	
	Group companies in Japan	FY	21.6	16.3	10.2	12.8	
	Group companies outside Japan	FY	188.3	174.0	193.0	196.8	
Water emissions (COD)	Toray Group total	FY	1,945.4	2,137.9	2,896.3	2,041.3	tons
	Toray Industries, Inc.	FY	694.0	666.6	586.7	534.3	
	Group companies in Japan	FY	28.8	25.9	15.6	18.1	
	Group companies outside Japan	FY	1,222.6	1,445.4	2,294.0	1,488.9	
Wastewater: Total nitrogen emissions	Toray Industries, Inc.	FY	340.4	405.8	389.3	357.9	tons
	Group companies in Japan	FY	8.6	7.6	4.1	8.9	
	Group companies outside Japan	FY	—	—	—	—	
Wastewater: Total phosphorous emissions	Toray Industries, Inc.	FY	18.7	19.0	31.7	31.9	tons
	Group companies in Japan	FY	0.6	0.7	0.4	0.8	
	Group companies outside Japan	FY	—	—	—	—	
Environmental related administrative disposition due to violations of laws or ordinances (Serious environmental accidents resulting in improvement orders)	Toray Group	FY	0	0	0	0	violation

¹ Emissions of CO₂ equivalents for six gases (CO₂, CH₄, N₂O, HFCs, PFCs, SF₆) are calculated according to conversion factors for each gas.

There are no NF₃ emissions. For Scope-1 group companies outside Japan, only CO₂ emissions are calculated.

² Until fiscal 2022, this was calculated by multiplying the GHG emissions and revenue of individual subsidiaries worldwide by the applicable Toray Industries' equity share. In fiscal 2023 however, the calculation method changed, and the degree of financial control Toray Industries has over the individual subsidiary (not the equity share) is now used, in accordance with the GHG Protocol, the international standard.

For information on such matters as the breakdown and types of greenhouse gas emissions, waste volume (recycled materials, incinerated materials, and other), breakdown of water usage and total water consumption, and amount of coal ash disposed of (direct landfill disposal), please refer to the [Environmental Impact Overview](#).

Society-Related

		Scope	Period	2020	2021	2022	2023	Unit
Number of employees	Total	Toray Industries, Inc.	As of the end of each fiscal year	7,420	7,175	6,992	6,995	persons
	Male			6,552	6,314	6,160	6,167	
	Female			868	861	832	828	
Percentage of women in unit manager or higher positions		Toray Industries, Inc.	As of April each year	9.8	10.0	10.0	10.1	%
Women in management positions (%)	Management staff (Section manager or higher positions)			5.6	6.0	6.1	6.4	
Employment rate of persons with disabilities		Toray Industries, Inc.	Year	2.23	2.39	2.48	2.56	%
Average time on the job	Total	Toray Industries, Inc.	FY	15.9	16.6	17.2	17.4	years
	Male			15.8	16.5	17.2	17.4	
	Female			16.7	17.2	17.5	17.6	
Percentage of available annual paid leave used by employees	Toray Industries' employees (non-managerial)	Toray Industries, Inc.	FY	83.4	89.6	93.2	95.7	%
Number of employees taking childcare leave	Total	Toray Industries, Inc.	FY	88	96	128	146	persons
	Male			22	40	82	95	
	Female			66	56	46	51	
Number of employees taking family care leave		Toray Industries, Inc.	FY	1	3	3	2	persons
Number of employees hired	Total	Toray Industries, Inc.	FY	223	180	190	353	persons
	Male			185	136	163	293	
	Female			38	44	27	60	

Turnover rate		Toray Industries, Inc.	FY	3.1	4.0	4.9	4.4	%
Education and Training	Training expenditures per employee ³	Toray Industries, Inc.	FY	71,788 ⁴	128,085	132,020	146,342	Yen
	Time dedicated to training per employee			26.9	33.7	34.7	34.7	Hours
Occupational accident frequency rate		Toray Group (all accidents)	Year	0.71	0.60	0.67	0.68	—
		Toray Group (accidents causing lost work time)	Year	0.39	0.38	0.37	0.40	—
		Toray Industries' onsite contractors (accidents causing lost work time)	Year	0.68	0.69	0.68	0.00	—
Process Safety Events -Tier 1-		Toray Group	Year	0	0	0	0	Events

		Scope	Period	2020	2021	2022	2023	Unit
Total social contribution expenditures		Toray Group	FY	1.54	1.43	1.86	2.08	billion yen
Percentage by type	Academics, science research, education	Toray Group	FY	59	66	55	52	%
	Environment, communities			9	13	10	16	
	Health, welfare, sports			22	10	27	25	
	Culture, arts, other			10	11	8	7	

³ Since much of the training is now being done in-house, starting in fiscal 2023 the calculation also includes costs related to in-house training.

⁴ The fiscal 2020 figure for education-related social contribution expenditures was impacted by the fact that the Company voluntarily cancelled activities that were deemed difficult to conduct in a safe manner that would prevent the spread of COVID-19, limiting these activities to online sessions and other methods that fully comply with measures to prevent infection.

Governance-Related

		Scope	Period	2020	2021	2022	2023	Unit
Number of members of the Board		Toray Industries, Inc.	FY	12	12	12	13	persons
Number of outside directors (independent officers)		Toray Industries, Inc.	FY	4	4	4	5	persons
Number of female directors		Toray Industries, Inc.	FY	0	0	0	1	persons
Ratio of female members of the Board		Toray Industries, Inc.	FY	0	0	0	7.7	%
R&D expenses		Toray Group	FY	62.8	62.1	68.9	70.5	billion yen
Ratio of R&D expenses to net sales		Toray Group	FY	3.3	2.8	2.8	2.9	%
Number of major violations of laws or ordinances		Toray Group	FY	1	1	0	0	violation
Number of whistleblowing reports and consultations received	Total	Toray Group	FY	74	89	97	114	Reports/ consultations
	Compliance related			15	17	24	29	
	Harassment related			44	49	32	50	
	Other			15	23	41	35	
Monetary contribution to Political fund-raising organization (The People's Political Association)		Toray Industries, Inc.	FY	30	30	30	23	million yen
Ratio between the total annual compensation of the CEO and the mean employee compensation		Toray Industries, Inc.	FY	22.18	20.97	16.79	16.21	times

Comparative Tables with GRI Standards, SASB Standards, ISO 26000 Subjects, and ESG Topics

Comparative Table with GRI Standards

GRI content index

Statement of use

Toray Industries, Inc. has reported the information covered in this index in accordance with the GRI Standards for the period April 1, 2023 to March 31, 2024. The report also includes some information on subsequent events after the reporting period.

GRI 1 used: GRI 1: Foundation 2021

GRI 2: General Disclosures 2021

GRI Standard		Location
The organization and its reporting practices		
2-1	Organizational details	> Corporate Outline
2-2	Entities included in the organization's sustainability reporting	> Editorial Policy
2-3	Reporting period, frequency and contact point	> Editorial Policy
2-4	Restatements of information	N/A
2-5	External assurance	> Third-Party Assurance
Activities and workers		
2-6	Activities, value chain and other business relationships	> Establishing Sustainable Supply Chain > Socially Responsible Procurement Initiatives at Toray Group
2-7	Employees	> ESG Data
2-8	Workers who are not employees	
Governance		
2-9	Governance structure and composition	> Corporate Governance > Corporate Governance Report PDF
2-10	Nomination and selection of the highest governance body	> Corporate Governance Report PDF

2-11	Chair of the highest governance body	Corporate Governance Report PDF
2-12	Role of the highest governance body in overseeing the management of impacts	Toray Group Corporate Social Responsibility Initiatives CSR Roadmap 2025 (Fiscal 2023 – Fiscal 2025)
2-13	Delegation of responsibility for managing impacts	Toray Group Corporate Social Responsibility Initiatives CSR Roadmap 2025 (Fiscal 2023 – Fiscal 2025)
2-14	Role of the highest governance body in sustainability reporting	
2-15	Conflicts of interest	Corporate Governance Report PDF
2-16	Communication of critical concerns	Corporate Governance Report PDF Ethics and Compliance Establishing a Corporate Culture of Total Respect for Ethics and Compliance Risk Management
2-17	Collective knowledge of the highest governance body	
2-18	Evaluation of the performance of the highest governance body	Corporate Governance Report PDF
2-19	Remuneration policies	Corporate Governance Report PDF
2-20	Process to determine remuneration	Corporate Governance Report PDF
2-21	Annual total compensation ratio	ESG Data
Strategy, policies and practices		
2-22	Statement on sustainable development strategy	Message from the President
2-23	Policy commitments	CSR-Related Policies and Guidelines
2-24	Embedding policy commitments	Toray Group Corporate Social Responsibility Initiatives CSR Activity Report (CSR Guideline Activity Reports) CSR Roadmap 2025 (Fiscal 2023 – Fiscal 2025) Corporate Governance Ethics and Compliance Safety, Accident Prevention, and Environmental Preservation Product Quality and Safety Risk Management Communication Contributing Solutions to Social Issues through Business Activities Human Rights Promotion and Human Resources Development Establishing Sustainable Supply Chain Social Contribution Activities as a Good Corporate Citizen
2-25	Processes to remediate negative impacts	Human Rights Activity Report Establishing Sustainable Supply Chain Socially Responsible Procurement Initiatives at Toray Group
2-26	Mechanisms for seeking advice and raising concerns	Ethics and Compliance Establishing a Corporate Culture of Total Respect for Ethics and Compliance Risk Management

2-27	Compliance with laws and regulations	> ESG Data
2-28	Membership associations	> Toray Group's Approach to Climate Change
Stakeholder engagement		
2-29	Approach to stakeholder engagement	> Communication
2-30	Collective bargaining agreements	> Creating a Positive Workplace for Employees

GRI 3: Material Topics 2021

GRI Standard		Location
Disclosures on material topics		
3-1	Process to determine material topics	> Materiality
3-2	List of material topics	> Materiality
3-3	Management of material topics	> Toray Group Corporate Social Responsibility Initiatives > CSR Activity Report (CSR Guideline Activity Reports) > CSR Roadmap 2025 (Fiscal 2023 – Fiscal 2025) > Corporate Governance > Ethics and Compliance > Safety, Accident Prevention, and Environmental Preservation > Product Quality and Safety > Risk Management > Communication > Contributing Solutions to Social Issues through Business Activities > Human Rights Promotion and Human Resources Development > Establishing Sustainable Supply Chain > Social Contribution Activities as a Good Corporate Citizen

Topic Standards

Economic topics

GRI Standard		Location
GRI 201: Economic Performance 2016		
201-1	Direct economic value generated and distributed	> Securities Report (available only in Japanese) > Financial Data > Social Contribution Activities as a Good Corporate Citizen Fiscal 2023 Results (Data edition)
201-2	Financial implications and other risks and opportunities due to climate change	> Toray Group's Approach to Climate Change

201-3	Defined benefit plan obligations and other retirement plans	> Securities Report (available only in Japanese) > Financial Data
201-4	Financial assistance received from government	Restrictions related to confidentiality and/or information difficult to obtain
GRI 202: Market Presence 2016		
202-1	Ratios of standard entry level wage by gender compared to local minimum wage	> Information on hiring new graduates (available only in Japanese)
202-2	Proportion of senior management hired from the local community	
GRI 203: Indirect Economic Impacts 2016		
203-1	Infrastructure investments and services supported	
203-2	Significant indirect economic impacts	
GRI 204: Procurement Practices 2016		
204-1	Proportion of spending on local suppliers	> Socially Responsible Procurement Initiatives at Toray Group
GRI 205: Anti-corruption 2016		
205-1	Operations assessed for risks related to corruption	> Establishing a Corporate Culture of Total Respect for Ethics and Compliance > Antitrust Compliance and Corruption/Bribery Prevention
205-2	Communication and training about anti-corruption policies and procedures	> Establishing a Corporate Culture of Total Respect for Ethics and Compliance > Antitrust Compliance and Corruption/Bribery Prevention > Socially Responsible Procurement Initiatives at Toray Group
205-3	Confirmed incidents of corruption and actions taken	> Antitrust Compliance and Corruption/Bribery Prevention
GRI 206: Anti-competitive Behavior 2016		
206-1	Legal actions for anti-competitive behavior, anti-trust, and monopoly practices	> Antitrust Compliance and Corruption/Bribery Prevention
GRI 207: Tax 2019		
207-1	Approach to tax	> Ensuring Tax Compliance
207-2	Tax governance, control, and risk management	> Ensuring Tax Compliance
207-3	Stakeholder engagement and management of concerns related to tax	> Ensuring Tax Compliance
207-4	Country-by-country reporting	

Environmental topics

GRI Standard		Location
GRI 301: Materials 2016		
301-1	Materials used by weight or volume	
301-2	Recycled input materials used	› Realizing a Circular Economy
301-3	Reclaimed products and their packaging materials	› Initiatives to Reduce Waste › Realizing a Circular Economy › Toray Group Distribution Initiatives (Expanding Collection and Reuse of Packaging Materials)
GRI 302: Energy 2016		
302-1	Energy consumption within the organization	› Conserving Energy and Reducing Greenhouse Gas Emissions › Environmental Impact Overview
302-2	Energy consumption outside of the organization	› Third-Party Assurance
302-3	Energy intensity	› Conserving Energy and Reducing Greenhouse Gas Emissions › Environmental Impact Overview
302-4	Reduction of energy consumption	› Conserving Energy and Reducing Greenhouse Gas Emissions › Environmental Impact Overview
302-5	Reductions in energy requirements of products and services	› Sustainability Innovation Business Expansion Project
GRI 303: Water and Effluents 2018		
303-1	Interactions with water as a shared resource	› Initiatives for Managing Water Resources
303-2	Management of water discharge-related impacts	› Initiatives to Prevent Air and Water Pollution
303-3	Water withdrawal	› Environmental Impact Overview › Comparative Table with SASB Standards
303-4	Water discharge	› Initiatives to Prevent Air and Water Pollution › Environmental Impact Overview
303-5	Water consumption	› Environmental Impact Overview › Comparative Table with SASB Standards
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	› Biodiversity Initiatives
304-2	Significant impacts of activities, products and services on biodiversity	› Biodiversity Initiatives

304-3	Habitats protected or restored	➤ Biodiversity Initiatives ➤ Social Contribution Activities as a Good Corporate Citizen Activities Carried Out in Fiscal 2023 (Environmental Conservation in Communities)
304-4	IUCN Red List species and national conservation list species with habitats in areas affected by operations	Information difficult to obtain
GRI 305: Emissions 2016		
305-1	Direct (Scope 1) GHG emissions	➤ Conserving Energy and Reducing Greenhouse Gas Emissions ➤ Environmental Impact Overview ➤ Third-Party Assurance
305-2	Energy indirect (Scope 2) GHG emissions	➤ Conserving Energy and Reducing Greenhouse Gas Emissions ➤ Environmental Impact Overview ➤ Third-Party Assurance
305-3	Other indirect (Scope 3) GHG emissions	➤ Conserving Energy and Reducing Greenhouse Gas Emissions ➤ Environmental Impact Overview ➤ Third-Party Assurance
305-4	GHG emissions intensity	➤ Conserving Energy and Reducing Greenhouse Gas Emissions ➤ Environmental Impact Overview
305-5	Reduction of GHG emissions	➤ Conserving Energy and Reducing Greenhouse Gas Emissions ➤ Environmental Impact Overview
305-6	Emissions of ozone-depleting substances (ODS)	➤ Conserving Energy and Reducing Greenhouse Gas Emissions (Initiatives to Protect the Ozone Layer)
305-7	Nitrogen oxides (NOx), sulfur oxides (SOx), and other significant air emissions	➤ Initiatives to Prevent Air and Water Pollution ➤ Environmental Impact Overview ➤ Chemical Substance Emissions and Transfer Data
GRI 306: Waste 2020		
306-1	Waste generation and significant waste-related impacts	➤ Initiatives to Reduce Waste ➤ Realizing a Circular Economy
306-2	Management of significant waste-related impacts	➤ Safety, Accident Prevention, and Environmental Preservation ➤ Initiatives to Reduce Waste ➤ Realizing a Circular Economy
306-3	Waste generated	➤ Environmental Impact Overview
306-4	Waste diverted from disposal	➤ Environmental Impact Overview ➤ Initiatives to Reduce Waste
306-5	Waste directed to disposal	➤ Environmental Impact Overview ➤ Initiatives to Reduce Waste

GRI 308: Supplier Environmental Assessment 2016		
308-1	New suppliers that were screened using environmental criteria	Socially Responsible Procurement Initiatives at Toray Group
308-2	Negative environmental impacts in the supply chain and actions taken	Socially Responsible Procurement Initiatives at Toray Group Establishing Sustainable Supply Chain

Social topics

GRI Standard		Location
GRI 401: Employment 2016		
401-1	New employee hires and employee turnover	Securing and Developing Human Resources to Create New Value ESG Data
401-2	Benefits provided to full-time employees that are not provided to temporary or part-time employees	Creating a Positive Workplace for Employees
401-3	Parental leave	Creating a Positive Workplace for Employees
GRI 402: Labor/Management Relations 2016		
402-1	Minimum notice periods regarding operational changes	In principle, cases involving the transfer of multiple personnel in the same month are submitted to the labor union at least 30 days in advance. The period of advanced notice may, however, vary depending on the details of the specific case.
GRI 403: Occupational Health and Safety 2018		
403-1	Occupational health and safety management system	Safety, Accident Prevention, and Environmental Preservation
403-2	Hazard identification, risk assessment, and incident investigation	Safety, Accident Prevention, and Environmental Preservation
403-3	Occupational health services	Safety, Accident Prevention, and Environmental Preservation
403-4	Worker participation, consultation, and communication on occupational health and safety	Occupational Safety and Accident Prevention Activities
403-5	Worker training on occupational health and safety	Occupational Safety and Accident Prevention Activities
403-6	Promotion of worker health	Creating a Positive Workplace for Employees
403-7	Prevention and mitigation of occupational health and safety impacts directly linked by business relationships	Occupational Safety and Accident Prevention Activities
403-8	Workers covered by an occupational health and safety management system	Occupational Safety and Accident Prevention Activities
403-9	Work-related injuries	Occupational Safety and Accident Prevention Activities

403-10	Work-related ill health	> Occupational Safety and Accident Prevention Activities
GRI 404: Training and Education 2016		
404-1	Average hours of training per year per employee	> Securing and Developing Human Resources to Create New Value
404-2	Programs for upgrading employee skills and transition assistance programs	> Securing and Developing Human Resources to Create New Value > Promoting Diversity
404-3	Percentage of employees receiving regular performance and career development reviews	> Securing and Developing Human Resources to Create New Value
GRI 405: Diversity and Equal Opportunity 2016		
405-1	Diversity of governance bodies and employees	> Promoting Diversity > ESG Data
405-2	Ratio of basic salary and remuneration of women to men	> Promoting Diversity
GRI 406: Non-discrimination 2016		
406-1	Incidents of discrimination and corrective actions taken	> Human Rights Activity Report > Establishing a Corporate Culture of Total Respect for Ethics and Compliance > Socially Responsible Procurement Initiatives at Toray Group
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	> Socially Responsible Procurement Initiatives at Toray Group
GRI 408: Child Labor 2016		
408-1	Operations and suppliers at significant risk for incidents of child labor	> Human Rights Promotion and Human Resources Development > Socially Responsible Procurement Initiatives at Toray Group
GRI 409: Forced or Compulsory Labor 2016		
409-1	Operations and suppliers at significant risk for incidents of forced or compulsory labor	> Human Rights Promotion and Human Resources Development > Socially Responsible Procurement Initiatives at Toray Group
GRI 410: Security Practices 2016		
410-1	Security personnel trained in human rights policies or procedures	> Socially Responsible Procurement Initiatives at Toray Group
GRI 411: Rights of Indigenous Peoples 2016		
411-1	Incidents of violations involving rights of indigenous peoples	

GRI 413: Local Communities 2016		
413-1	Operations with local community engagement, impact assessments, and development programs	> Environmental Accounting > Social Contribution Activities as a Good Corporate Citizen
413-2	Operations with significant actual and potential negative impacts on local communities	N/A
GRI 414: Supplier Social Assessment 2016		
414-1	New suppliers that were screened using social criteria	> Socially Responsible Procurement Initiatives at Toray Group
414-2	Negative social impacts in the supply chain and actions taken	> Socially Responsible Procurement Initiatives at Toray Group > Establishing Sustainable Supply Chain
GRI 415: Public Policy 2016		
415-1	Political contributions	> ESG Data
GRI 416: Customer Health and Safety 2016		
416-1	Assessment of the health and safety impacts of product and service categories	> Initiatives for Quality Assurance and Product Safety
416-2	Incidents of non-compliance concerning the health and safety impacts of products and services	> Initiatives for Quality Assurance and Product Safety
GRI 417: Marketing and Labeling 2016		
417-1	Requirements for product and service information and labeling	> Product Quality and Safety > Our Businesses > Initiatives for Quality Assurance and Product Safety
417-2	Incidents of non-compliance concerning product and service information and labeling	N/A
417-3	Incidents of non-compliance concerning marketing communications	N/A
GRI 418: Customer Privacy 2016		
418-1	Substantiated complaints concerning breaches of customer privacy and losses of customer data	> Protection of Personal Information

Comparative Tables with GRI Standards, SASB Standards, ISO 26000 Subjects, and ESG Topics

Comparative Table with SASB Standards

Chemicals

TOPIC	CODE	ACCOUNTING METRIC	UNIT OF MEASURE	Progress/CSR Report Coverage
Greenhouse Gas Emissions	RT-CH-110a.1	Gross global Scope 1 emissions, percentage covered under emissions-limiting regulations	Metric tons (t) CO ₂ -e, Percentage (%)	Gross global Scope 1 emissions: 2.491 million tons-CO₂¹ Percentage subject to emissions limits : 83%² Notes: ¹ CO₂-equivalent emissions for six gases (CO₂, CH₄, N₂O, HFCs, PFCs, SF₆) are calculated according to conversion factors for each gas. There are no NF3 emissions. Data is compiled for Toray Industries, Inc. and its group companies in and outside Japan. Only CO₂ emissions are calculated for group companies outside Japan. See the following page for a breakdown of figures for each category. > Environmental Impact Overview ² The numerator is the sum of the Group's emissions in the regions listed in the World Bank's Carbon Pricing Dashboard as having a carbon tax and/or emissions trading scheme (ETS) in place as of 2020; specifically, Japan, the Republic of Korea, European countries, Mexico, U.S. (California, Rhode Island, and Virginia) and China (Guangdong Province, Beijing, and Shanghai).
	RT-CH-110a.2	Discussion of long-term and short-term strategy or plan to manage Scope 1 emissions, emissions reduction targets, and an analysis of performance against those targets	n/a	> Conserving Energy and Reducing Greenhouse Gas Emissions > Toray Group's Approach to Climate Change
Air Quality	RT-CH-120a.1	Air emissions of the following pollutants: (1) NO_x (excluding N₂O), (2) SO_x, (3) volatile organic compounds (VOCs), and (4) hazardous air pollutants (HAPs)	Metric tons (t)	(1) NO_x, (2) SO_x, (3) VOC > Initiatives to Prevent Air and Water Pollution (4) hazardous air pollutants (HAPs) > Chemical Substance Emissions and Transfer Data Note: (4) applies to atmospheric emissions of PRTR Law-specified substances

TOPIC	CODE	ACCOUNTING METRIC	UNIT OF MEASURE	Progress/CSR Report Coverage
Energy Management	RT-CH-130a.1	(1) Total energy consumed, (2) percentage grid electricity, (3) percentage renewable, (4) total self-generated energy	Gigajoules (GJ), Percentage (%)	(1) Total energy consumed > Environmental Impact Overview (2) Percentage grid electricity: 23.5% (3) Percentage renewable energy: 1.87% Note: Percentage of renewable energy represents the ratio of solar power, wind power, biomass fuel, and electricity procured from renewable energy sources to total Toray Group fuel consumption. (4) Total self-generated energy > Conserving Energy and Reducing Greenhouse Gas Emissions
Water Management	RT-CH-140a.1	(1) Total water withdrawn, (2) total water consumed, percentage of each in regions with High or Extremely High Baseline Water Stress	Thousand cubic meters (m³), Percentage (%)	(1) Total water withdrawn: 206,784 thousand tons Of which, percentage of water withdrawn in regions with High Baseline Water Stress: 2.4% Of which, percentage of water withdrawn in regions with Extremely High Baseline Water Stress: 2.0% (2) Total water consumed: 38,449 thousand tons Of which, percentage of water consumed in regions with High or Extremely High Baseline Water Stress: 9.3% Of which, percentage of water consumed in regions with Extremely High Baseline Water Stress: 2.5% Note: Total water consumed is calculated by subtracting water discharged from water withdrawn. Water stress is surveyed for each Toray Group business site based on the World Resources Institute's Aqueduct Water Risk Atlas. The amount of water withdrawn and the amount of water consumed by business sites located in regions with High or Extremely High Baseline Water Stress are summed up, respectively, yielding the percentages shown above.
	RT-CH-140a.2	Number of incidents of non-compliance associated with water quality permits, standards, and regulations	Number	4 > Environmental Risk Management
	RT-CH-140a.3	Description of water management risks and discussion of strategies and practices to mitigate those risks	n/a	> Initiatives for Managing Water Resources
Hazardous Waste Management	RT-CH-150a.1	Amount of hazardous waste generated, percentage recycled	Metric tons (t), Percentage (%)	(1) Amount of hazardous waste generated: 3,848 tons (2) Percentage recycled: 98.7% > Initiatives to Reduce Waste Note: The scope of aggregation for waste generated is Toray Industries, Inc. and its group companies in Japan. Data corresponding to "industrial waste subject to special control," as defined in Japan's Waste Disposal and Public Cleansing Act, is recorded as hazardous waste generated.

TOPIC	CODE	ACCOUNTING METRIC	UNIT OF MEASURE	Progress/CSR Report Coverage
Community Relations	RT-CH-210a.1	Discussion of engagement processes to manage risks and opportunities associated with community interests	n/a	> Communication
Workforce Health & Safety	RT-CH-320a.1	(1) Total recordable incident rate (TRIR) and (2) fatality rate for (a) direct employees and (b) contract employees	Rate	(1) TRIR (a) Toray Group (Calculated by actual working hours of employees including temporary staff): 0.68 (b) Onsite business partner companies (Only staff stationed at Toray Industries plants; working hours used in the calculations are estimates): 0.231 (2) Fatality rate (a) Toray Group: 0 (b) Onsite business partner companies: 0 Note: Because Toray Group's safety record includes data on temporary staff, they are calculated using the definition above.
	RT-CH-320a.2	Description of efforts to assess, monitor, and reduce exposure of employees and contract workers to long-term (chronic) health risks	n/a	> Occupational Safety and Accident Prevention Activities
Product Design for Use-phase Efficiency	RT-CH-410a.1	Revenue from products designed for use-phase resource efficiency	Yen	> Sustainability Innovation Business Expansion Project * Sustainability Innovation (SI) Business: Business areas and product lines that can help realize the Toray Group Sustainability Vision. The products are categorized into four initiative areas: 1) Accelerating measures to counter climate change, 2) promoting resource recycling, 3) providing clean water and air, and 4) contributing to better medical care and hygiene for people.
Safety & Environmental Stewardship of Chemicals	RT-CH-410b.1	(1) Percentage of products that contain Globally Harmonized System of Classification and Labeling of Chemicals (GHS) Category 1 and 2 Health and Environmental Hazardous Substances, (2) percentage of such products that have undergone a hazard assessment	Percentage (%) by revenue, Percentage (%)	Not disclosed Note: At Toray Industries, Inc. and its group companies, safety reviews are conducted for all products. For more information, please visit the webpage > Initiatives for Quality Assurance and Product Safety
	RT-CH-410b.2	Discussion of strategy to (1) manage chemicals of concern and (2) develop alternatives with reduced human and/or environmental impact	n/a	(1) Discussion of strategy to manage chemicals of concern > Chemical Management > Product Quality and Safety > Initiatives for Quality Assurance and Product Safety (2) Discussion of strategy to develop alternatives with reduced human and/or environmental impact > Chemical Management
Genetically Modified Organisms	RT-CH-410c.1	Percentage of products by revenue that contain genetically modified organisms (GMOs)	Percentage (%) by revenue	Not disclosed

TOPIC	CODE	ACCOUNTING METRIC	UNIT OF MEASURE	Progress/CSR Report Coverage
Management of the Legal & Regulatory Environment	RT-CH-530a.1	Discussion of corporate positions related to government regulations and/or policy proposals that address environmental and social factors affecting the industry	n/a	> Toray Group's Approach to Climate Change
Operational Safety, Emergency Preparedness & Response	RT-CH-540a.1	Process Safety Incidents Count (PSIC), Process Safety Total Incident Rate (PSTIR), and Process Safety Incident Severity Rate (PSISR)	Number, Rate	- PSIC¹: 0 - PSTIR²: 0 - PSISR³: 0 All figures are for the 2023 calendar year. Notes: ¹ PSIC is defined as the total annual count of all incidents that meet the definition of a Tier 1 Process Safety Incidents (PSI) per ANSI/API RP 754. ² PSTIR is calculated as the total number of PSI multiplied by 200,000 and divided by the total annual hours worked by employees, contractors, and subcontractors. ³ PSISR is calculated as the Total Severity Score for all Process Safety Incidents multiplied by 200,000 and divided by the total annual hours worked by employees, contractors, and subcontractors.
	RT-CH-540a.2	Number of transport incidents	Number	No accidents fall within the definition of "serious transport incident" in International Council of Chemical Associations (ICCA) Information Guidance

Activity Metrics

Activity Metrics	CODE	UNIT OF MEASURE	Progress/CSR Report Coverage
Production by reportable segment	RT-CH-000.A	Cubic meters (m³) and/or metric tons (t)	Not disclosed

Comparative Tables with GRI Standards, SASB Standards, ISO 26000 Subjects, and ESG Topics

Comparative Table with ISO 26000 Subjects

Organizational governance

Issues	Toray's initiatives
1.Organizational governance	Toray Philosophy and CSR
	Message from the President
	Management Strategies and CSR
	Toray Group Corporate Social Responsibility
	Toray Group Corporate Social Responsibility Initiatives
	Materiality
	CSR Activity Report (CSR Guideline Activity Reports)
	CSR Roadmap 2025 (Fiscal 2023 – Fiscal 2025)
	Corporate Governance
	Communication with Employees
	Ethics and Compliance
	Promoting Diversity
	Communication

Human rights

Issues	Toray's initiatives
1. Due diligence	Human Rights Activity Report
	Establishing Sustainable Supply Chain
	Socially Responsible Procurement Initiatives at Toray Group
2. Human rights risk situations	Human Rights Activity Report
	Socially Responsible Procurement Initiatives at Toray Group
3. Avoidance of complicity	Human Rights Activity Report
	Establishing Sustainable Supply Chain
	Socially Responsible Procurement Initiatives at Toray Group
4. Resolving grievances	Establishing a Corporate Culture of Total Respect for Ethics and Compliance
	Human Rights Activity Report
	Establishing Sustainable Supply Chain
	Socially Responsible Procurement Initiatives at Toray Group
5. Discrimination and vulnerable groups	Human Rights Promotion and Human Resources Development
	Promoting Diversity
	Socially Responsible Procurement Initiatives at Toray Group
6. Civil and political rights	Ethics and Compliance
	Human Rights Promotion and Human Resources Development

Issues	Toray's initiatives
7. Economic, social and cultural rights	Human Rights Promotion and Human Resources Development
	Securing and Developing Human Resources to Create New Value
	Socially Responsible Procurement Initiatives at Toray Group
	Social Contribution Activities as a Good Corporate Citizen
8. Fundamental principles and rights at work	Human Rights Promotion and Human Resources Development
	Establishing Sustainable Supply Chain

Labor practices

Issues	Toray's initiatives
1. Employment and employment relationship	Human Rights Promotion and Human Resources Development
	Securing and Developing Human Resources to Create New Value
	Promoting Diversity
2. Conditions of work and social protection	Creating a Positive Workplace for Employees
3. Social dialogue	Creating a Positive Workplace for Employees
	Communication with Employees
4. Health and safety at work	Occupational Safety and Accident Prevention Activities
	Creating a Positive Workplace for Employees (Employee Health)
5. Human development and training in the workplace	Securing and Developing Human Resources to Create New Value

The environment

Issues	Toray's initiatives
1. Prevention of pollution	Safety, Accident Prevention and Environmental Preservation (Safety, Health, Accident Prevention and Environmental Preservation Management)
	Chemical Management
	Initiatives to Prevent Air and Water Pollution
	Initiatives to Reduce Waste
	Environmental Risk Management
	Environmental Impact Overview
	Establishing Sustainable Supply Chain
	Socially Responsible Procurement Initiatives at Toray Group
2. Sustainable resource use	Approach to Sustainability Innovation Products
	Realizing a Circular Economy
	Toray Group Distribution Initiatives
	Conserving Energy and Reducing Greenhouse Gas Emissions
	Initiatives for Managing Water Resources
	Initiatives to Reduce Waste
	Environmental Impact Overview

Issues	Toray's initiatives
3. Climate change mitigation and adaptation	Toray Group's Approach to Climate Change
	Contributing Solutions to Social Issues through Business Activities
	Sustainability Innovation Business Expansion Project
	Toray Group Distribution Initiatives
	Conserving Energy and Reducing Greenhouse Gas Emissions
	Environmental Impact Overview
4. Protection of the environment, biodiversity and restoration of natural habitats	Biodiversity Initiatives
	Environmental Risk Management
	Social Contribution Activities as a Good Corporate Citizen Activities Carried Out in Fiscal 2023 (Environmental Conservation in Communities)

Fair operating practices

Issues	Toray's initiatives
1. Anti-corruption	Ethics and Compliance
	Establishing a Corporate Culture of Total Respect for Ethics and Compliance
	Antitrust Compliance and Corruption/Bribery Prevention
2. Responsible political involvement	Establishing a Corporate Culture of Total Respect for Ethics and Compliance
3. Fair competition	Establishing a Corporate Culture of Total Respect for Ethics and Compliance
	Antitrust Compliance and Corruption/Bribery Prevention
4. Promoting social responsibility in the value chain	Establishing Sustainable Supply Chain
	Socially Responsible Procurement Initiatives at Toray Group
	Toray Group Distribution Initiatives
	Occupational Safety and Accident Prevention Activities
	Communication with Stockholders and Investors
5. Respect for property rights	Communication with Stockholders and Investors
	Human Rights Promotion and Human Resources Development

Consumer issues

Issues	Toray's initiatives
1. Fair marketing, factual and unbiased information and fair contractual practices	Communication with Customers
2. Protecting consumers' health and safety	Initiatives for Quality Assurance and Product Safety
3. Sustainable consumption	Contributing Solutions to Social Issues through Business Activities
	Sustainability Innovation Business Expansion Project
	Approach to Sustainability Innovation Products
	Realizing a Circular Economy
4. Consumer service, support, and complaint and dispute resolution	Initiatives for Quality Assurance and Product Safety
5. Consumer data protection and privacy	Protection of Personal Information
	Addressing Information Security Risks
6. Access to essential services	Business Continuity Plan Initiatives
7. Education and awareness	Initiatives for Quality Assurance and Product Safety

Community involvement and development

Issues	Toray's initiatives
1. Community involvement	Communication with Local Communities
	Social Contribution Activities as a Good Corporate Citizen
	Toray Group Sustainability Vision
2. Education and culture	Social Contribution Activities as a Good Corporate Citizen Activities Carried Out in Fiscal 2023
3. Employment creation and skills development	Social Contribution Activities as a Good Corporate Citizen Activities Carried Out in Fiscal 2023
4. Technology development and access	Social Contribution Activities as a Good Corporate Citizen Activities Carried Out in Fiscal 2023
5. Wealth and income creation	Social Contribution Activities as a Good Corporate Citizen Activities Carried Out in Fiscal 2023
	Ensuring Tax Compliance
6. Health	Social Contribution Activities as a Good Corporate Citizen Activities Carried Out in Fiscal 2023
7. Social investment	Social Contribution Activities as a Good Corporate Citizen Fiscal 2023 Results (Data edition)

Comparative Tables with GRI Standards, SASB Standards, ISO 26000 Subjects, and ESG Topics

Comparative Table with ESG Topics

Topic		Basic Approach/Policy	Structure	Initiatives/Results/Other
E:Environment	Climate change/energy	> Toray Group Sustainability Vision PDF > Toray Group's Approach to Climate Change > Toray Group TCFD Report Ver.2.1 PDF > Safety, Accident Prevention, and Environmental Preservation	> Toray Group's Approach to Climate Change > Toray Group TCFD Report Ver.2.1 PDF > Safety, Accident Prevention, and Environmental Preservation	> Toray Group's Approach to Climate Change > Toray Group TCFD Report Ver.2.1 PDF > Conserving Energy and Reducing Greenhouse Gas Emissions > Business Continuity Plan Initiatives > Environmental Impact Overview > Third-Party Assurance > Sustainability Innovation Business Expansion Project > Approach to Sustainability Innovation Products > Realizing a Circular Economy > Toray Group Distribution Initiatives > Environmental Accounting
	Water resource management	> Toray Group Sustainability Vision PDF > Toray Group's Approach to Climate Change > Toray Group TCFD Report Ver.2.1 PDF > Safety, Accident Prevention, and Environmental Preservation	> Toray Group's Approach to Climate Change > Toray Group TCFD Report Ver.2.1 PDF > Safety, Accident Prevention, and Environmental Preservation	> Toray Group's Approach to Climate Change > Toray Group TCFD Report Ver.2.1 PDF > Initiatives to Prevent Air and Water Pollution > Initiatives for Managing Water Resources > Environmental Impact Overview > Business Continuity Plan Initiatives > Approach to Sustainability Innovation Products > Environmental Accounting > Third-Party Assurance

Topic		Basic Approach/Policy	Structure	Initiatives/Results/Other
	Biodiversity	➢ Toray Group Sustainability Vision PDF ➢ Safety, Accident Prevention, and Environmental Preservation ➢ Biodiversity Initiatives	➢ Safety, Accident Prevention, and Environmental Preservation	➢ Biodiversity Initiatives ➢ Socially Responsible Procurement Initiatives at Toray Group ➢ Social Contribution Activities as a Good Corporate Citizen Activities Carried Out in Fiscal 2023 ➢ Environmental Accounting
	Use of resources/waste	➢ Toray Group Sustainability Vision PDF ➢ Safety, Accident Prevention, and Environmental Preservation	➢ Safety, Accident Prevention, and Environmental Preservation	➢ Toray Group's Approach to Climate Change ➢ Toray Group TCFD Report Ver.2.1 PDF ➢ Initiatives to Reduce Waste ➢ Environmental Impact Overview ➢ Realizing a Circular Economy ➢ Social Contribution Activities as a Good Corporate Citizen Activities Carried Out in Fiscal 2023 ➢ Environmental Accounting ➢ Third-Party Assurance
	Pollution prevention/chemical substance management	➢ Toray Group Sustainability Vision PDF ➢ Safety, Accident Prevention, and Environmental Preservation ➢ Chemical Management	➢ Safety, Accident Prevention, and Environmental Preservation ➢ Chemical Management	➢ Chemical Management ➢ Initiatives to Prevent Air and Water Pollution ➢ Environmental Impact Overview ➢ Chemical Substance Emissions and Transfer Data ➢ Environmental Accounting ➢ Third-Party Assurance
	Supply chain (environment)	➢ Toray Group Sustainability Vision PDF ➢ Realizing a Circular Economy ➢ Establishing Sustainable Supply Chain	➢ Establishing Sustainable Supply Chain	➢ Realizing a Circular Economy ➢ Socially Responsible Procurement Initiatives at Toray Group ➢ Toray Group Distribution Initiatives
	Sustainability Innovation	➢ Toray Group Sustainability Vision PDF ➢ Contributing Solutions to Social Issues through Business Activities	➢ Contributing Solutions to Social Issues through Business Activities	➢ Sustainability Innovation Business Expansion Project ➢ Approach to Sustainability Innovation Products ➢ Realizing a Circular Economy

Topic		Basic Approach/Policy	Structure	Initiatives/Results/Other
S:Social Initiatives	Human Rights	➢ Human Rights Promotion and Human Resources Development ➢ Establishing Sustainable Supply Chain	➢ Human Rights Promotion and Human Resources Development ➢ Human Rights Activity Report ➢ Establishing Sustainable Supply Chain	➢ Human Rights Activity Report ➢ Statement on the UK's Modern Slavery Act ➢ Socially Responsible Procurement Initiatives at Toray Group
	Securing/developing human resources	➢ Human Rights Promotion and Human Resources Development	➢ Human Rights Promotion and Human Resources Development	➢ Securing and Developing Human Resources to Create New Value ➢ Communication with Employees ➢ ESG Data
	Promoting diversity			➢ Securing and Developing Human Resources to Create New Value ➢ Promoting Diversity ➢ ESG Data
	Creating comfortable workplace environments			➢ Creating a Positive Workplace for Employees ➢ Establishing a Corporate Culture of Total Respect for Ethics and Compliance ➢ ESG Data
	Ensuring occupational health and safety and employee healthcare	➢ Safety, Accident Prevention, and Environmental Preservation ➢ Creating a Positive Workplace for Employees (Employee Health)	➢ Safety, Accident Prevention, and Environmental Preservation ➢ Creating a Positive Workplace for Employees (Employee Health)	➢ Occupational Safety and Accident Prevention Activities ➢ Third-Party Assurance ➢ Creating a Positive Workplace for Employees (Employee Health) ➢ ESG Data
	Accident Prevention	➢ Safety, Accident Prevention, and Environmental Preservation ➢ Risk Management	➢ Safety, Accident Prevention, and Environmental Preservation ➢ Risk Management	➢ Occupational Safety and Accident Prevention Activities ➢ Risk Management Initiatives ➢ Business Continuity Plan Initiatives
	Quality Assurance	➢ Product Quality and Safety	➢ Product Quality and Safety	➢ Initiatives for Quality Assurance and Product Safety ➢ Sites with ISO 9001 Certification
	Supply chain (social)	➢ Establishing Sustainable Supply Chain	➢ Establishing Sustainable Supply Chain	➢ Socially Responsible Procurement Initiatives at Toray Group ➢ Toray Group Distribution Initiatives ➢ Statement on the UK's Modern Slavery Act

Topic		Basic Approach/Policy	Structure	Initiatives/Results/Other
	Sustainability Innovation	➢ Toray Group Sustainability Vision PDF ➢ Contributing Solutions to Social Issues through Business Activities	➢ Contributing Solutions to Social Issues through Business Activities	➢ Sustainability Innovation Business Expansion Project ➢ Approach to Sustainability Innovation Products
	Social Contribution Activities	➢ Toray Group Sustainability Vision PDF ➢ Social Contribution Activities as a Good Corporate Citizen	➢ Social Contribution Activities as a Good Corporate Citizen	➢ Social Contribution Activities as a Good Corporate Citizen Fiscal 2023 Results (Data edition) ➢ Social Contribution Activities as a Good Corporate Citizen Activities Carried Out in Fiscal 2023 ➢ Communication with Local Communities
	Stakeholder engagement	➢ Communication	➢ Communication	➢ Materiality ➢ Comments from Thought Leaders ➢ Communication via Corporate Websites ➢ Communication with Customers ➢ Communication with Stockholders and Investors ➢ Communication with Business Partners ➢ Communication with Employees ➢ Communication with the Media ➢ Communication with Local Communities ➢ Creating a Positive Workplace for Employees
G:Governance	Corporate Governance	➢ Corporate Governance (Overall Policy) ➢ Basic Policy on Corporate Governance	➢ Corporate Governance Structures ➢ Basic Policy on Corporate Governance	➢ Corporate Governance ➢ Corporate Governance Report PDF ➢ ESG Data
	Risk Management	➢ Risk Management	➢ Risk Management	➢ Risk Management Initiatives ➢ Business Continuity Plan Initiatives ➢ Addressing Information Security Risks

Topic		Basic Approach/Policy	Structure	Initiatives/Results/Other
	Compliance/ preventing corruption and bribery	➢ Ethics and Compliance ➢ Ethics & Compliance Code of Conduct PDF	➢ Ethics and Compliance	➢ Establishing a Corporate Culture of Total Respect for Ethics and Compliance ➢ Ensuring Tax Compliance ➢ Environmental Risk Management ➢ Improving Security Trade Controls ➢ Antitrust Compliance and Corruption/Bribery Prevention ➢ Protection of Personal Information ➢ Ethics and Compliance for Research Involving Human Biological Subjects and Information ➢ Disclosure of Information Regarding the Ethical Treatment of Laboratory Animals
	Promoting CSR	➢ Toray Group Sustainability Vision PDF ➢ Toray Group Corporate Social Responsibility ➢ Toray Philosophy and CSR ➢ Management Strategies and CSR ➢ Toray Group Corporate Social Responsibility Initiatives (CSR Guidelines, CSR Roadmap) ➢ CSR Roadmap 2025 (Fiscal 2023 – Fiscal 2025) ➢ Materiality	➢ Toray Group Corporate Social Responsibility Initiatives (Toray Group CSR Promotion System)	➢ CSR Activity Report (CSR Guideline Activity Reports) ➢ Progress on CSR Roadmap 2025 KPIs in Fiscal 2023 PDF ➢ Materiality View of CSR Roadmap 2025 PDF

Editorial Policy

Toray Group issues an annual corporate social responsibility (CSR) report in order to communicate its CSR initiatives to stakeholders. The latest report, the content of which is available here in web format, focuses primarily on the Group's efforts in fiscal 2023 based on the Toray Group CSR Guidelines, which spell out the overarching policy governing the Group's CSR initiatives.

The information provided here on this website is also available for download in a PDF report format at the CSR report download page.

Period Covered by this Report

This report covers fiscal 2023, the period from April 1, 2023 to March 31, 2024. Contents may include efforts underway after this period.

Scope of this Report

Environmental Data

Covers Toray Industries, Inc. and the following 92 manufacturing subsidiaries (93 companies in all).

Notes:

1. For group companies newly covered under the scope of environmental data, results are published using performance data for fiscal years since joining Toray Group.
2. Environmental data used in this report concerning greenhouse gas emissions (Scopes 1 & 2 and some Scope 3), energy consumption, industrial waste, water use, wastewater, air emissions (SOx, NOx, dust, and VOC), and chemical oxygen demand (COD) at Toray Industries has been verified by a third party, LRQA Limited.
3. Environmental data used in this report concerning some Scope 3 greenhouse gas emissions by Toray Group companies in Japan, as well as data concerning greenhouse gas emissions (Scopes 1 & 2, and some Scope 3), energy consumption, and industrial waste by Toray Group companies outside Japan have been verified by a third party, LRQA Limited.
4. In general, this report covers Toray Industries and Toray Group companies, mainly manufacturers (27 in Japan and 65 outside Japan). However, the scope of the reported information may vary depending on the topic.

Group companies in Japan: 27

- Ogaki Fuso Spinning Co., Ltd.
- Sowa Textile Co., Ltd.
- Toray Amtecs Inc.
- Toray Opelontex Co., Ltd.
- Toray Coatex Co., Ltd.
- Toray Textiles, Inc.
- Du Pont-Toray Co., Ltd.
- Toray Hybrid Cord, Inc.
- Toray Monofilament Co., Ltd.
- Maruichi Fiber Co., Ltd.
- Toray Plastics Precision Co., Ltd.
- Toray PEF Products Inc.
- Toray Celanese Co., Ltd.
- Toray KP Films Inc.
- Toray Advanced Film Co., Ltd.
- Soda Aromatic Co., Ltd.
- Dow Toray Co., Ltd.
- DuPont Toray Specialty Materials Kabushiki Kaisha
- Toray Fine Chemicals Co., Ltd.
- Toray Carbon Magic Co., Ltd.
- Suido Kiko Kaisha, Ltd.
- Toray Engineering Co., Ltd.
- Toray Building Materials Co., Ltd.
- Toray Precision Co., Ltd.
- Toray Medical Co., Ltd.
- Toyo Jitsugyo Co., Ltd.
- Toray Research Center, Inc.

Group companies outside Japan: 65

America : 13 companies

United States

- Toray Fluorofibers (America), Inc.
- Toray Resin Co.
- Toray Plastics (America), Inc.
- Toray Composite Materials America, Inc.
- Performance Materials Corp.
- Zoltek Corporation
- Toray Advanced Composites ADS LLC
- Toray Advanced Composites USA Inc.
- Toray Membrane USA, Inc.
- Engineering Technology Corp.

Mexico

- Toray Advanced Textile Mexico, S.A. de C.V.
- Toray Resin Mexico, S.A. de C.V.
- Zoltek de Mexico, S.A. de C.V.

Europe : 14 companies

United Kingdom

- Toray Textiles Europe Ltd.
- Toray Advanced Composites UK Ltd

Germany

- Euro Advanced Carbon Fiber Composite GmbH

France	• Greenerity GmbH
	• Toray Films Europe S.A.S.
	• Toray Carbon Fibers Europe S.A.
	• Alcantara S.p.A.
	• Composite Materials (Italy) s.r.l.
Italy	• Delta-Tech S.p.A.
	• Delta-Preg S.p.A.
Czech Republic	• Toray Textiles Central Europe s.r.o.
Hungary	• Zoltek Zrt.
	• LG Toray Hungary Battery Separator Kft.
Netherlands	• Toray Advanced Composites Netherlands B.V.
MiddleAsia_Africa : 2 companies	
Saudi Arabia	• Toray Membrane Middle East LLC
Tunisia	• Alva Tunisia S.A.
Asia : 36 companies	
East Asia	• Toray Fibers (Nantong) Co., Ltd.
	• Toray Fibers & Textiles Research Laboratories (China) Co., Ltd.
	• Toray Polytech (Foshan) Co., Ltd.
	• Toray Polytech (Nantong) Co., Ltd.
	• Toray Sakai Weaving & Dyeing (Nantong) Co., Ltd.
	• Toray Plastics (Chengdu) Co., Ltd.
	• Toray Plastics (Suzhou) Co., Ltd.
	• Toray Plastics Precision (Zhongshan) Ltd.
	• Toray Plastics (Shenzhen) Ltd.
	• Toray Film Products (Zhongshan) Ltd.
	• Yihua Toray Polyester Film Co., Ltd.
	• PMC Performance Materials (Guangzhou) Ltd.
	• Toray BlueStar Membrane Co., Ltd.
	• Toray Membrane (Foshan) Co., Ltd.
	• Toray Medical (Qingdao) Co., Ltd.
	• Toray Advanced Materials Research Laboratories (China) Co., Ltd.
	• Toray Advanced Film Kaohsiung Co., Ltd.
	• Cangzhou Toray Fine Chemicals Co., Ltd.
	• Toray Advanced Materials Korea Inc.
	• Toray BSF Coating Korea Limited
	• Toray Battery Separator Film Korea Limited
	• STEMCO, Ltd.
Southeast Asia	• P.T. Acryl Textile Mills
	• P.T. Century Textile Industry Tbk
	• P.T. Easterntex
	• P.T. Indonesia Synthetic Textile Mills
	• P.T. Indonesia Toray Synthetics
	• P.T. Toray Polytech Jakarta
	• Toray Textiles (Thailand) Public Company Limited
	• Thai Toray Synthetics Co., Ltd.
	• Toray BASF PBT Resin Sdn. Berhad
	• Toray Plastics (Malaysia) Sdn. Berhad
	• Penfabric Sdn. Berhad
	• Penfibre Sdn. Berhad
South Asia	• Toray Industries (India) Private Limited
	• Toray Kusumgar Advanced Textile Private Limited

Safety Data

Covers Toray Industries, Inc. and 52 group companies in Japan and 91 group companies outside of Japan, including the major manufacturers listed in environmental data above and non-manufacturing companies such as Toray International, Inc., Toray Systems Center, Inc., and Toray Industries (America), Inc. (144 companies in all)

Note: The occupational accident frequency rates at Toray Industries and its group companies in and outside Japan and the occupational accident frequency rate for subcontractors working at Toray Industries have been verified by a third party, LRQA Limited

Social Data

Covers Toray Industries, Inc. and its 194 consolidated subsidiaries (195 companies in all), but scope of reporting may differ for some items.

Economic Data

Covers Toray Industries, Inc. and its 280 consolidated companies (281 companies in all).

Disclaimer

This report contains forward-looking statements in addition to historical and current facts. These forward-looking statements are assertions or assumptions that were prepared on the basis of available information at the time of publication. Actual future social conditions and results of business activities may differ from any forecasts contained in this report, as a result of changing circumstances.

Reference Guidelines

- GRI Standards
Note: The comparative table referencing the GRI Standards is available at the Toray website.
- Responsible Care Code issued by the Responsible Care Council of the Japan Chemical Industry Association
- Sustainable Accounting Standards Board (SASB): Chemicals Sustainability Standard, 2018
Note: The comparative table referencing this standard is available at the Toray website.
- Environmental Accounting Guidelines 2005 issued by the Ministry of the Environment, Japan
- ISO 26000:2010 (Guidance on social responsibility)
Note: The comparative table referencing ISO 26000:2010 is available at the Toray website.

Issued

August 2024 (Next issue scheduled for August 2025. Previous report issued in October 2023.)