

# CSR Activity Report (CSR Guideline Activity Reports)

Toray Group has established CSR Guidelines to govern its CSR initiatives, which form one of the foundations of the Group's sustainable management. 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 to drive forward the initiatives concerned.

The Group also establishes a CSR roadmap every three years to ensure that these CSR Guideline-based activities 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	
<b>1 Corporate Governance</b> Continually revise management systems, strengthen internal controls as part of efforts to fulfill the company's social responsibilities.	<a href="#">&gt; Read more</a>
<b>2 Ethics and Compliance</b> 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.	<a href="#">&gt; Read more</a>
<b>3 Safety, Accident Prevention, and Environmental Preservation</b> 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.	<a href="#">&gt; Read more</a>
<b>4 Product Quality and Safety</b> Provide safe, highly reliable products by striving to enhance management systems for product quality assurance and safety, and disclose appropriate information.	<a href="#">&gt; Read more</a>
<b>5 Risk Management</b> 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.	<a href="#">&gt; Read more</a>

<p><b>6 Communication</b></p> <p>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.</p>	<p><a href="#">&gt; Read more</a></p>
<p><b>7 Contributing Solutions to Social Issues through Business Activities</b></p> <p>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.</p>	<p><a href="#">&gt; Read more</a></p>
<p><b>8 Human Rights Promotion and Human Resources Development</b></p> <p>Respect human rights, provide safe and healthy workplaces for employees, secure and train personnel, and diversify while striving to protect employment.</p>	<p><a href="#">&gt; Read more</a></p>
<p><b>9 Establishing Sustainable Supply Chain</b></p> <p>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.</p>	<p><a href="#">&gt; Read more</a></p>
<p><b>10 Social Contribution Activities as a Good Corporate Citizen</b></p> <p>Proactively participate in local communities and the larger society in order to contribute to development in a way befitting a good corporate citizen.</p>	<p><a href="#">&gt; Read more</a></p>

## 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.

### Policies

- > [Toray Philosophy](#)
- > [Basic Policy on Corporate Governance](#)

#### Related Information

- > [Corporate Governance](#)

[Corporate Governance Report \(546.7KB\)](#) [PDF](#)

## Structure

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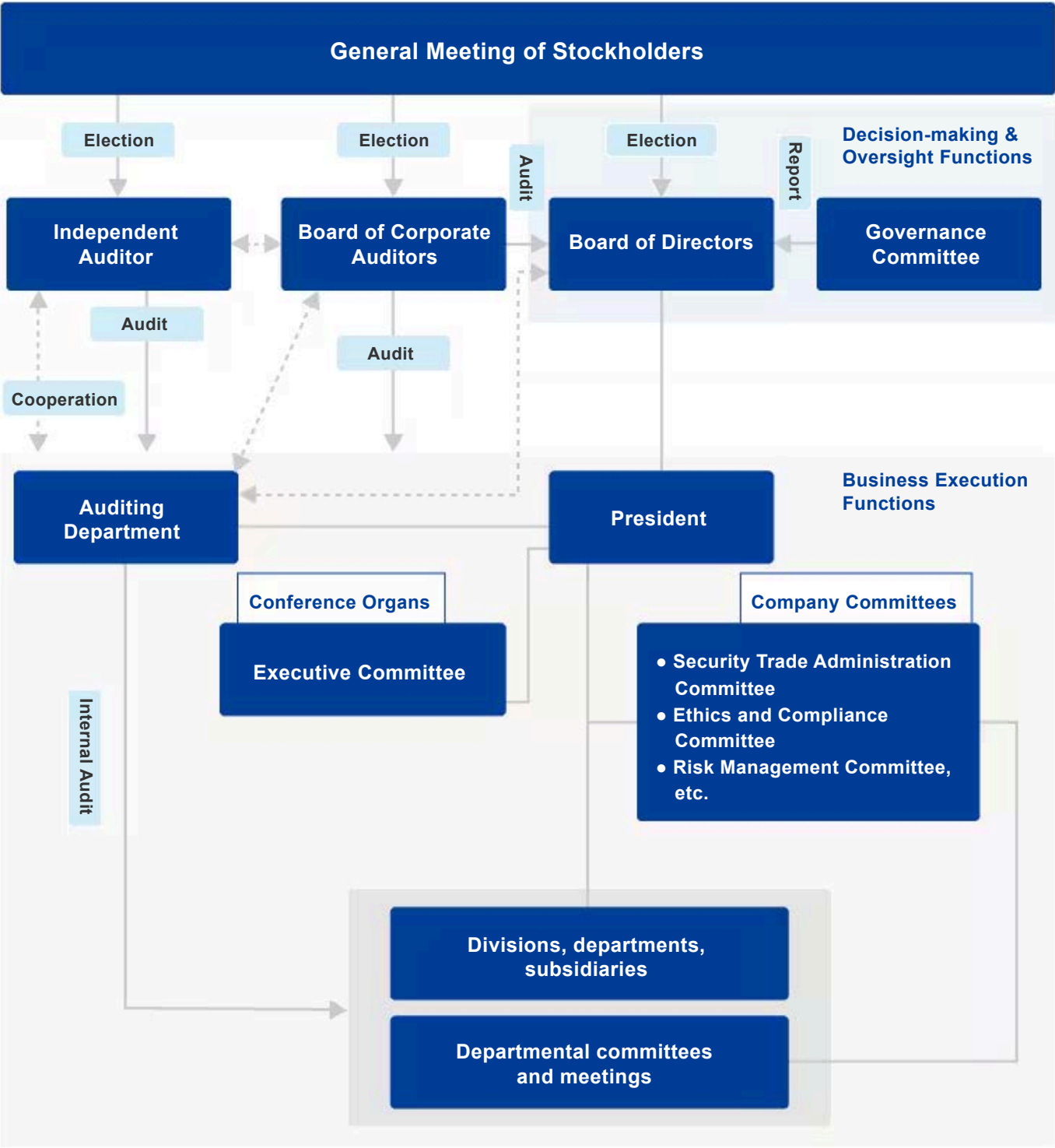
Toray Industries, Inc. operates as a company with a Board of Corporate Auditors and Board of Directors. The Board of Directors, which includes outside directors, decides on the business execution and supervises the execution of duties by the directors. The Board of Corporate Auditors includes outside 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 Directors strives for appropriate balance in the number of members and structure based on laws and regulations, important guidelines and rules, as well as diversity-related perspectives of gender, international experience, work experience, age, and other factors, with members who widely cover the fields of the corporate activities of the Group in terms of knowledge, experience and ability.

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 2024, the Board of Directors held 14 meetings, the Board of Corporate Auditors held 11 meetings, and the Governance Committee held 11 meetings<sup>1</sup>. The attendance rate for all 14 Board of Directors meetings was 99%.

<sup>1</sup> For the attendance of each director, please refer to pages 9-18 of the [Notice of the 144th Ordinary General Meeting of Stockholders \(1.47MB\)](#). [PDF](#) . All corporate auditors attended every board meeting. (See page 28 of the [Corporate Governance Report \(547KB\)](#). [PDF](#) .)



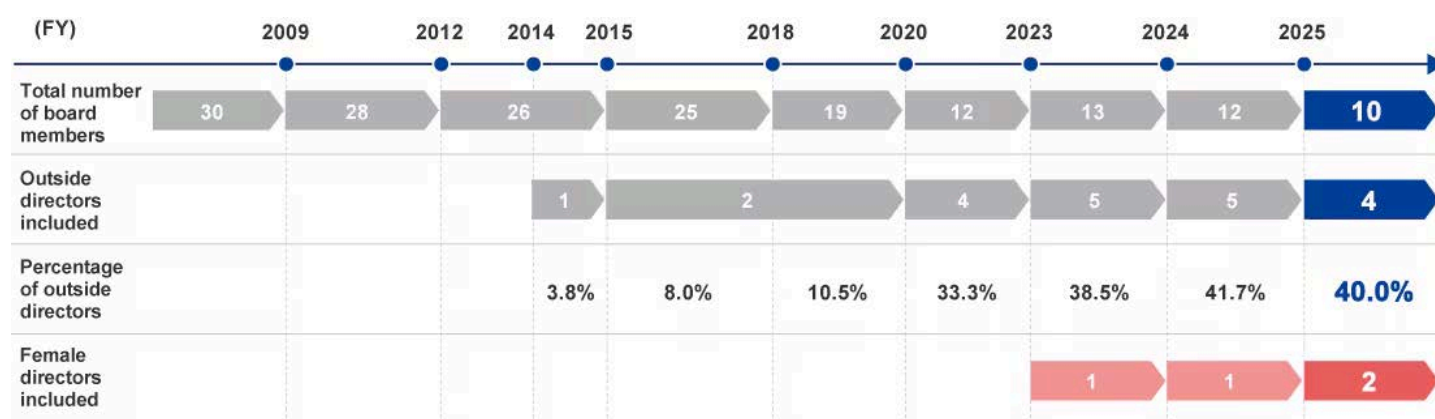


Name		Business operations				Corporate			Strategic
		Management experience	Global business	Technology / Manufacturing / R&D	Sales and marketing	Legal / Intellectual property / Risk management	Accounting / Finance	Human resource management / diversity	
Member of the Board	Akihiro Nikkaku	●	●	●					
	Mitsuo Ohya	●			●			●	
	Kazuhiko Shuto	●	●		●				
	Tetsuya Tsunekawa	●		●					● (DX)
	Shigeki Terada		●						● (Business strategies)
	Yuichiro Kato					●	●		
	Kunio Ito						●	●	● (ESG)
	Susumu Kaminaga	●	●	●					
	Yuko Harayama							●	● (Innovation)
	Akiko Innes-Taylor	●			●			●	
Corporate Auditor	Hideki Hirabayashi	●	●			●			
	Mitsuharu Mano		●			●	●		
	Makiko Takabe					●		●	
	Kozo Ogino	●					●		
	Masahiko Inoue					●	●		

\* 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.

\* Click > [here](#) for a brief biography of each director and corporate auditor.

## Changes in the Composition of the Board of Directors



## CSR Roadmap 2025 Targets and Results

### 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)	Targets / Results		
	Fiscal 2023	Fiscal 2024	Fiscal 2025
<b>1-① Toray Group Business Strategy Discussion sessions held at Board of Directors meetings (times)</b>	8 times / 8 times	8 times / 8 times	8 times / -
<b>1-② Board of Directors' positive assessment of the implementation of the Basic Policy for Internal Control Systems (%)</b>	90% / 96%	90% / 97%	90% / -

Reporting scope: Toray Group

### Related Materiality for CSR

- Strengthening Corporate Governance

Click [here \(536KB\)](#) **PDF** for the Materiality View of CSR Roadmap 2025.


## Looking to the Future

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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, 2025." The survey had among 17 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 in fiscal 2024, the Company's core values—contributing to society through business activities, people-centric management, and management from a long-term perspective— help raise medium- to long-term corporate value. In addition, the Board of Directors continued discussions concerning improving capital efficiency that is conscious of PBR and returns to stockholders and others as an initiative under "Action to Implement Management That is Conscious of Capital Cost and Stock Price". It also maintained ongoing dialogue among outside directors and executive officers, and created an environment that supports appropriate risk-taking to respond to the changing business environment. As such, it was determined that the Board had generally fulfilled its roles and responsibilities. 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 2025 and beyond, continuing from fiscal 2024, 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. In addition, with respect to the executive compensation system, the proportion of performance-linked bonuses within total compensation has been increased starting in fiscal 2025 to further strengthen incentives for improving business performance. To further enhance value-sharing with shareholders, a restricted stock remuneration plan has also been adopted. From fiscal 2026, which marks the first year of the next Medium-Term Management Program, the Company will consider incorporating non-financial indicators such as sustainability metrics, alongside financial indicators such as ROIC, as evaluation criteria for determining executive compensation.

Click [here \(771KB\)](#)  for the main initiatives and KPIs for CSR Guideline No. 1 "Corporate Governance" during the CSR Roadmap 2025 period (fiscal 2023–2025).

## 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  
Toray Group

■Target in fiscal 2024  
8 times

Result in fiscal 2024

**8 times**

### Board of Directors' positive assessment of the implementation of the Basic Policy for Internal Control Systems (%)<sup>1</sup>

■Reporting scope  
Toray Group

■Target in fiscal 2024  
90%

Result in fiscal 2024

**97 %**

<sup>1</sup> To evaluate the effectiveness of internal control relating to the Board of Directors, a questionnaire is given to all 17 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 2024.

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 2024 was 97%, surpassing the target of 90%.

#### Related Information

> [Basic Policy on Corporate Governance](#)

[Corporate Governance Report \(546.7KB\)](#) 

> [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.

## 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

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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.

## Policies

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### 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 2024, the Ethics and Compliance Committee convened twice to deliberate on and discuss the results of fiscal 2023 initiatives, action plans for fiscal 2024, 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.



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

## CSR Roadmap 2025 Targets and Results

### 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)	Targets / Results		
	Fiscal 2023	Fiscal 2024	Fiscal 2025
<b>2-① Number of major violations of laws or ordinances</b>	0 / 0	0 / 0	0 / -
<b>2-② Group companies implementing internal legal audits (%)</b>	<ul style="list-style-type: none"> <li>Toray Industries, Inc. : 100%</li> <li>Group companies in and outside Japan : Implemented focusing on high-risk companies / 100% (Fiscal 2023 / 2024)</li> </ul>		
<b>2-③ Group companies providing information and implementing education on major laws and regulations and other compliance-related matters (%)</b>	100% / 100%	100% / 100%	100% / -

Reporting scope: Toray Group

### Related Materiality for CSR

- Ensuring Ethics and Compliance

Click [here \(536KB\)](#) **PDF** for the Materiality View of CSR Roadmap 2025.

## Looking to the Future

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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*<sup>2</sup> approach – Look to the facts!
- **R** : Responsibility as a member of our excellent company



<sup>2</sup> *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 2024, 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 \(771KB\)](#) **PDF** for the main initiatives and KPIs for CSR Guideline No. 2 "Ethics and Compliance" during the CSR Roadmap 2025 period (fiscal 2023–2025).

# Establishing a Corporate Culture of Total Respect for Ethics and Compliance

## Toray Group Ethics & Compliance Code of Conduct

CSR Roadmap 2025  
Main Initiatives (1)(2)(3)(6)(7)

The Ethics & Compliance Code of Conduct was issued in May 2020, 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.



[Ethics & Compliance Code of Conduct \(444KB\)](#) [PDF](#)

### 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.

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 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 2024  
0

Result in fiscal 2024

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 2024, the Company provided training on the Toray Group Ethics & Compliance Code of Conduct and the Group’s whistleblowing system. Participation in this course was 99.8% of targeted employees, who signed a declaration confirming their understanding and commitment to complying with the Code. 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 2024

Compliance Awareness Round-Table Held (Toray Industries, Inc. Nasu Plant)

A round-table discussion was held for management and union members with the aim of raising awareness of the need to improve workplace compliance.

To explore the topic of unconscious bias, participants watched three different instant noodle commercials from different eras and engaged in cross-departmental group discussion.

Participants recognized the gender role stereotypes depicted in older commercials and noted the importance of identifying the substance of matters without being carried away by the mores of the times. The lively discussions provided an opportunity to recognize others’ perspectives and their own unconscious biases.



Participants engaging in discussion after watching TV commercials



## Toray Group Compliance Training in Thailand [Toray Industries (Thailand) Co., Ltd. (TTH)]

Compliance training was conducted for young and newly hired employees of Toray Group companies in Thailand, using a combination of in-person and online formats. There were a total of 220 participants.

The head of compliance at TTH served as the instructor and provided an overview of past misconduct cases within the Toray Group, the group-wide “Mission BEAR” compliance initiative, and specific compliance efforts underway within the Toray Group in Thailand.

In the second half of the training, participants actively exchanged views during group work, deepening their understanding of compliance.



Compliance training participants

## 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.

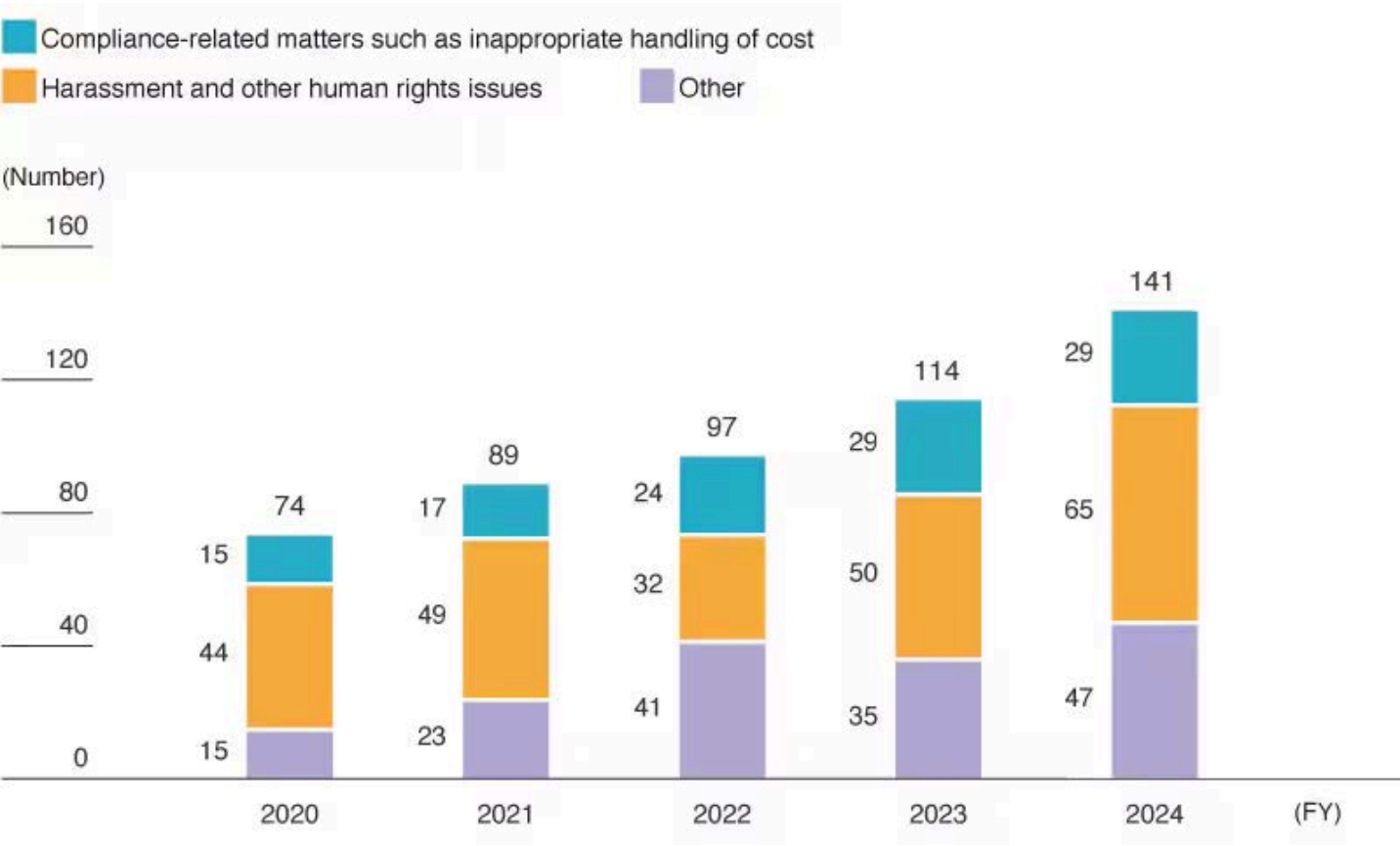
In addition, each Toray Group company in Japan has established a helpline contact point. Moreover, Toray Industries has also created an external helpline contact point shared by all group companies in Japan to make it easier for employees to report and consult.

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 2024, Toray Industries and its group companies received a total of 141 whistleblowing reports and consultations, with 19 cases resulting in disciplinary action. Of these disciplinary cases, six were compliance-related matters such as inappropriate handling of cost, seven were harassment and other human rights issues, and six were categorized as other. Of the six compliance related cases, there were none that resulted in disciplinary action for conflicts of interest, 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.

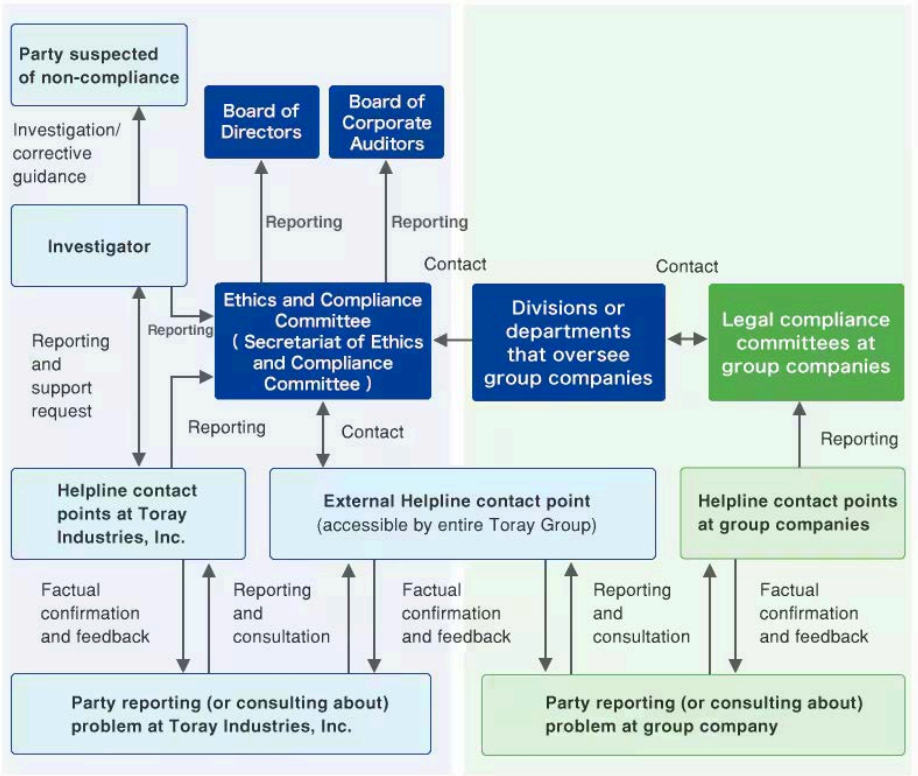
Number and Subject of Reports (Consultations) Across Toray Group



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%
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Corporate Ethics and Legal Compliance Helpline System (Toray Industries, Inc. and its Group Companies in Japan)<sup>1</sup>



<sup>1</sup> 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)

### Group companies implementing internal legal audits (%)

■Reporting scope  
Toray Group

■Target in fiscal 2024

- Toray Industries, Inc.: 100%
- Group companies in and outside Japan: Implemented focusing on high-risk companies

### Result in fiscal 2024

100%

In fiscal 2024, 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 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 Division<sup>1</sup>, 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.

<sup>1</sup> As of July 2025, a corporate 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.

## Related Initiatives

CSR Roadmap 2025  
Main Initiatives (1)

### 1. Tax Governance

The Toray Group Tax Policy outlines the basic tax governance principles, while internal regulations such as the Toray Group Tax Management Regulations require each group company to establish appropriate tax governance frameworks and properly report on their tax status.

### 2. Tax Risk Management

While striving to ensure compliance with the tax laws of each country in which it operates, Toray Group acknowledges the potential for its legal interpretations to differ from those of local tax authorities. In such cases, the Group engages external experts such as tax advisory firms to conduct thorough reviews, and, when necessary, make pro-active inquiries to the relevant tax authorities in an effort to minimize tax-related risks.

### 3. Transfer Pricing

Pricing for transactions with foreign related parties is determined based on the arm's length principle in accordance with the OECD Transfer Pricing Guidelines, with the aim of ensuring appropriate income allocation. Toray Group does not engage in arbitrary manipulation of transaction prices for the sole purpose of tax avoidance, such as excessive profit shifting to low-tax jurisdictions. Transfer pricing documentation is prepared in compliance with the tax laws and regulations of the countries and regions in which the Group operates, as well as with applicable international frameworks.

In cases where double taxation arises on the same economic income in multiple countries or regions, the Group makes efforts to eliminate such double taxation by applying relevant tax treaties or mutual agreement procedures.

### 4. Tax Planning

Toray Group does not engage in excessive tax planning aimed solely at tax reduction, such as arbitrary tax avoidance schemes using tax havens or the deliberate interposition of entities with no economic substance that are unrelated to the purpose of business activities.

### 5. Helpline Use

Unethical or unlawful conduct, or concerns related to tax matters, may be reported through an internal whistleblowing system, the Corporate Ethics and Legal Compliance Helpline, which is available to group employees worldwide.

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

## 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 2024, the committee decided on measures to implement for fiscal 2025 after considering the risks to be addressed 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). In particular, Toray Group strictly controls the list-control items that require the approval of the Japanese Minister of Economy, Trade and Industry when exporting, such as TORAYCA™ carbon fiber and its composite materials, manufacturing equipment, coating agents for semiconductors, and water treatment membranes.

In addition, from the perspective of economic security, regulations under Japan's Foreign Exchange and Foreign Trade Act are increasingly being strengthened. These changes aim to prevent technology leakage and to clarify the distinction between conventional weapons applications and civilian uses, which can be difficult to cleanly classify. In response, Toray Group focuses on promoting appropriate understanding and disseminating rational responses through the exchange of opinions and other means, mainly in departments and group companies dealing with sensitive catch-all control technologies, such as in designated critical technology fields.

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**

Toray Industries is continuously improving and expanding its training programs. In fiscal 2024, the Company conducted internally developed training programs focused primarily on key personnel and executive officers who play a central role in security trade control, covering topics such as practical skills related to determining classifications. Training was also given to newly appointed managers to promote appropriate management on the front lines. Study sessions and discussions focused on individual departments or group companies were held to enhance appropriate internal understanding and rational responses regarding transaction information reliability and technology transfer management. (A total of 11 courses were held with 1,249 employees participating)

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 2024, 322 Toray Group employees passed the exam, bringing the cumulative number of Toray Group employees who have passed the exam to 5,183 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, and on transactions suspected of violating laws or internal management rules. The Company reported or consulted with the appropriate authorities as necessary and took appropriate measures. Toray industries centrally aggregated information on suspicious inquiries and other concerns, as well as information on transactions that violated laws and regulations or were suspected to contradict internal management rules, and reported to and consulted with relevant authorities as necessary to respond appropriately. 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 Fine Chemicals 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

CSR Roadmap 2025  
Main Initiatives (1)(2)(6)(7)

## 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 2024, 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 2024, there were no legal actions taken against Toray Group due to corruption and bribery prevention.

In October 2024, 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 7,365 people taking the training.

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



## 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 2024, 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

CSR Roadmap 2025  
Main Initiatives (1)

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 standards<sup>1</sup>, which are based on national ethics guidelines<sup>2</sup>.

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 Subjects<sup>3</sup> (the “Ethics Committee”) and an Ethics Review Committee on Research Involving Human Biological Subjects<sup>4</sup> (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 2025, the senior 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 2025, the position is held by the director.

[Member of Ethics Review Committee on Research Involving Human Biological Subjects \(91KB\)](#) [PDF](#)

[Minutes of 15th Ethics Review Committee on Research Involving Human Biological Subjects \(113KB\)](#) [PDF](#)

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

## 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 has established the Toray Industries Research & Development Division Animal Experiment Guidelines 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, and will strive to use alternatives to animals, reduce the number used, and minimize their pain to the full extent.

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 use of alternatives to animals (Replacement), reducing the number of animals used (Reduction), and the minimization of pain (Refinement). 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* evaluation<sup>1</sup> using computers and *in vitro* evaluation<sup>2</sup> 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 Center<sup>3</sup> 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.

<sup>1</sup> *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.

<sup>2</sup> *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.

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

## 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

#### Occupational Safety and Accident Prevention

Toray Industries puts safety and the environment first in its Corporate Guiding Principles, by “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.”

Under this policy, the Company promotes safety and accident prevention activities across the entire Group. To put this principle into practice, Toray Industries has adopted a top-down structure in which top management, plant managers, and supervisors act as one, and has built its own system using industry standards for occupational health and safety management systems.

Based on Toray Group-wide policy, the Company conducts safety activities at all sites in accordance with unified standards and statistically evaluates progress against key performance indicators (KPIs) set out in its CSR Roadmap 2025.

Each year, Toray Industries establishes a safety slogan and “Main Activities for Safety, Health, Accident Prevention and Environmental Preservation,” which are reflected in the annual activity plans of each company and plant. These plans are managed by various committees and audits based on plan-do-check-act (PDCA) cycles.

Those conducting these audits include Toray Industries executive officers, chief representatives of group operations in other countries, as well as executives, plant managers, and safety and environmental preservation staff at group companies. Using a standardized checklist, they conduct both document-based and on-site audits at production sites worldwide. The results are then reflected in the following year’s activity plans, slogan, and policies, which help to raise the safety level of the entire Group.

#### Environmental Preservation

To help realize a sustainable society, Toray Group has positioned the reduction of environmental impact as a critical issue, and has been adopting its Medium-Term Environmental Plans since fiscal 2000. The Group has set KPIs and is pursuing continuous improvement through initiatives such as reducing greenhouse gas emissions per unit of revenue as well as cutting atmospheric emissions of certain chemical substances (PRTR substances, VOCs, and others) and waste.

Under the Toray Group Sustainability Vision announced in 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 launched in fiscal 2020, the entire Group worked to reduce emissions through its Challenge 30 Project. With these efforts, the Group met its targets for fiscal 2030 ahead of schedule in fiscal 2022. Therefore, the Group significantly raised its numerical targets from a 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 also set a new target of reducing greenhouse gas emissions in Japan by at least 40% compared to fiscal 2013. Since fiscal 2023, three-year KPIs have been set based on the CSR Roadmap 2025. The project has also been renamed the Challenge 50+ Project to strengthen initiatives such as energy-saving activities, introducing renewable energy, and eliminating the use of coal. Moreover, KPIs have been established for atmospheric VOC emission reduction and waste recycling rate improvement, and the Group is strengthening its management of priority-focus companies and factories.

## 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 year, and specifies the main activities to implement in each policy area.

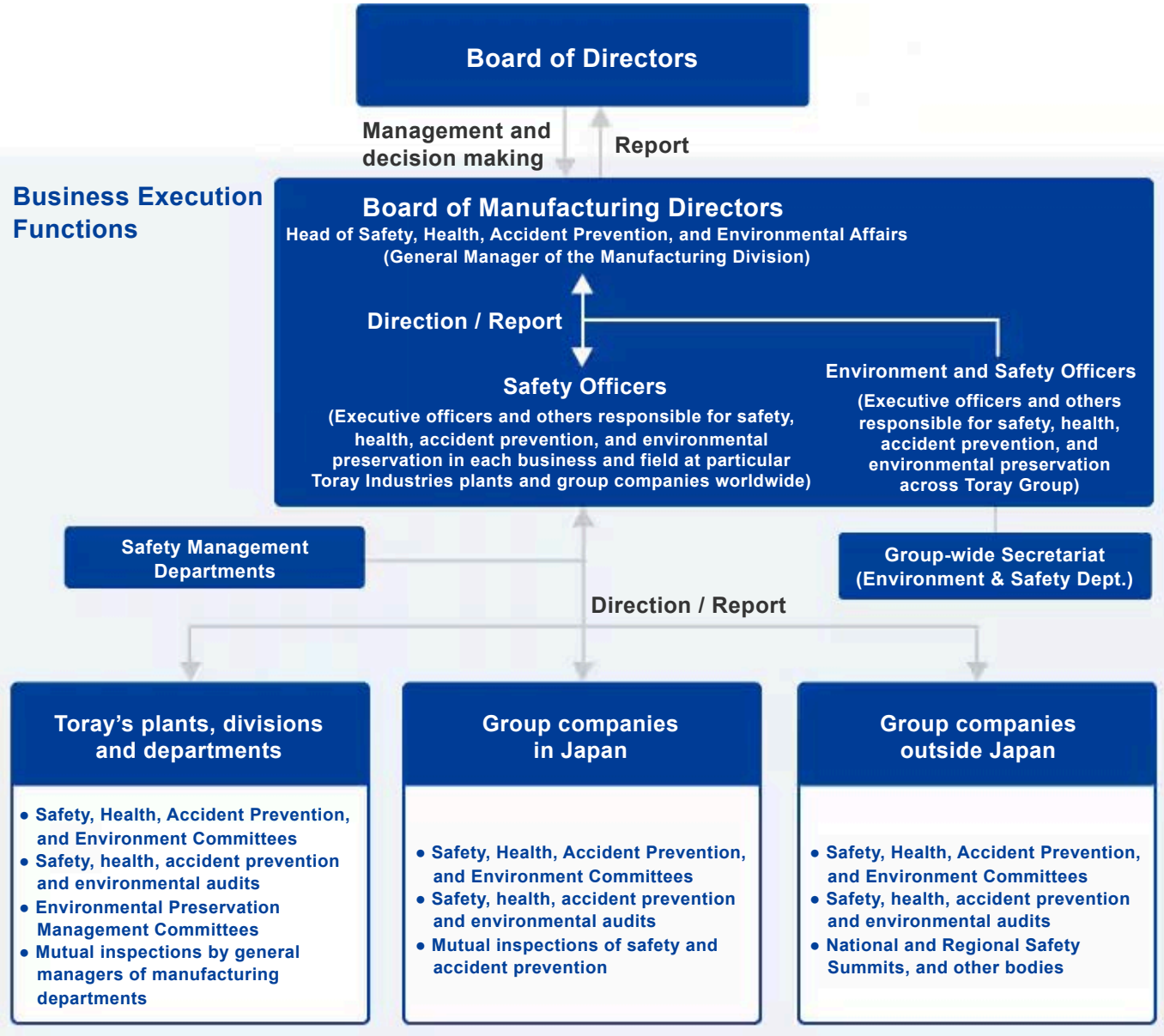
### Safety, Health, Accident Prevention, and Environment Activity Policy of Toray Group in 2024

Action policy		Main activities
Safety	Pursue zero occupational accidents	1. Follow rules thoroughly 2. Thorough elimination of similar accidents 3. Enhance safety activities in each business division
Healthier lives	Emphasize occupational health management	1. Enhance and strengthen mental health management 2. Promote work environment improvement 3. Rigorous chemical substance management
Accident prevention	Pursue zero fire accidents	1. Strengthen fire accident prevention management
	Enhance crisis management for natural disaster risks	1. Strengthen preparation and response for large-scale earthquake and water disaster
Environment	Pursue zero environmental accidents	1. Thorough elimination of similar accidents
	Promote Sustainability Vision	1. Promote Challenge 50+ Project 2. Make efforts to reduce environmental impact 3. Address the problem of marine plastic waste

# Structure

At Toray Group, the promotion of safety, health, accident prevention, and environmental preservation is overseen by the Head of Safety, Health, Accident Prevention, and Environmental Affairs (general manager of the Manufacturing Division<sup>1</sup>). Each year, at the Board of Manufacturing Directors, this general manager deliberates on policies and main activities together with the Safety Officers, who are responsible for safety, health, accident prevention, and environmental preservation in their respective businesses and fields, and the Environment and Safety Officers, who bear responsibility for these areas across the entire Group. The resulting policies and main activities are then communicated to Toray Industries and its group companies. 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



<sup>1</sup> As of July 2025, the senior vice president responsible for the Manufacturing Division concurrently serves as the division's general manager.



## Safety, Health, Accident Prevention, and Environmental Audits

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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 2024, audits were conducted for all 13 plants and one research laboratory at Toray Industries, 27 plants operated by 27 group companies in Japan, and 82 plants operated by 63 group companies outside Japan. The audits focused on the following areas: safety checks before starting operations as well as training and comprehension checks for inexperienced workers; follow-up on the results of inspections using the FP<sup>2</sup> Checklist, which includes the Electrical Equipment Checklist; confirmation of response progress for additional substances subject to the Industrial Safety and Health Act (for group companies in Japan); 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.

<sup>2</sup> FP: Fire Prevention

## Responsible Care Program

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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 Charter<sup>3</sup>, 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.

<sup>3</sup> The Responsible Care Global Charter is a voluntary initiative established in 2005 by the International Council of Chemical Associations (ICCA) with the aim of actively strengthening and promoting Responsible Care activities worldwide. To promote understanding among external stakeholders and encourage companies to take concrete action the Charter was revised in 2014, and Toray Industries was a signatory to both the original and revised Charter.

## ISO 14001 Certification

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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 2024, 32 plants at 23 group companies in Japan and 68 plants at 51 group companies outside Japan were certified.

In fiscal 2024, the total number of certified plants decreased by one, as the M1 Plant of Toray Textiles (Thailand) Public Company Limited was closed, reducing the overseas total by one plant.

### Related Information

> [Sites with ISO 14001 Certification](#)

# Education and Awareness-Raising to Enhance Safety, Accident Prevention, and Environmental Awareness

## Safety and Accident Prevention Training

Toray Group promotes safety activities in line with industry standards for occupational health and safety management systems, such as ISO 45001. Through training programs tailored to different organizational levels, from new hires to managers, the Group works to instill a strong awareness of safety and ensure strict compliance with rules, while conducting audits led by executives.

In addition, initiatives such as establishing safety slogans are carried out across the Group in pursuit of zero accidents.

## Environmental and Sustainability Education Initiatives

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. In fiscal 2022, three e-learning courses were conducted as an introductory program on environmental education, with an average of approximately 12,000 participants. Since fiscal 2023, new intermediate and advanced e-learning courses have been introduced to promote the acquisition of more substantial environmental knowledge.

Related Information

> [Communication with Employees](#)

# CSR Roadmap 2025 Targets and Results

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
<b>Safety</b>	
(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	-
<b>Accident Prevention</b>	
(4) Aim for zero fire and explosion accidents	3-③
<b>Environmental Prevention</b>	
(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 VOC <sup>4</sup> 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)	Targets / Results		
	Fiscal 2023	Fiscal 2024	Fiscal 2025
<b>3-① Number of major accidents</b>	0 / 1	0 / 1	0 / -
<b>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)</b>	No more than 0.05 / 0.40	No more than 0.05 / 0.25	No more than 0.05 / -
<b>3-③ Number of fire and explosion accidents</b>	0 / 1	0 / 3	0 / -
<b>3-④ Number of environmental accidents</b>	0 / 4	0 / 6	0 / -
<b>3-⑤ Reduction of greenhouse gas emissions per unit of revenue (%)</b>	At least 40% lower than fiscal 2013 <sup>5</sup> (Fiscal 2025) / 36.0% (Fiscal 2023), 42.8% (Fiscal 2024) <sup>6</sup>		
<b>3-⑥ Increase in solar power generation capacity (%)</b>	At least 10% higher than fiscal 2022 (Fiscal 2025) / 101% (Fiscal 2023), 182% (Fiscal 2024)		
<b>3-⑦ Reduction of water usage per unit of revenue (%)</b>	At least 40% lower than fiscal 2013 <sup>5</sup> (Fiscal 2025) / 35.3% (Fiscal 2023), 37.8% (Fiscal 2024)		
<b>3-⑧ Waste recycling rate (%)</b>	At least 86% / 87.0%	At least 87% / 87.3%	At least 87% / -
<b>3-⑨ Reduction of atmospheric VOC emissions (%)</b>	At least 70% lower than fiscal 2000 / 72.5%	At least 72% lower than fiscal 2000 / 74.9%	At least 72% lower than fiscal 2000 / -

Reporting scope: Toray Group


<sup>4</sup> Volatile organic compounds

<sup>5</sup> 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.

<sup>6</sup> 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.

### 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 \(536KB\)](#)  for CSR Roadmap 2025 from the perspective of materiality.

## Looking to the Future

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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 \(771KB\)](#).  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).

## Occupational Safety and Accident Prevention Activities

Toray Group pursues its own safety activities by establishing and operating an audit system that complies with international standards for occupational health and safety management systems (such as ISO 45001 and OHSAS 18001).

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. Best practices are also 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 2024, 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 2024 slogan for fiscal 2025, 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.

### **2024 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. The Toray Human Resources Development Center was the main venue for this meeting again in 2024. Approximately 600 people attended, including online participants from companies and plants worldwide, who pledged to help achieve a completely accident-free Toray Group in 2025. 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.



2024 Toray Group Safety Meeting at Toray Human Resources Development Center



Opening of the 2024 Health and Safety Conference (slogan chanting) (Toray Construction Co., Ltd.)



A deputy general plant manager from Toray Plastics Precision (Zhongshan) Ltd. reports on safety activities at the Toray Group South China Regional Safety Conference in China [Toray Industries (China) Co., Ltd.]



Examples of Workplace Initiatives in Fiscal 2024

Safety Information Exchange Meeting with Suido Kiko Kaisha [Toray Lycra Co., Ltd. (TLC)]

TLC held a safety information exchange meeting with the PE Center of Suido Kiko Kaisha, Ltd. (SKK). During the meeting, the two companies shared information on their safety initiatives and factory cleanup campaigns, followed by a plant tour to see TLC’s plant rejuvenation activities, where they exchanged insights on resourceful approaches and challenges encountered. Examples included improvements to SKK’s break room and outdoor walkways, as well as TLC’s use of QR codes for parts management and the renovation of the women’s changing room and break area. Both companies gained practical knowledge on the implementation and management of factory cleanup and workplace improvements.



Activity reports being shared by both companies

Safety Education for Technical Intern Trainees [Toray Industries (H.K.) Vietnam Company Limited (THKVN)]

At THKVN, company-wide training sessions were used to provide labor safety education, drawing on actual accident cases that occurred within Toray Group. Fifteen cases translated into Vietnamese were used as discussion material, allowing employees to review risks relevant to their own departments and strengthen safety awareness.

In addition, training sessions were conducted for Vietnamese technical intern trainees working at Toray Group companies in Japan, with Vietnamese staff serving as instructors. The sessions emphasized the importance of safety rules and compliance. The trainees gained a better understanding of safe workplace practices, helping to raise individual awareness.



Training by a Vietnamese instructor at Toray Textiles, Inc.

Toray Group Safety Record

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

Number of major accidents

■Reporting scope	■Target in 2024 (calendar year)
Toray Group	0

Result in 2024

1



## Number of fire and explosion accidents

■Reporting scope  
Toray Group

■Target in 2024 (calendar year)  
0

Result in 2024

3

## 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  
Toray Group

■Target in 2024 (calendar year)  
No more than 0.05

Result in 2024

0.25

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 2024 was 0.25. Although this is a positive result compared with that of Japan's manufacturing industry (1.30), 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 accidents 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.

1. Major accidents

In fiscal 2024, at a group company outside Japan, an accident occurred in which molten polymer was splattered onto employees while they responded to an extruder malfunction, resulting in injuries to multiple individuals. In accordance with internal regulations, the incident was treated as a major accident.

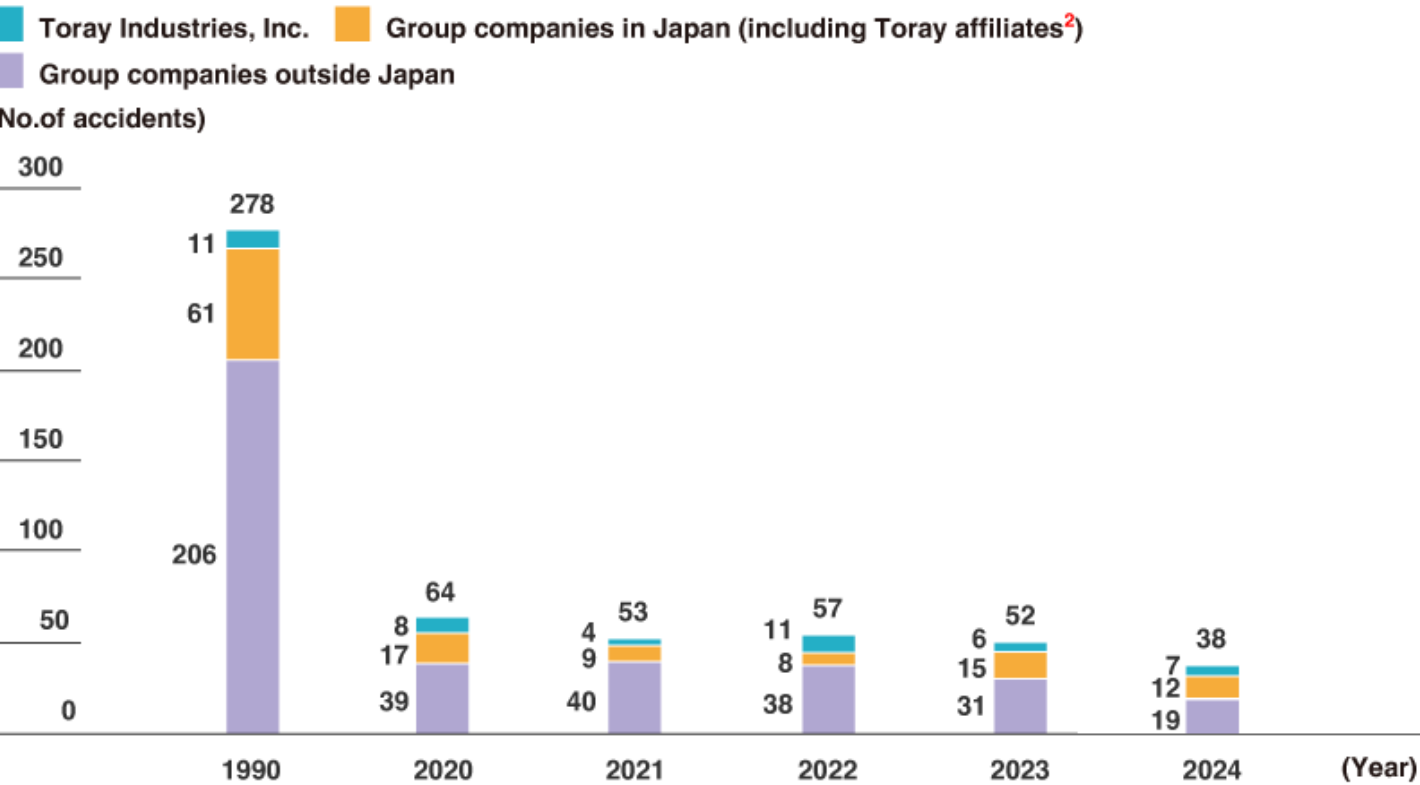
As part of reoccurrence prevention measures, the company first conducted refresher courses on the risks posed by heated polymer splattering and also reviewed protective equipment to ensure such accidents can never reoccur. In addition, in the event of a malfunction such as a machine shutdown, supervisors must be present at the location, personally verify the environmental settings and work procedures required for handling the issue, and provide direct guidance to the employees concerned.

2. Fire and explosion accidents

While there were no fire or explosion accidents at Toray Industries or group companies in Japan in 2024, there were three such accidents at overseas group companies. These incidents included fires caused by hot work operations and ignition originating from electric utility carts.

In response, the companies where these incidents occurred reinforced communication of the Toray Group's hot work standards to employees and strengthened inspection of electrical equipment. 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.

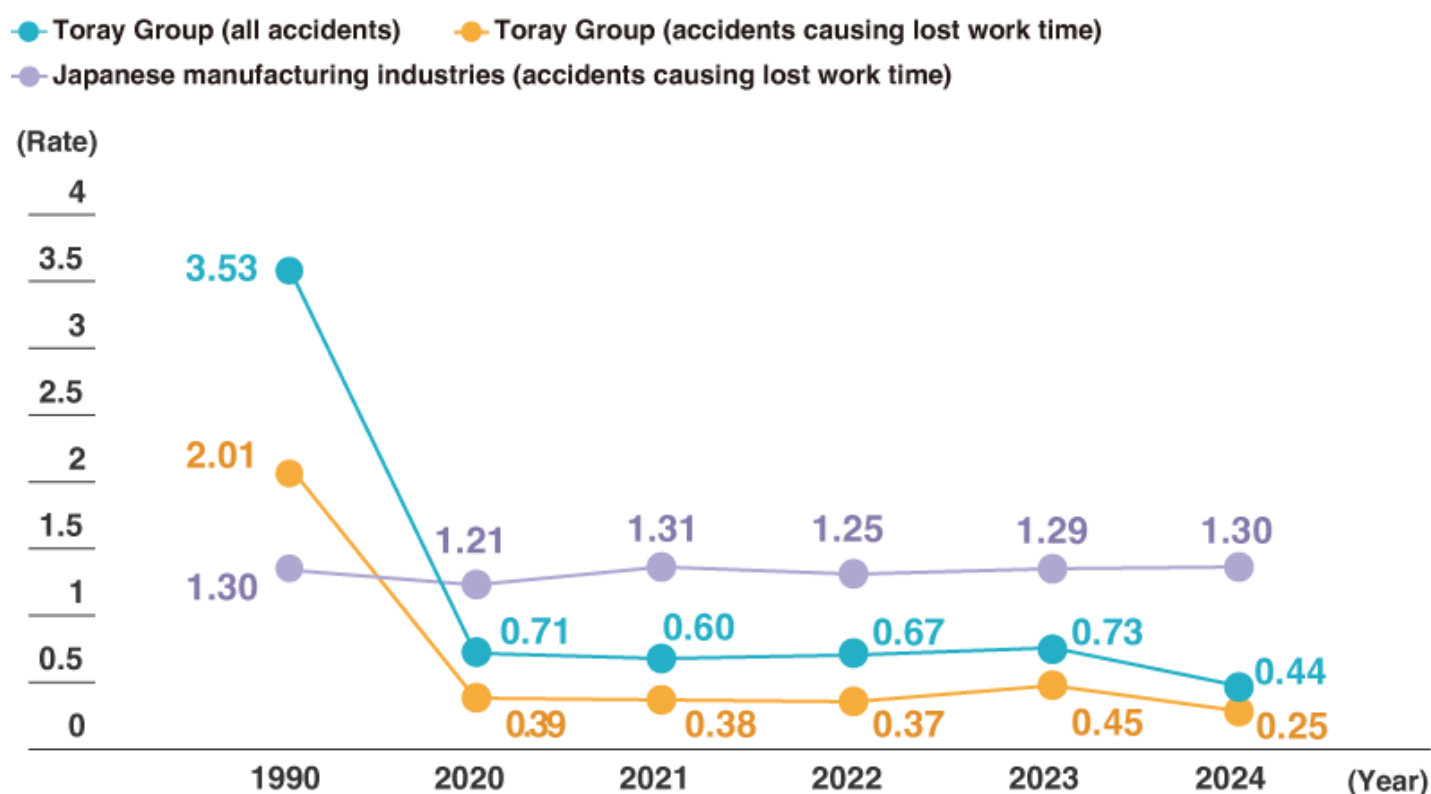
Number of Occupational Accidents<sup>1</sup>: Toray Group (Lost work time and non-lost work time)



<sup>1</sup> 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.

<sup>2</sup> Toray affiliates: Toray Industries' subsidiaries that provide ancillary services for plant operations

## Occupational Accident Frequency Rate<sup>3</sup>: Toray Group



<sup>3</sup> 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

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

### 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.

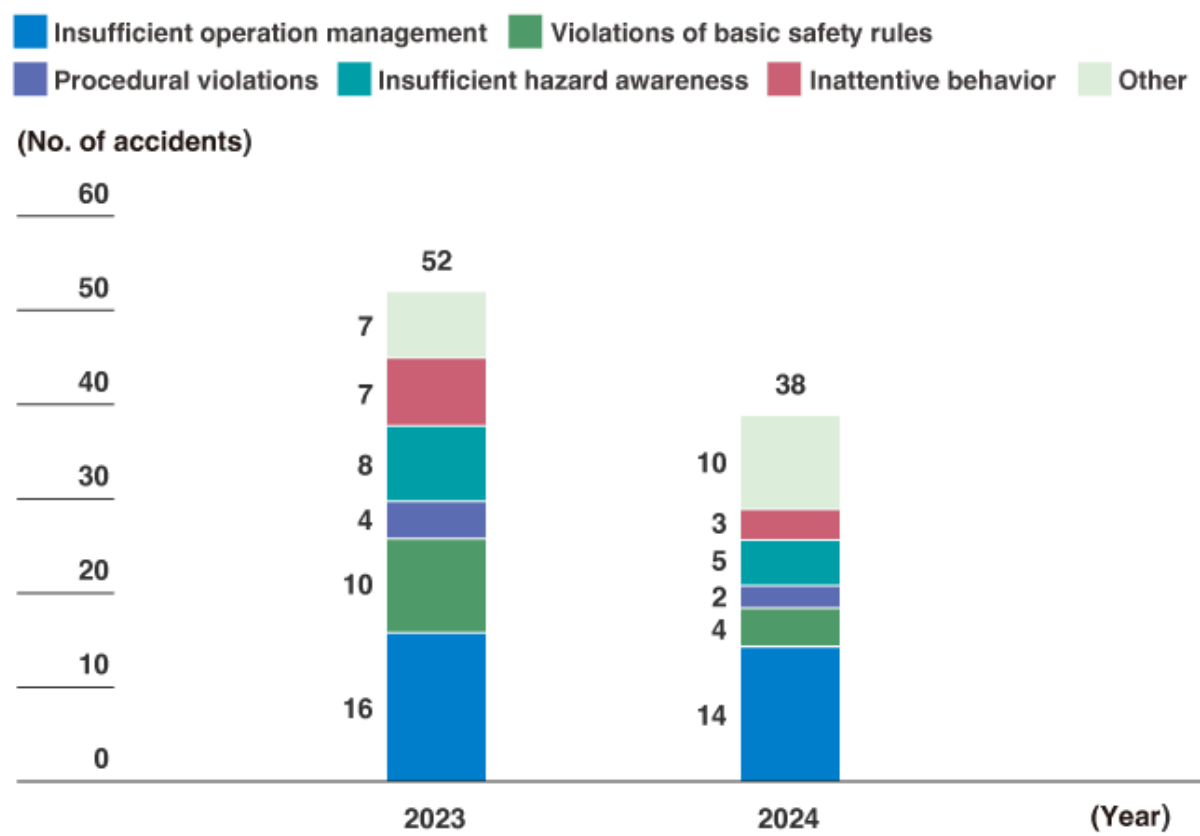
In addition, information about the accident is shared throughout the Group and measures taken to prevent a reoccurrence.

3. Prioritized risk reduction activities

Since 2023, Toray Group has focused on ensuring thorough workplace rule compliance as a main activity. As a result, in 2024, the number of accidents caused by violations of basic safety rules or work procedures was halved, decreasing from 14 cases in the previous year to six. Compliance with rules continues to be emphasized through the Group’s safety slogans, and efforts will continue to achieve zero accidents. Meanwhile, in 2024, Toray Group promoted thorough pre-work safety checks as a main activity. However, accidents due to insufficient operation management only slightly decreased, from 16 cases to 13. Supervisors will continue to provide detailed instructions on work methods and procedures and ensure that employees fully understand them. In addition, employees are being further instructed to rigorously conduct hazard prediction before starting tasks and to stop work and consult their supervisors if any uncertainties arise during an operation.

In 2025, the Group will continue to analyze the accidents that occurred in 2024 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) in 2023 / 2024 (Toray Group)



## 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 Nagoya Plant (Toray Industries, Inc.)



Demonstrating the danger of fires and explosions at Gifu Plant (Toray Human Resources Development Center)

The Nagoya Plant of Toray Industries carries out production activities across three adjacent factory sites separated by public roads. Due to these narrow roads, nearly 100 of the pipes on the plant premises that supply utilities such as the electricity, steam, and water necessary for production have been installed overhead instead of at ground level. Damage to these pipes can have significant impacts not only on production but also on safety, requiring immediate decision-making and rapid response. However, challenges such as the distances between factories and the risks associated with nighttime high-elevation work had presented many challenges.

To address this, the power engineering section of the facilities department, which manages utility supply at the Nagoya Plant on a 24-hour basis, adopted digital twin technology. This technology converts real spatial information into data and recreates it in a virtual environment on a computer, enabling a more accurate understanding of on-site conditions than drawings alone. It also allows technicians to view each location virtually, almost as if they were physically on-site.

With the adoption of this digital twin technology, equipment and related information can be checked from a desk regardless of the lighting or weather conditions. This has yielded various benefits, including improved safety during inspections and checks, and enhanced work efficiency.

Going forward, the technology will be deployed to other departments and facilities-related divisions, helping to reduce maintenance costs.



Objective	Specific Cost Reduction Examples and Benefits
Efficient capital investment	Reduced on-site survey costs, shorter travel times, faster design work
Process stabilization	Improved reliability through detailed maintenance history management, rapid planning and execution of update plans
Maintenance efficiency	Inspections of leaks and repairs, greater safety when working at height, confirmation of environmental settings, careful review of estimates
Human resource development	On-site training and work inspections unaffected by weather or time of day, self-directed learning, technical skill transfer to younger employees, traffic safety education



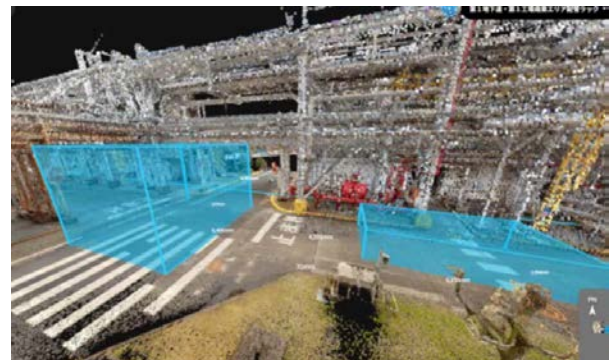
Utility pipelines at Plants 1, 2 and 3



Pipelines installed overhead



Functions of various pipelines are made clear on the computer screen using 18 different colors



Spatial simulations are also possible using virtual reality technology

This initiative was recognized with the Group's First Steps Award. The annual award program seeks to encourage individual employees to take on new challenges.

## Related Information

> [Communication with Employees](#)

## 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 affiliates 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.



Participants learn pre-operation forklift inspections and basic driving techniques and engage in hands-on training (Ogaki Fuso Spinning Co., Ltd.)

## 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.



Reports from each department are delivered at a safety conference attended by group and partner companies at the plant (Toray Industries, Inc. Gifu Plant)

## 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 tailored to each type of fire and explosion. 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. The Noto Peninsula Earthquake in January 2024 impacted the Toray Industries Ishikawa Plant and Sowa Textile Co., Ltd. Learning from this experience, the Group established its Fundamental Policy in the Event of a Major Earthquake, which prioritizes preservation of human life above all else. Based on this policy, each company and plant conducts drills for the initial response to a large-scale earthquake, while 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 (Toray Monofilament Co., Ltd.)



Firefighting training (Toray Textiles, Inc.)



Disaster prevention training at a petrochemical complex (Toray Industries, Inc. Nagoya Plant)



## Initiatives for Improving Fire-Prevention Capabilities

CSR Roadmap 2025  
Main Initiatives (4)

Toray Group is further enhancing its disaster prevention capabilities. In 2024, 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 FP<sup>4</sup> key persons, who play a pivotal role on the frontlines by promoting accident prevention inspections and measures. As a result, a total of 493 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.

Furthermore, when responding to a large-scale earthquake, the Group's basic policy is to prioritize human life, taking into consideration not only the seismic intensity but also the impact of aftershocks, the securing of sufficient personnel, and the emotional well-being of our employees and their families. 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.

<sup>4</sup> FP : Fire Prevention

### Examples of Workplace Initiatives in Fiscal 2024

#### Earthquake Preparedness Drills

Toray Group, with the cooperation of local fire departments and other organizations, conducts fire and earthquake drills with group companies and local residents.



Evacuation drill using a simulated smoke-filled house (Toray Industries Inc. Mishima Plant)



Rescue training using a simulated collapsed house (Toray Industries Inc. Seta Plant)

## 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 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, ECETOC 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, 2025 are as follows.

Medical examination recipients involving asbestos (Toray Group): 4,045

Certified occupational accidents arising from handling asbestos (Toray Group): 140 (124)\*

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

\* Figures in parentheses refer to fatalities as of March 2025.

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

## Managing Energy Use 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 emissions<sup>1</sup> 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 revenue<sup>1</sup> Group-wide by 20% by fiscal 2022 compared with fiscal 2013. As a result of efforts to reduce CO<sub>2</sub> 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%<sup>2</sup> 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%<sup>1</sup>. The Group also set a target of reducing absolute greenhouse gas emissions for Toray Group in Japan by at least 40%<sup>1</sup> compared to fiscal 2013, thereby accelerating the Toray response to climate change.

As of the end of fiscal 2024, the Group as a whole achieved a 42.8% reduction in greenhouse gas emissions per unit of revenue, and a 28% reduction in greenhouse gas emissions within Japan.

<sup>1</sup> 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.

<sup>2</sup> 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 fiscal 2022, the reduction calculated under this new method would be 32.7%.

### Managing Energy Use

CSR Roadmap 2025  
Main Initiatives (6)

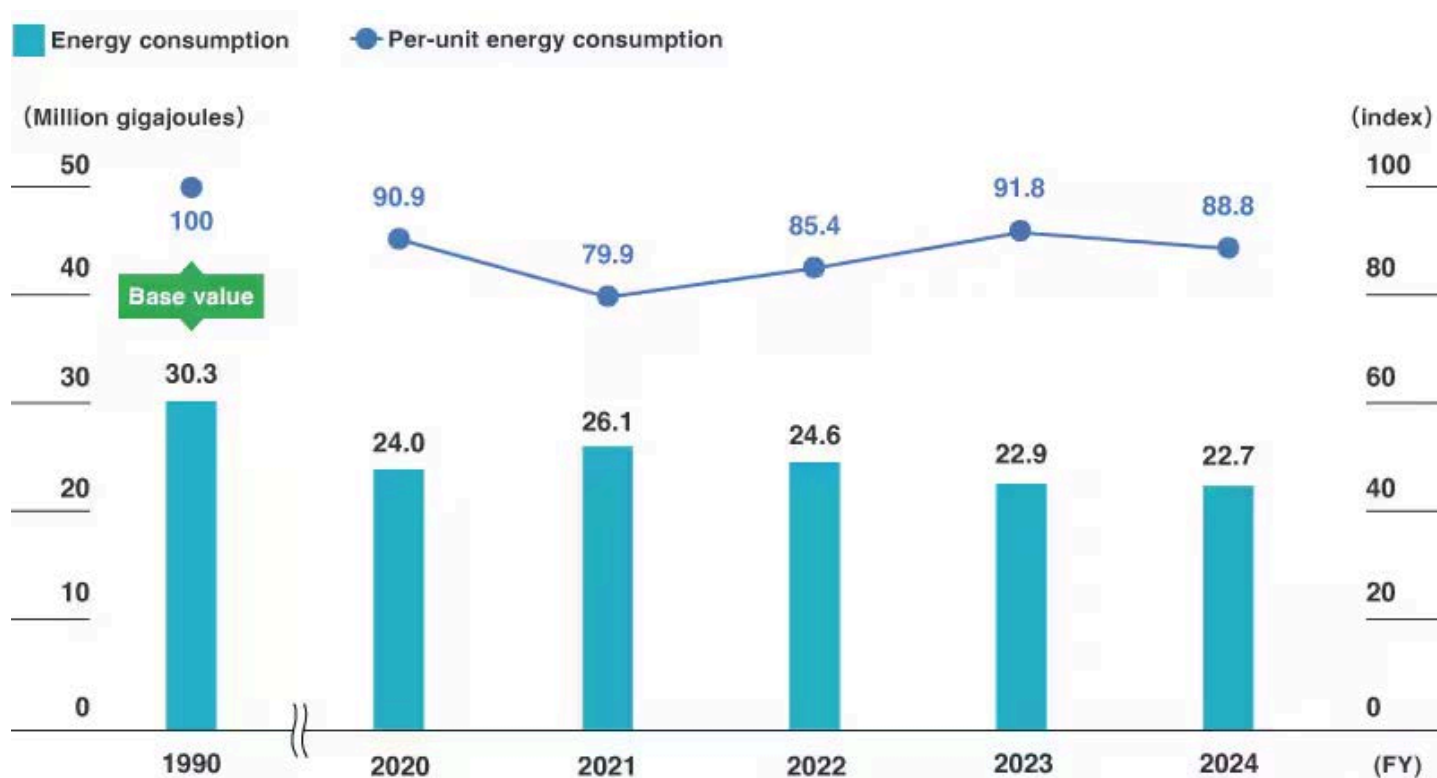
As part of its energy management, Toray Group sets annual energy-conserving targets for each company and plant and promotes group-wide energy-conserving activities. It also checks the progress of its energy-conserving measures on a monthly basis.

Toray Industries undergoes audits of its environmental data, including energy consumption, to identify opportunities for improving its energy performance. Using the results as a reference, the Company is promoting energy-conserving activities with a goal of reducing its per-unit energy consumption<sup>3</sup> by 2% annually.

In fiscal 2024, energy consumption decreased by 0.9% year on year due to more efficient use of energy and efforts to reduce energy waste and loss. Meanwhile, energy intensity improved by 3.2% year on year, reflecting a 1.4% increase in production volumes. This represents an 11.2% improvement over the baseline year of fiscal 1990.

<sup>3</sup> Energy consumption per converted production volume

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



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

Toray Group holds an annual group-wide energy-saving technology presentation meeting each June as part of its energy conservation activities, where the Group shares and recognizes the results of its energy-saving initiatives. This initiative is aimed at raising employees' awareness of energy conservation and promoting the deployment of effective technologies across group companies.

At the meeting, about 20 energy-saving projects nominated by Toray Group companies are reviewed, and four to five outstanding cases are selected for recognition. Presenters explain the background and key points behind their projects, the technical innovations applied, and the challenges they faced in implementation. Approximately 300 employees, including both in-person attendees and online participants, usually take part in the event.

In fiscal 2024, the following plants and group companies took part:

- Toray Industries, Inc.: Nagoya Plant, Tokai Plant
- Group companies in Japan: Du Pont-Toray Co., Ltd., Toray Fine Chemicals Co., Ltd.
- Group companies outside Japan: Toray Fibers (Nantong) Co., Ltd.

Furthermore, as part of its concrete on-site support, Toray Group has organized teams whose members are well-versed in manufacturing processes and equipment. These teams conduct energy-saving diagnostics at Toray Industries and group company plants around the world to generate ideas for further energy conservation and actively promote activities to achieve this. In fiscal 2024, these diagnostics were carried out at three of Toray Industries' plants. As a result, the Group reduced greenhouse gas emissions by about 5,000 tons-CO<sub>2</sub> per year or more equivalent.

Finally, in conjunction with these diagnostics, Toray Group also implements an energy conservation education program aimed at raising employee awareness of energy efficiency. To date, 463 employees have participated in this program.

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

Result in fiscal 2024

**42.8%**

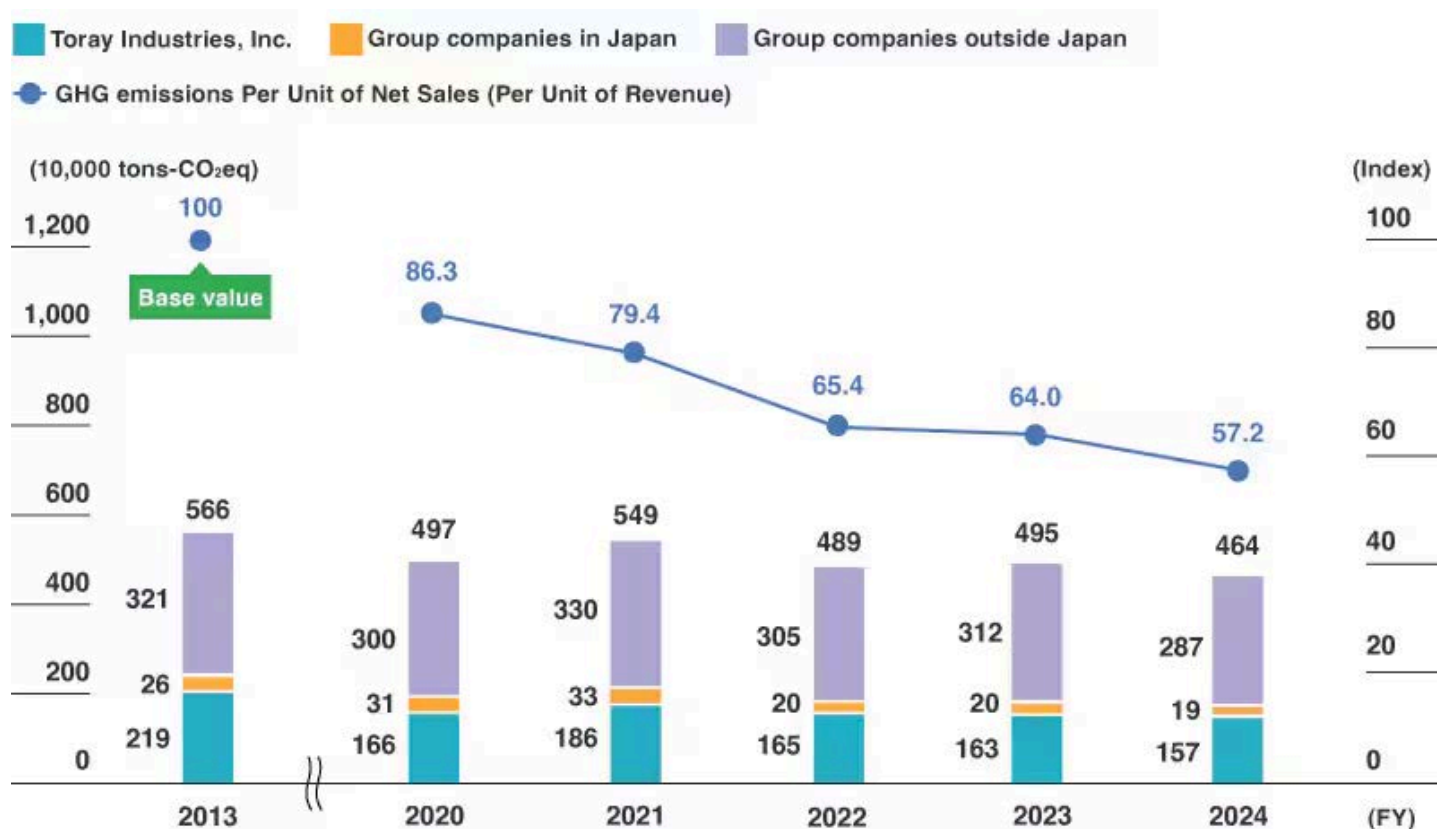
■ Reporting scope  
Toray Group

■ 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 2024 decreased by 6.3% year on year to 4.64 million tons-CO<sub>2</sub> equivalent. In terms of per unit of revenue, the Group reduced emissions by 42.8% 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).

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



### Notes:

- Figures for the baseline year of fiscal 2013 are calculated using Japanese GAAP and include companies that joined Toray Group in fiscal 2014 or later.
- The calculation method for the baseline year of fiscal 2013 and for fiscal 2023 onward 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 2020 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.

## Toray Group Greenhouse Gas Emissions (Scope 3) and Calculation Method

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).

### FY 2024 Scope 3 Emissions

(10,000 tons-CO<sub>2</sub>eq)

Category 1: Purchased goods and services	854.7
Category 2: Capital goods	75.2
Category 3: Fuel and energy related activities	93.3
Category 4: Upstream transportation and distribution	17.3
Category 5: Waste generated in operations	0.8
Category 6: Business travel	0.6
Category 7: Employee commuting	2.1
Category 8: Upstream leased assets	0.5
Category 9: Transportation and delivery (downstream)	2.8
Category 10: Processing of sold products	—
Category 11: Use of sold products	146.7
Category 12: End-of-life treatment of sold products	441.9
Category 13: Leased assets (downstream)	1.1
Category 14: Franchises	0.0
Category 15: Investments	—
Total	1,637.1



## Calculation Method for Scope 3

Category	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. (Used values from the Inventory Database for Environmental Analysis (IDEA), industry-related database charts, and those provided by suppliers.)
2. Capital goods	Calculated by multiplying the expenditure amount for purchased capital goods (amount of capital investment) by the emission factor used to calculate GHG throughout the supply chain. (See IDEA.)
3. Fuel and energy related activities	<p>Fuel: Calculated by multiplying the amount of purchased fuel by the emission factor for the fuel type. (See IDEA.)</p> <p>Electricity: Calculated by multiplying the input data of electricity procured from power companies by the average emission factor of all power sources, which is based on the emission factor used to calculate GHG throughout the supply chain. (See IDEA.)</p> <p>Steam (heat): Calculated by multiplying the input data of procured heat by the emission factor used to calculate GHG throughout the supply chain. (See IDEA.)</p>
4. Upstream transportation and distribution	<p>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.</p> <p>Products: Emissions for transportation are calculated by multiplying weight, distance, and loading rate by emission factors for each type of transportation, which is based on the emission factor used to calculate GHG throughout the supply chain. (See IDEA.) Also, emission impacts from loading/unloading are minimal and therefore not included.</p>
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, which is based on the emission factor used to calculate GHG throughout the supply chain. (See IDEA.)
6. Business travel	Calculated by multiplying the total number of employees by the emission factor, which is based on the emission factor used to calculate GHG throughout the supply chain. (See IDEA.)

Category	Calculation Method
7. Employee commuting	Calculated by multiplying the total number of employees and the average number of days of operation by the emission factor, which is based on the emission factor used to calculate GHG throughout the supply chain. (See IDEA.)
8. Upstream leased assets	Calculated by multiplying floor area of relevant building by the emission factor per unit of floor area, which is based on the emission factor used to calculate GHG throughout the supply chain. (See IDEA.)
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.
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, which is based on the emission factor used to calculate GHG throughout the supply chain. (See IDEA.)
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

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

### Related Information

Toray Group has obtained third-party assurance of its Scope 1, 2 and 3 greenhouse gas emissions from LRQA Limited.

> [Third-Party Assurance](#)

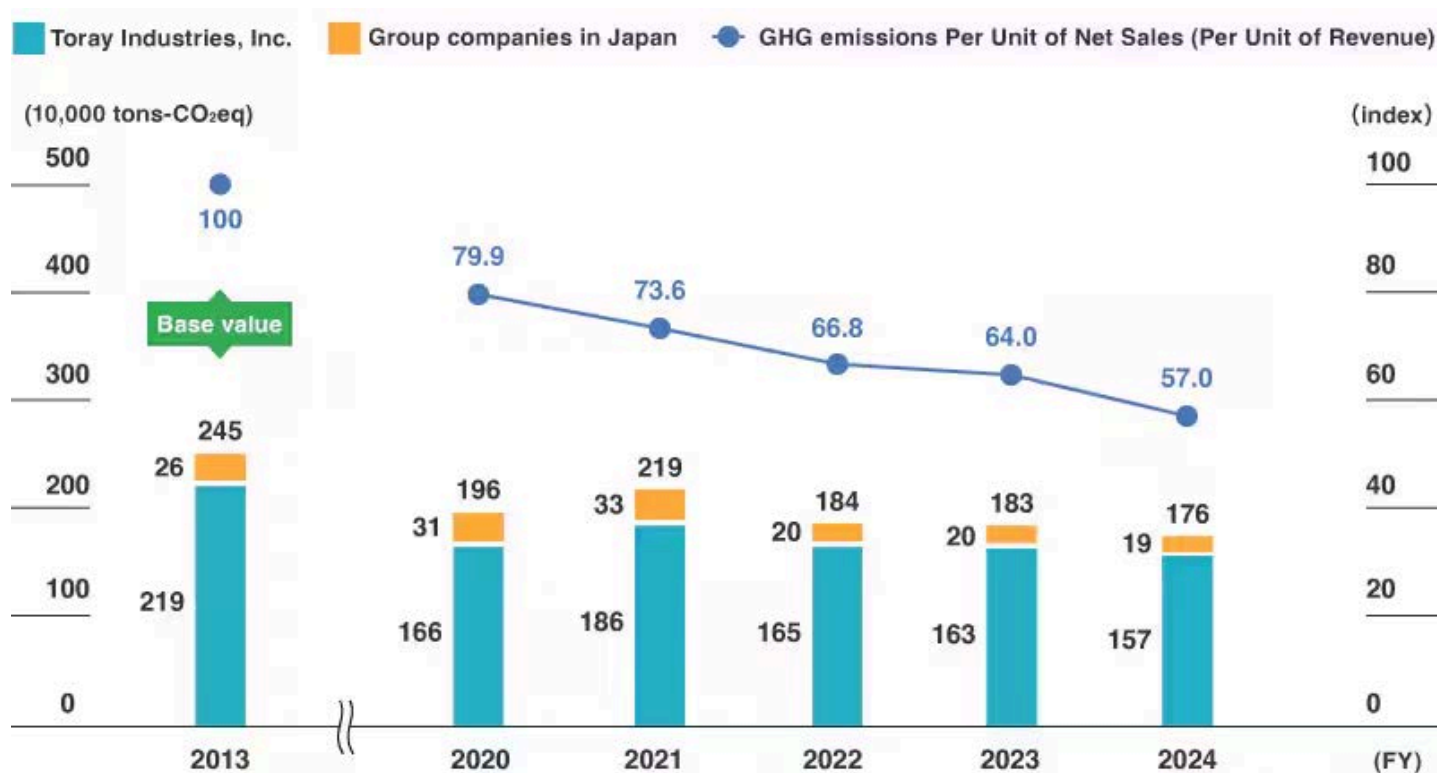


## Greenhouse Gas Emissions (Scope 1 and 2) for Toray Industries and Its Group Companies in Japan

CSR Roadmap 2025  
Main Initiatives (6)

In fiscal 2024, greenhouse gas emissions (Scope 1 and 2) at Toray Industries and its group companies in Japan decreased by 3.5% compared to the previous fiscal year. Greenhouse gas emissions per unit of revenue improved by 10.9% compared to the previous fiscal year, due to efforts to reduce emissions and an increase in sales revenue. This resulted in a 43.0% reduction compared to fiscal 2013.

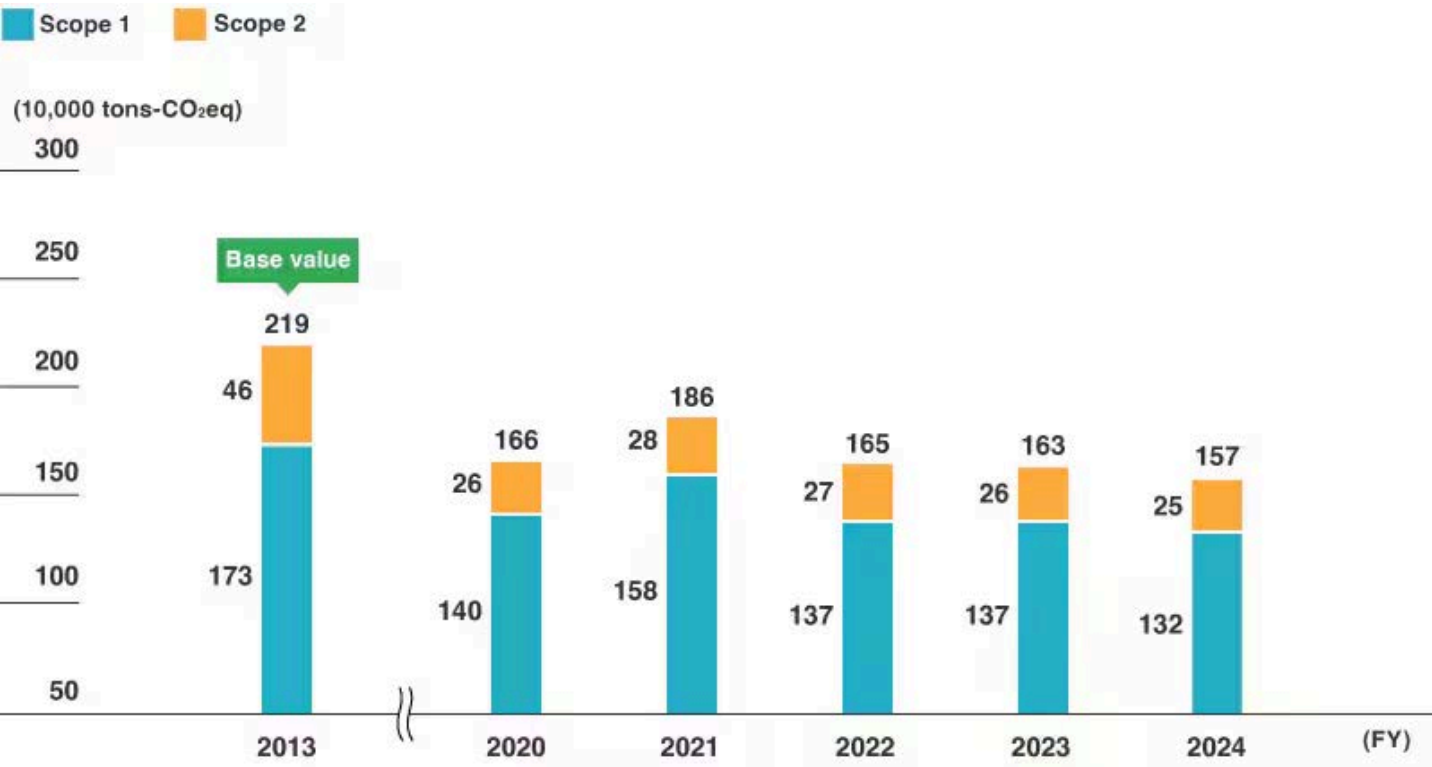
### Greenhouse Gas Emissions (Scope 1 and 2) and Greenhouse Gas Emissions Per Unit of Net Sales (Per Unit of Revenue) (Toray Group in Japan)



#### Notes:

- Figures for the baseline year of fiscal 2013 are calculated using Japanese GAAP and include companies that joined Toray Group in fiscal 2014 or later.
- The calculation method for the baseline year of fiscal 2013 and for fiscal 2023 onward 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 2020 through fiscal 2022 are based on multiplying greenhouse gas emissions by equity share.

Greenhouse Gas Emissions (Scope 1 and 2) (Toray Industries, Inc.)



Installing Renewable Energy Systems

CSR Roadmap 2025  
Main Initiatives (6)

**Increase in solar power generation capacity (%)**

■Reporting scope  
Toray Group

■Target  
At least 10% higher than fiscal 2022 (Fiscal 2025)

Result in fiscal 2024

**182%**

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 2024, the expansion of solar power systems at the Toray Industries Shiga Plant, new installation at the Company's Ishikawa Plant and system expansion at group company plants in China resulted in an 182% 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 Ishikawa Plant

Renewable energy generated in fiscal 2024	104,609 MWh
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Toray Group has installed solar power generation facilities at the following plants:

<b>Toray Industries, Inc.</b>	<ul style="list-style-type: none"> <li>• Shiga Plant</li> <li>• Seta Plant</li> <li>• Ehime Plant</li> <li>• Okazaki Plant</li> <li>• Mishima Plant</li> <li>• Ishikawa Plant</li> <li>• Nasu Plant</li> <li>• Basic Research Center (Kamakura)</li> </ul>
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<b>Group companies in Japan</b>	<ul style="list-style-type: none"> <li>• Toray Textiles, Inc.</li> <li>• Toray Plastics Precision Co., Ltd.</li> <li>• Toray KP Films Inc.</li> <li>• Toray Advanced Film Co., Ltd.</li> <li>• Soda Aromatic Co., Ltd.</li> <li>• Toray Fine Chemicals Co., Ltd.</li> <li>• Toray Carbon Magic Co., Ltd.</li> <li>• Toray Engineering Co., Ltd.</li> <li>• Toray Engineering West Co., Ltd.</li> <li>• Toray Engineering Central Co., Ltd.</li> <li>• Toray Construction Co., Ltd.</li> <li>• Toray Precision Co., Ltd.</li> <li>• Toyo Jitsugyo Co., Ltd.</li> </ul>
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<b>Group companies outside Japan</b>	
America	
United States	<ul style="list-style-type: none"> <li>• Toray Resin Co.</li> <li>• Toray Plastics (America), Inc.</li> <li>• Toray Membrane USA, Inc.</li> </ul>
Europe	
Italy	<ul style="list-style-type: none"> <li>• Delta-Tech S.p.A.</li> </ul>
Hungary	<ul style="list-style-type: none"> <li>• Zoltek Zrt.</li> </ul>
Asia	
East Asia	<ul style="list-style-type: none"> <li>• Toray Fibers (Nantong) Co., Ltd.</li> <li>• Toray Polytech (Foshan) Co., Ltd.</li> <li>• Toray Polytech (Nantong) Co., Ltd.</li> <li>• Toray Sakai Weaving &amp; Dyeing (Nantong) Co., Ltd.</li> <li>• Toray Plastics (Suzhou) Co., Ltd.</li> <li>• Toray Plastics Precision (Zhongshan) Ltd</li> <li>• Toray Film Products (Zhongshan) Ltd.</li> <li>• Yihua Toray Polyester Film Co., Ltd.</li> <li>• Toray Membrane (Foshan) Co.,Ltd.</li> <li>• TAK Advanced Film (Nantong) Co., Ltd.</li> <li>• Toray Advanced Materials Korea Inc.</li> </ul>
Southeast Asia	<ul style="list-style-type: none"> <li>• Thai Toray Synthetics Co., Ltd.</li> <li>• Penfabric Sdn. Berhad</li> </ul>

## Substantial Use of Renewable Electricity at Toray Industries

Toray Industries signed a green power supply service<sup>4</sup> 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-CO<sub>2</sub>. 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, and by the Chugoku & Shikoku Branch, which is located in the Hiroshima Train Vert Building, in April 2025.

In addition, at the Shiga Plant and the Gifu Plant of Toray Industries, a portion of the electricity used in the production process for Ultrasuede was switched to CO<sub>2</sub>-free power sources starting in April 2024 in order to reduce CO<sub>2</sub> emissions from electricity consumption. This is expected to reduce greenhouse gas emissions by approximately 7,100 tons-CO<sub>2</sub> annually.

<sup>4</sup> 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 to Protect the Ozone Layer

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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

See the following webpage for information on climate-related disclosures in line with the recommendations of the Task Force on Climate-related Financial Disclosures (TCFD).

> [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.

## Chemical Management

### Compliance Status Regarding Worldwide Chemical Substance Regulations

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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 2024, the following key activities were conducted:

1. Registration and notification of chemical substances in compliance with country-specific regulations
2. Revision of its Safety Data Sheets (SDS) in response to Japan's revised Industrial Safety and Health Act
3. 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
4. Development of PFAS-free materials, including water-repellent textiles, polyimide materials, electrolyte membranes, and release films for semiconductors
5. Development of new wavelength conversion sheets using cadmium-free materials

As of June 2025, there are 26 Toray products that contain SVHC substances at a rate exceeding 0.1% by weight.

### Management of Chemicals in Products (CiP)

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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

1. Class I specified chemical substances regulated under the Japanese Act on the Regulation of Manufacture and Evaluation of Chemical Substances
2. Substances banned under the Japanese Industrial Safety and Health Act

## Controlled Substances

1. 10 restricted substances under the EU RoHS Directive
2. Azo compounds that form specified amines under the Japanese Act on Control of Household Products Containing Harmful Substances
3. Ozone depleting substances under the Japanese Act on the Protection of the Ozone Layer
4. Radioactive substances

Controlled substances other than those listed above are designated primarily in accordance with the laws and regulations pertaining to chemSHERPA<sup>1</sup>.

<sup>1</sup> chemSHERPA: Information-sharing scheme for chemical substances, managed by the Joint Article Management Promotion-consortium (JAMP) (<https://cmp-consortium.com/english>)

Based on information on the chemical substances contained in its products, the Group classifies all chemicals in its products according to the Globally Harmonized System (GHS) of Classification and Labelling of Chemicals, and affixes labels to products that are classified as hazardous. In addition, the Group provides information on the chemical components in its products through Safety Data Sheets (SDS), regardless of whether they are classified as hazardous under GHS.

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

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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 2024, training was provided to interested employees within Toray Group on nine topics, including chemical management systems in South Korea and Southeast Asia and the use of IT tools. A total of 1,645 employees took part in the training sessions.

## 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 2024  
At least 72% lower than fiscal 2000

Result in fiscal 2024

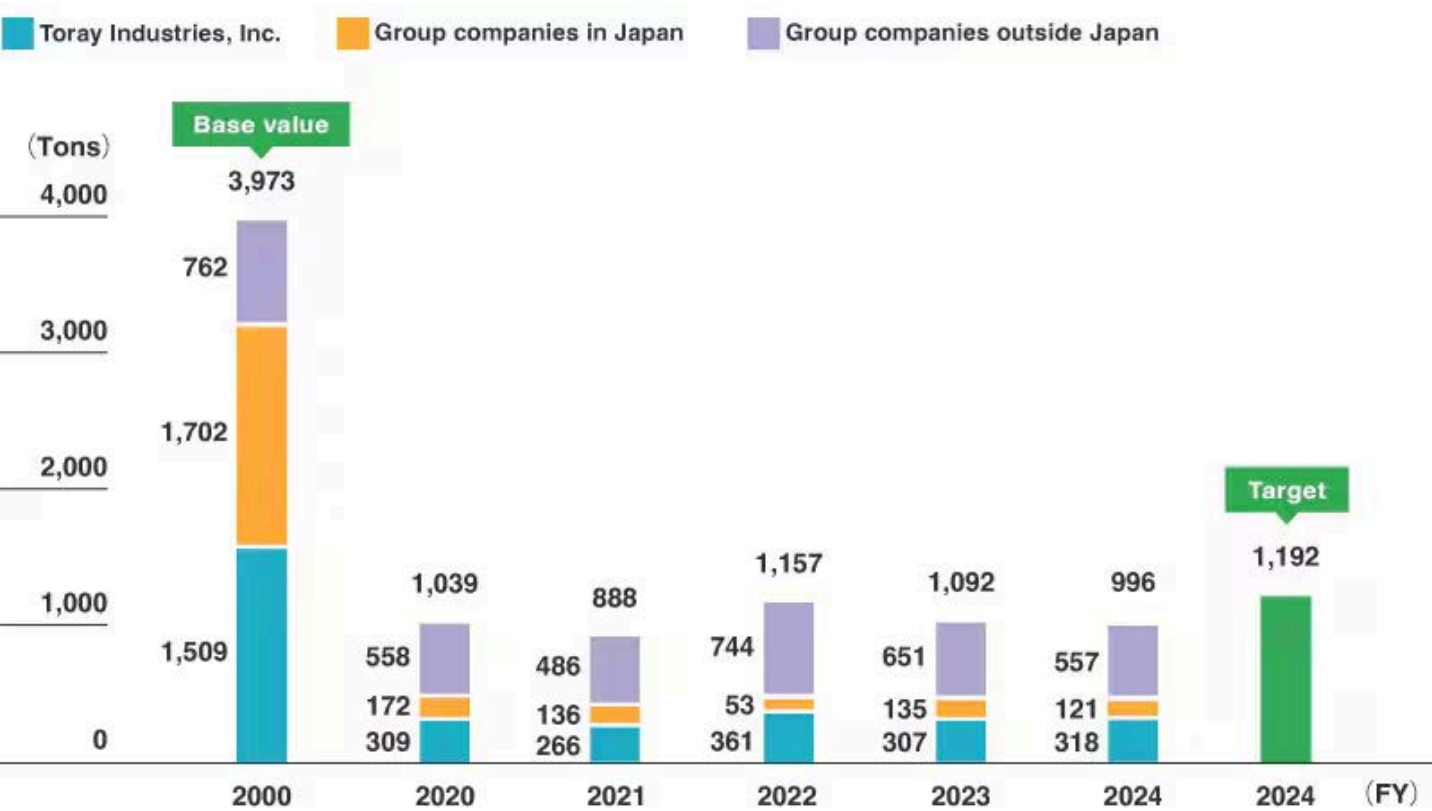
**74.9%**

In fiscal 2024, Toray Group's atmospheric VOC emissions were 996 tons, down 8.8% (97 tons) compared to the previous fiscal year.

The emissions were 74.9% below the base year of fiscal 2000, achieving the CSR Roadmap 2025 target of a 72% 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 (Toray Group)



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.

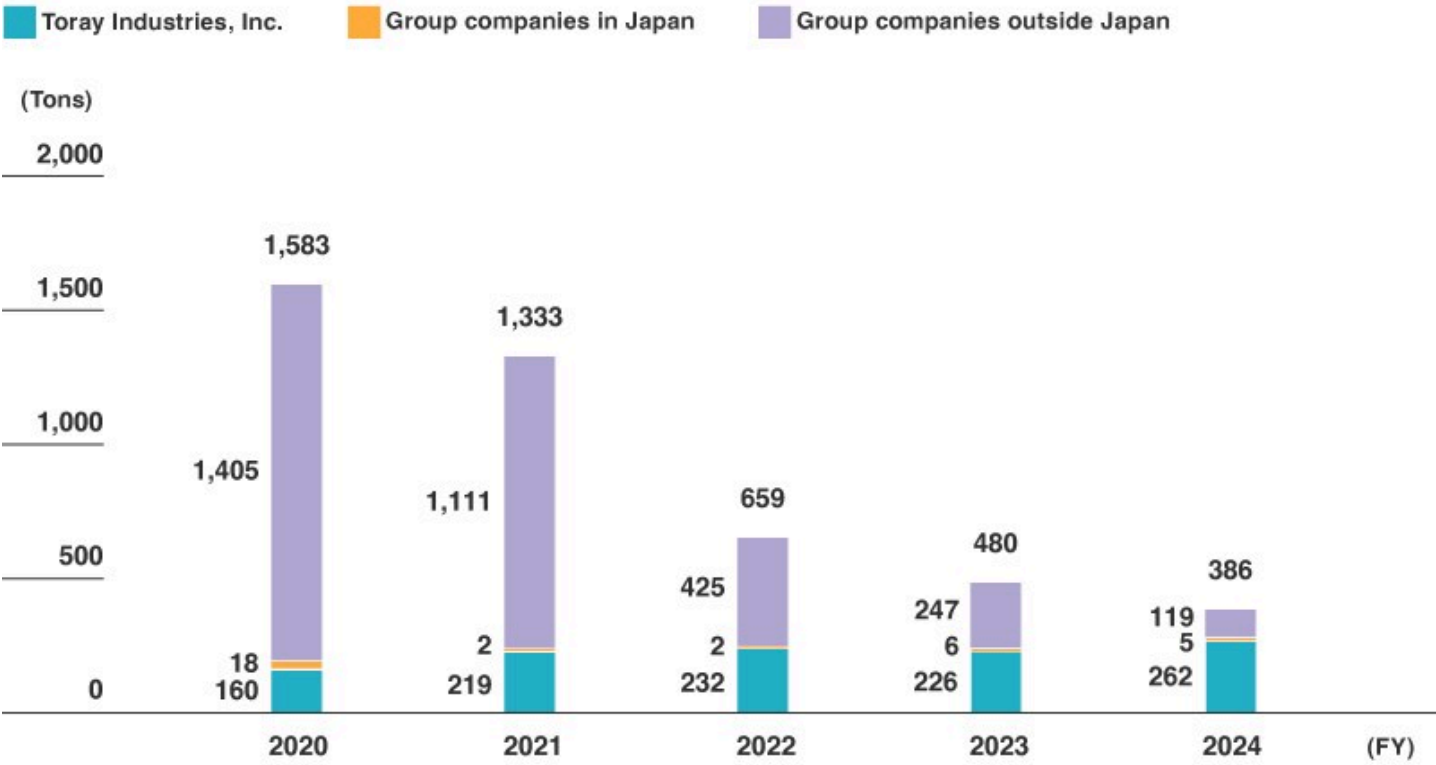
In fiscal 2024, total atmospheric emissions of PRTR-regulated substances across the Toray Group amounted to 699 tons. This represented a 73.4% reduction compared to the base year of fiscal 2000.

Air Pollutant Management

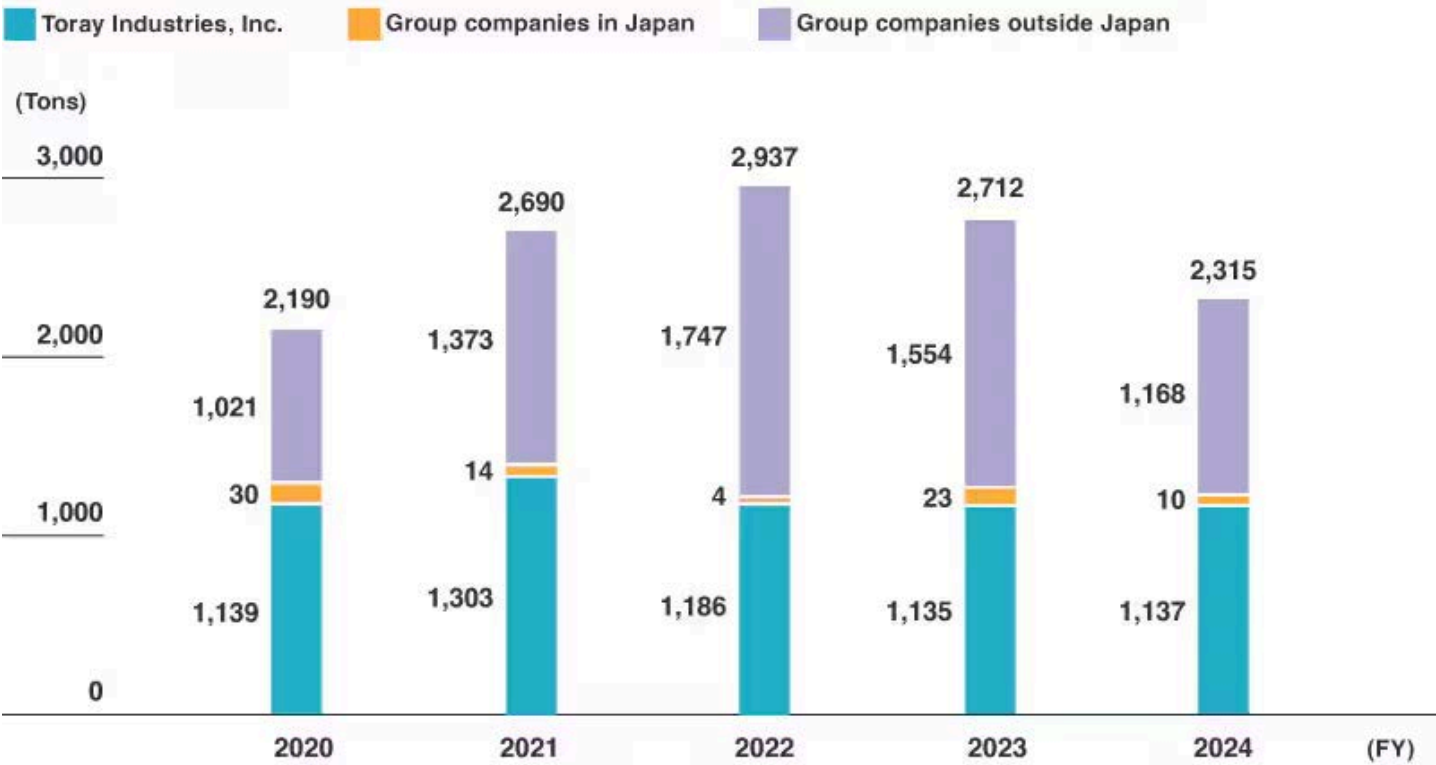
In fiscal 2024, Toray Group recorded 386 tons of SOx emissions (down 20% year on year), 2,315 tons of nitrogen oxide (NOx) emissions (down 15% year on year), and 239 tons of dust emissions (down 62% year on year). These reductions were mainly due to the decline in coal-fueled boiler operations at group companies outside of Japan.



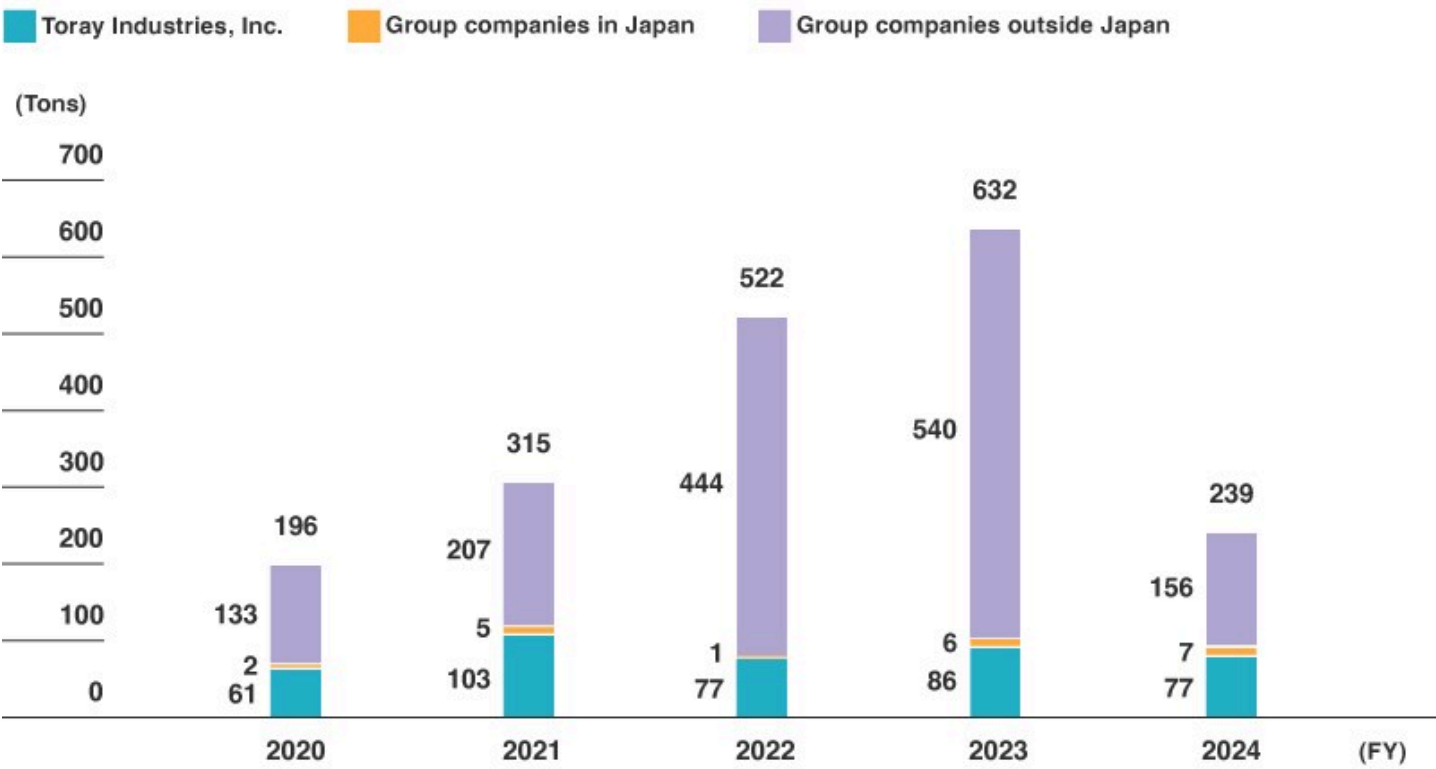
Atmospheric SOx Emissions (Toray Group)



Atmospheric NOx Emissions (Toray Group)



Atmospheric Dust Emissions (Toray Group)



Water Pollutant Management

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.

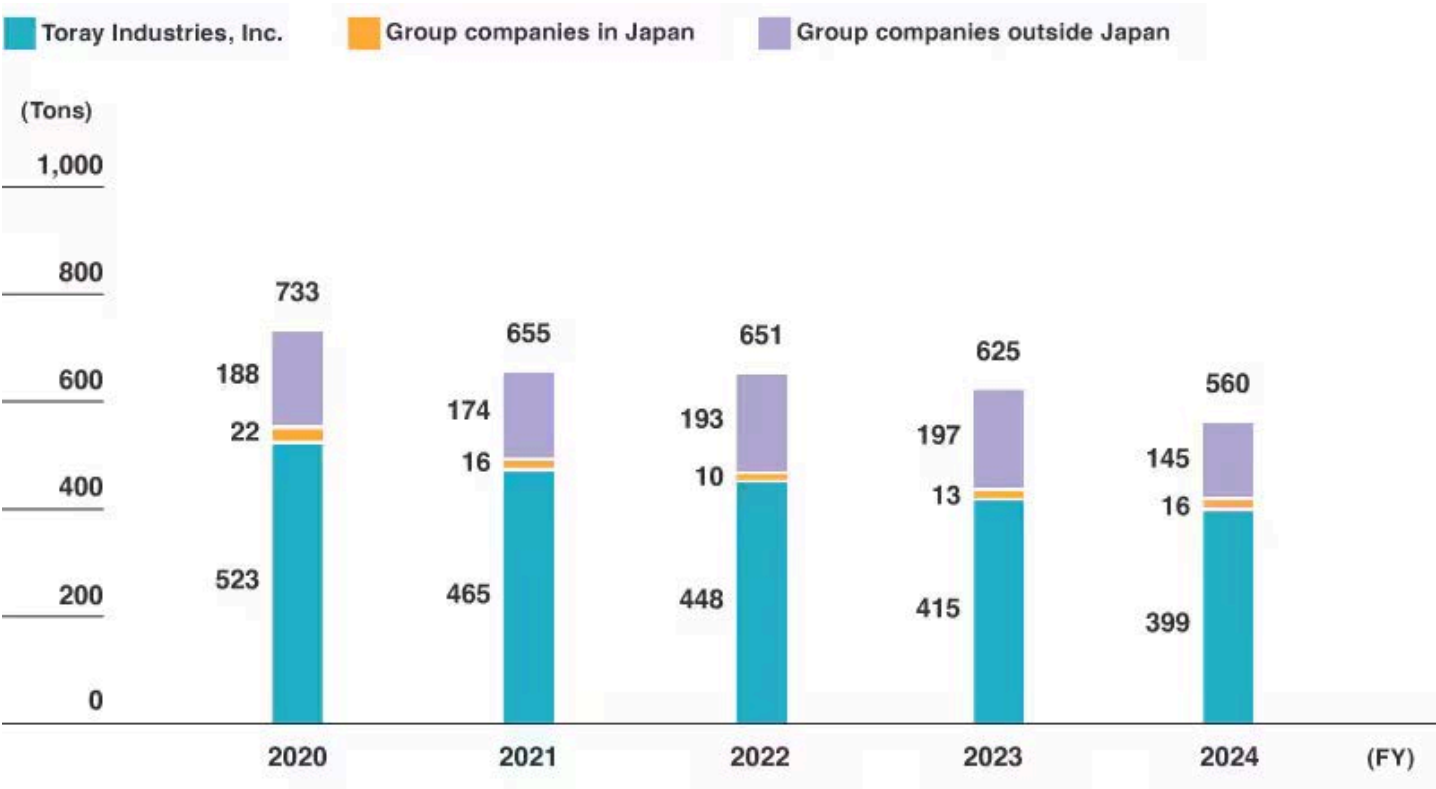
Plants with high effluent loads are reducing effluents by installing wastewater treatment facilities (activated sludge method) that utilize the activated sludge method and other techniques.

The Group is committed to remaining in compliance with regulations through everyday facilities operation management and regular self-testing of water quality.

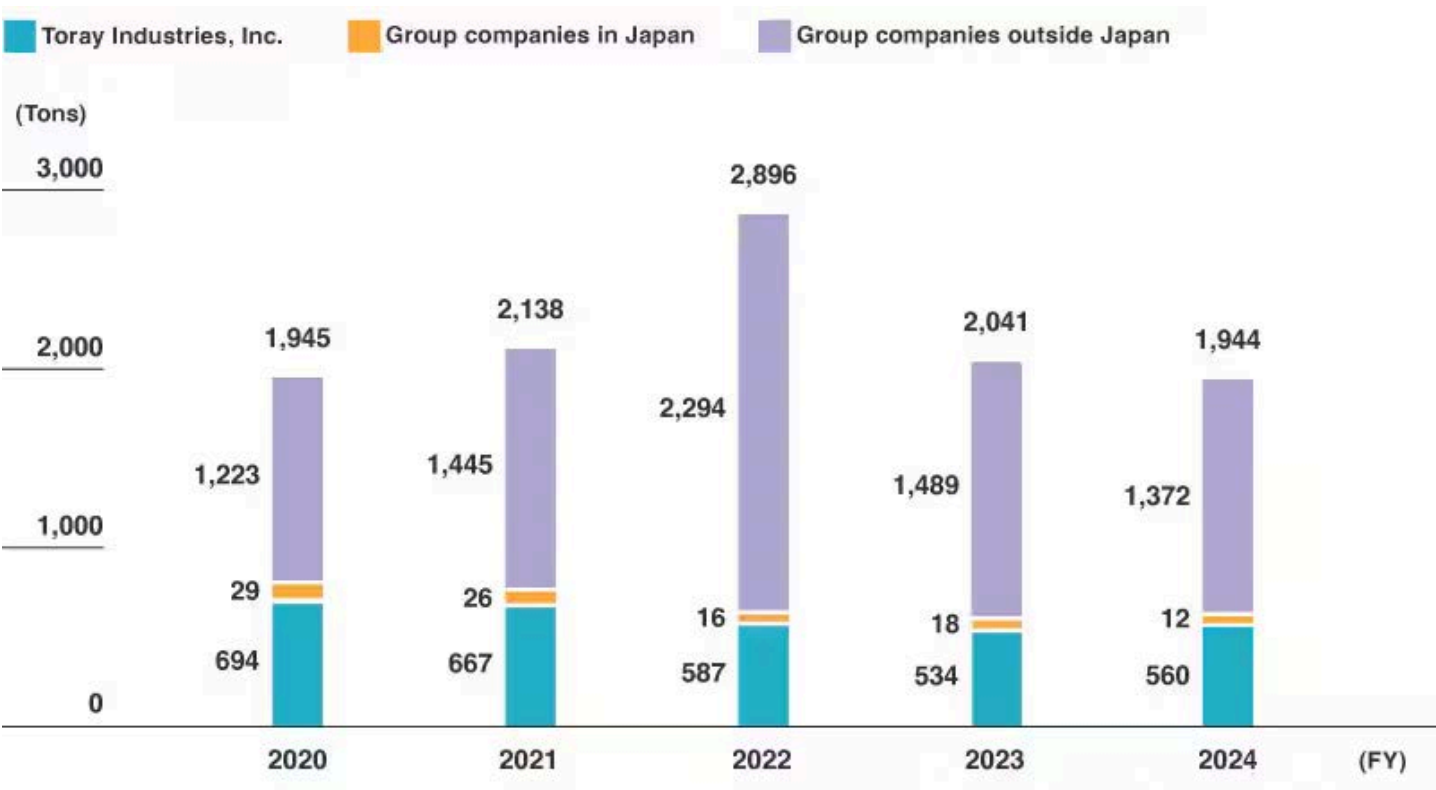
In fiscal 2024, Toray Group recorded 560 tons of BOD emissions (down 11% year on year) and 1,944 tons of COD emissions (down 5% year on year). These improvements are the result of enhancement of wastewater treatment process efficiency and other efforts.

Moving forward, Toray Industries will further strengthen the technical support provided to group companies to achieve greater reduction of effluent loads.

BOD Water Emissions (Toray Group)



COD Water Emissions (Toray Group)



Furthermore, to enhance wastewater management levels at each production site, the following initiatives are being implemented:

### 1. Wastewater Management Information Exchange Meetings

Annual wastewater management information exchange meetings are held for wastewater management personnel. The fiscal 2024 meeting was attended by 45 persons from Toray Industries' plants and 36 persons from group companies in Japan.

### 2. Technical Guidance and On-Site Training

Since fiscal 2022, Toray Group has been conducting facility surveys and holding guidance meetings on operation and management with the aim of achieving consistent performance at wastewater treatment facilities. By fiscal 2023, these activities were completed at sites in Japan, and from fiscal 2024 the scope has been expanded to overseas sites. In Thailand and Malaysia, surveys and technical guidance were carried out at group companies.



Guidance meeting and on-site inspection in Malaysia

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

## 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 8.0% 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.

At 19 production sites located in areas with high water risk, the Group is taking the following measures to reduce this risk:

- Installation of equipment with backup functions, such as recycling of factory wastewater and utilizing reservoirs
- Drawing water from rivers with stable flow rates, using pipelines, etc.

# Production Activity Initiatives

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.

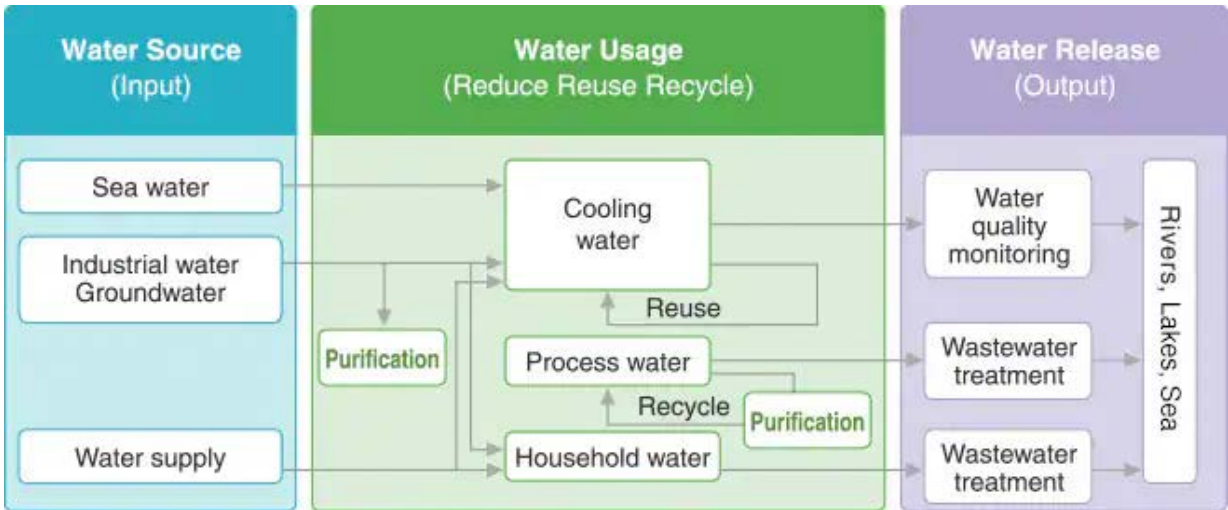
For example, Toray Sakai Weaving & Dyeing (Nantong) Co., Ltd., located in Nantong, China, recycles all water used for its looms and, additionally, purifies approximately 1,300 tons/day of effluent from the dyeing process using Toray reverse osmosis membrane water treatment technology before the effluent 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<sup>1</sup> (Fiscal 2025)

### Result in fiscal 2024

**37.8%**

<sup>1</sup> 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 fiscal 2024, Toray Group used 209 million tons of water, approximately 1.8 million tons more 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 2024 was 62.2 points, down 2.5 points from the previous fiscal year. This improvement in water usage per unit of revenue is thanks to the reuse of cooling water and effluent in the manufacturing process.

## Comparative Water Usage Per Unit of Net Sales (Per Unit of Revenue) (Toray Group)

FY	2018	2019	2020	2021	2022	2023	2024
Comparative Water Usage Per Unit of Net Sales (Per Unit of Revenue)	77.9	77.1	82.4	71.7	68.1	64.7	62.2

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.

### Related Information

See the following page for information on Toray Group's water usage.

> [ESG Data](#)

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



## Initiatives to Reduce Waste

CSR Roadmap 2025  
Main Initiatives (8)

Toray Group is making effective use of resources as it works toward the realization of a sustainable, recycling-based world. To identify opportunities to improve waste reduction performance, the Group aggregates and analyzes environmental data, including waste volumes, and conducts internal audits to confirm the appropriateness of disposal methods.

Under its CSR Roadmap 2025, which covers fiscal 2023-2025, the Group has set the waste recycling rate<sup>1</sup> as a KPI, drawing on the gathered data as a reference. 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. At the same time, each Toray Industries plant is working to reduce and prevent the generation of waste as part of its environmental management efforts under ISO 14001. To achieve these goals, a wide range of initiatives are being pursued, including separation and volume reduction of waste, converting waste into valuable resources, and educating employees.

<sup>1</sup> Waste recycling rate = (recycled resources + resources with monetary worth) / (total waste + resources with monetary worth)

### Waste recycling rate

■Reporting scope  
Toray Group

■Target in fiscal 2024  
At least 87%

Result in fiscal 2024

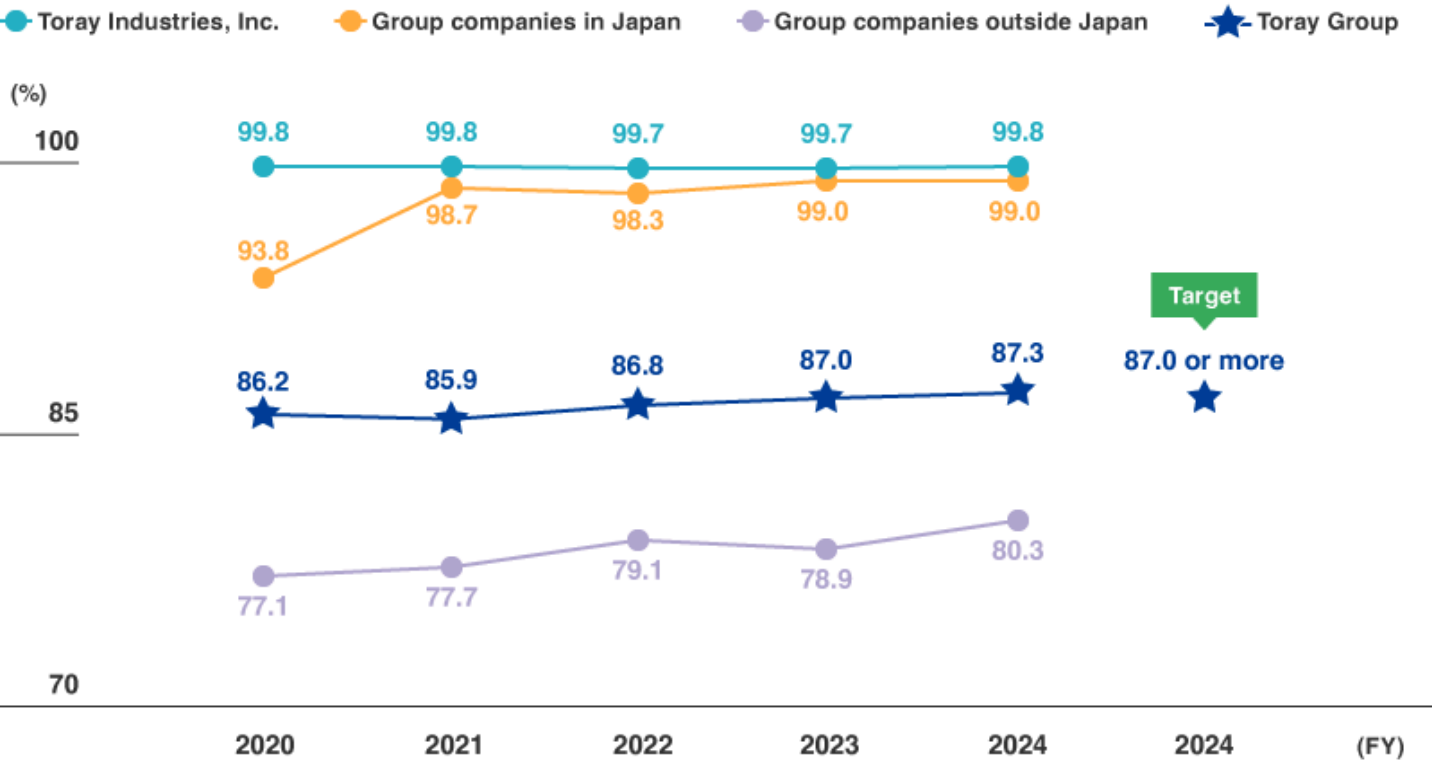
**87.3%**

The Toray Group recycling rate in fiscal 2024 was 87.3%, up by 0.3 percentage points year on year, thanks to efforts to promote stable operation of sludge drying equipment at relevant group companies, as well as progress in recycling and converting waste into valuable resources at each site. As a result, the Group achieved its CSR Roadmap 2025 target of 87% or higher.

Going forward, Toray will continue efforts to achieve the waste recycling rate KPI set in a 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.

# Environmental Risk Management

## Compliance with Environmental Laws and Accidents

CSR Roadmap 2025  
Main Initiatives (5)

### Number of environmental accidents

■Reporting scope  
Toray Group

■Target in fiscal 2024  
0

### Result in fiscal 2024

6

In fiscal 2024, six 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 implemented response measures based on internal rules. At the same time, the plants conducted analytical investigations and reviews of the surroundings and confirmed that the impact on the environment was extremely minor.

The causes of these accidents included insufficient management of wastewater treatment facilities and failure to anticipate pipe corrosion due to the effects of chemicals. To prevent recurrences, Toray will take thorough measures group-wide such as reviewing emergency response procedures for wastewater treatment facilities, checking chemical pipe corrosion, as well as strengthening the management of wastewater within factories.

The Group received two complaints from residents near its facilities concerning noise, which were seriously examined and addressed by implementing improvements.

### Environmental Accidents in FY 2024 (Toray Group)

Administrative disposition due to violations of laws or ordinances Note: Serious environmental accidents resulting in improvement orders	0
Accidents (environmental accidents, etc.) Note: Environmental accidents for which improvement guidance and recommendations are issued	3
Slight but temporary exceeding of standard values Note: Environmental accidents for which improvement guidance and recommendations are not issued by local government	3
Complaints/requests (noise, odor, etc.)	2

## 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):

1. Does the product comply with the Toray Green Procurement Guidelines? (e.g. Is it free from prohibited substances?)
2. To help protect biodiversity, do the operational emissions exceed the standard values for regulated substances?
3. Is recycling used within the processes and are waste heat and unused energy utilized effectively?
4. Have the amounts of exhaust gas and noise generated during product use been reduced?
5. 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 2024, 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.

## Environmental Accounting

### 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 2024, the Company's environment-related investment amounted to 6.73 billion yen, up 4.93 billion yen compared to the previous year, mainly due to increased investments in facilities to reduce atmospheric emissions of acrylonitrile.

On the other hand, environment-related costs totaled 9.16 billion yen, down 0.54 billion yen compared to the previous year, reflecting factors such as reduced fuel consumption.

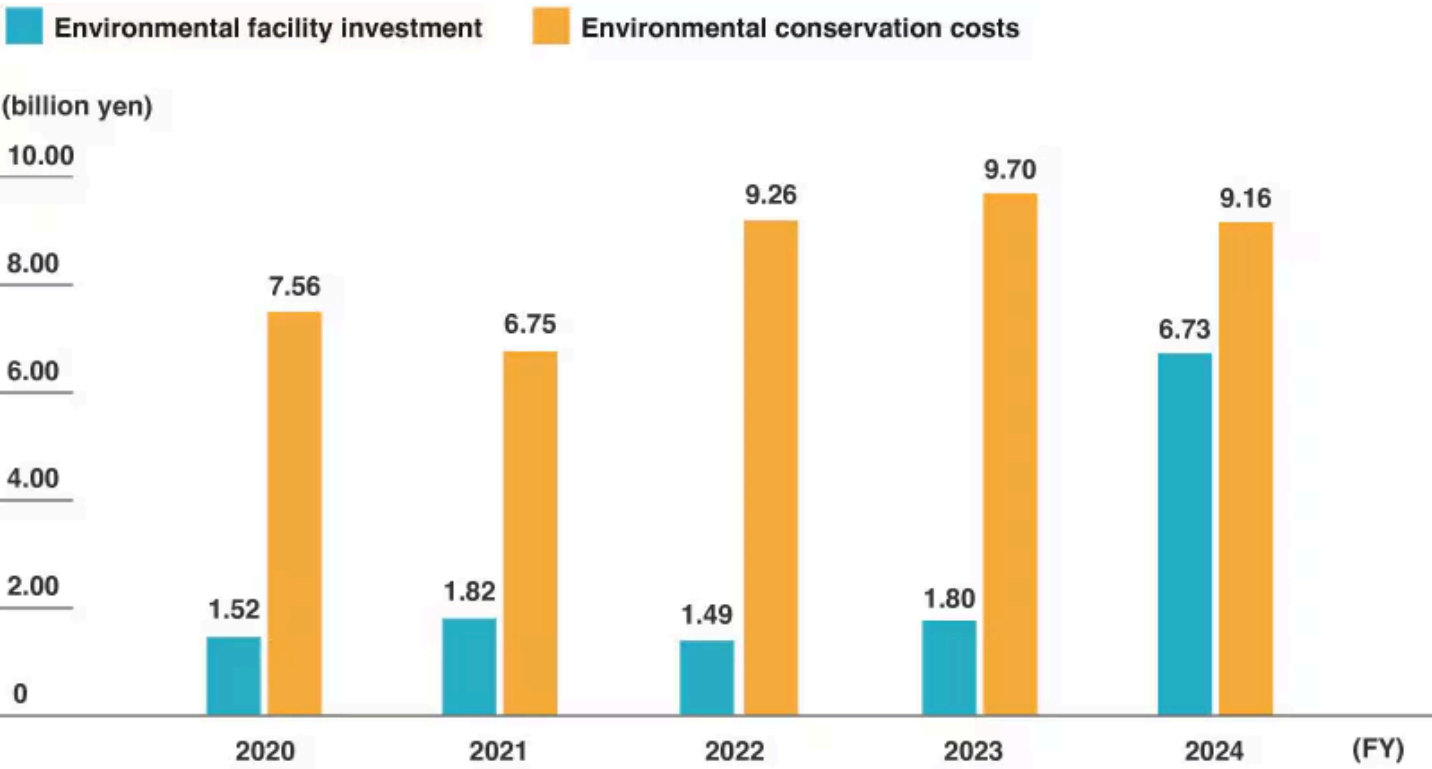
#### FY 2024 Environmental Accounting Report (Toray Industries, Inc.)

Expenses				
Item		Subcategory and description	Investment (million yen)	Cost (million yen)
Business area costs	Pollution prevention costs	Air (including CFC countermeasures)	5,236	3,890
		Water quality	623	2,287
		Noise and vibration	7	13
		Greening	16	301
		Odors and other	39	233
	Global environment conservation costs	Energy conservation and combating global warming	151	110
	Resource recycling costs	Industrial waste reduction, recycling, disposal, and PCB waste disposal services	41	1,213
Upstream and downstream costs		Product recycling	621	140
		Container and package recycling	0	1

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	616
Social initiative costs	Regional initiatives, support for organizations, etc.	0	202
Environmental remediation costs	SOx fines, soil purification, etc.	0	151
Total		6,735	9,156

Effectiveness		
Item		Amount (million yen)
Financial effects	Reduction in energy costs	65
	Reduction in industrial waste disposal costs	52
	Sale of valuable recycled resources with monetary value	767
Quantitative environmental effects	Reduction of greenhouse gas emissions	1,500 tons-CO <sub>2</sub> eq

Environmental Facility Investment and Environmental Conservation Costs (Toray Industries, Inc.)



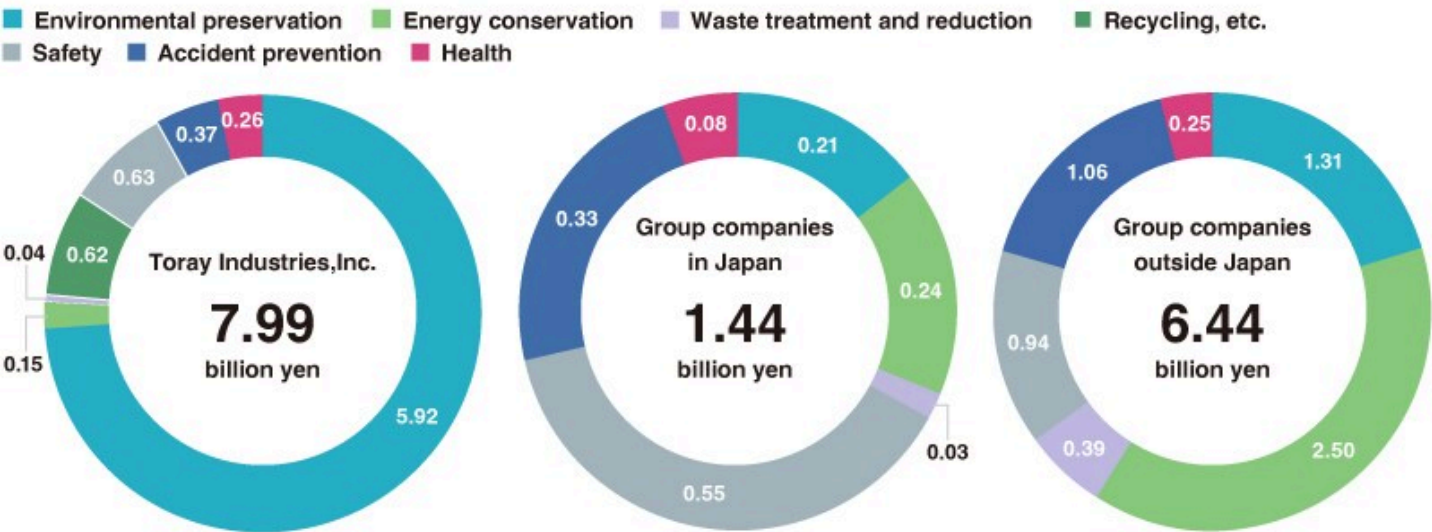
Facility Investment in Safety, Health, Accident Prevention, and Environmental Preservation Projects

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.

FY 2024 Facility Investment in Safety, Health, Accident Prevention, Environmental Preservation, and Energy Conservation Projects (Toray Group)



### **Toray Industries Environmental Accounting Standards**

1. Some categories were changed based on the Ministry of the Environment's Guidelines for FY 2005.
2. Only economic effects that can be determined with a high degree of certainty are included in the calculation. Presumed effects are not included.
3. 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.
4. 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.
5. 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.
6. Effects of reducing greenhouse gas emissions are measured over a 12-month period following the completion of measures or facilities to save energy.



## Biodiversity Initiatives

CSR Roadmap 2025  
Main Initiatives (10)

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, 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.

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](#) (703KB) [PDF](#).

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.



## Structure

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In 2010, Toray Group launched a cross-organizational working group to develop biodiversity initiatives. The CSR Committee adopted the Toray Group Biodiversity Basic Policy in December of the same year, and the Group has been working to identify issues, prioritize them, and promote initiatives based on that policy.

In 2023, the team was renamed the Nature Positive (NP) Subcommittee, and some of its functions were updated. Then in 2024, the entire framework for promoting initiatives aimed at realizing the Toray Group Sustainability Vision was also revised and the Group promoted initiatives based on the following two projects.

- Sustainability Innovation Business Expansion Project (SI Business Expansion Project)  
Under this project, Toray Group worked to expand its SI businesses with the aim of helping to reduce society's environmental impact through the Group's business activities. While initiatives were basically promoted within each business division, subcommittees were established separately in cross-business areas such as mobility, circular economy, and hydrogen, working together to expand the SI business.
- Climate Change Action Project (Climate Change Project)  
With the objective of reducing the environmental burden from its own operations, Toray Group is pursuing an integrated approach to GHG emissions reduction and actions to help achieve a nature positive world. Within this framework, the Nature Positive (NP) Subcommittee reviewed the formulation of an overall strategy and external communication concerning initiatives to help achieve a nature positive world.

In 2025, to strengthen its response to growing and increasingly complex sustainability issues, Toray Group established the Corporate Sustainability Strategic Management Division as an organization under the direct supervision of the president, through the integration of related departments. This structure enables the Group to centrally promote the expansion of sustainability-related businesses such as biodiversity and natural capital, reduction of environmental impact, and information disclosure.

The Board of Directors receives regular reports on the progress of these initiatives, monitors the Group's response to biodiversity appropriately, and incorporates biodiversity-related opportunities and risks as key elements in management decision-making, thereby ensuring oversight and comprehensive decision-making.

Moreover, at the Executive Committee (an advisory body to the Board of Directors), key policies and agenda items related to sustainability are also discussed.

These initiatives are closely connected with activities in governance, plants, facilities, production, safety, health, environment, risk management, human rights, human capital, as well as research and technological development. Through initiatives undertaken in collaboration with these functions, the Group is addressing challenges related to reducing overall environmental impacts.

Furthermore, the progress and outcomes of initiatives toward realizing the Toray Group Sustainability Vision are reported to the Board of Directors at least once a year. The Board appropriately monitors actions to help achieve a nature positive world and incorporates issues related to these actions as important elements in management decision-making, ensuring oversight and comprehensive judgment.

In addition, important issues related to fundamental strategies and capital investment in equipment under the SI Business Expansion Project and Climate Change Project are deliberated by the Executive Committee, an advisory body to the Board of Directors, taking into account the rapidly changing business environment. By enhancing agility in both oversight and execution, Toray Group is accelerating its response to reducing environmental impacts across society and within its own operations.

## Strategy and Initiatives

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### Strategy

#### Business-Related Risk Analysis

Toray Group conducted a risk analysis focusing on water risks (drought and flooding) and pollution risks in order to identify priority regions where dependencies and impacts related to biodiversity and natural capital, as well as associated opportunities and risks, are significant. The analysis covered 423 production sites and offices. As a result, 45 sites were identified as being located in high-risk regions. However, through on-site assessments at each location, it was confirmed that appropriate risk mitigation measures had been implemented, or that both actual and potential risks were not present.

Reference: Analysis Tools

- Water risk: Aqueduct Water Risk Atlas, a water risk assessment tool provided by the World Resources Institute (WRI)
- Pollution risk: WWF Biodiversity Risk Filter (BRF)

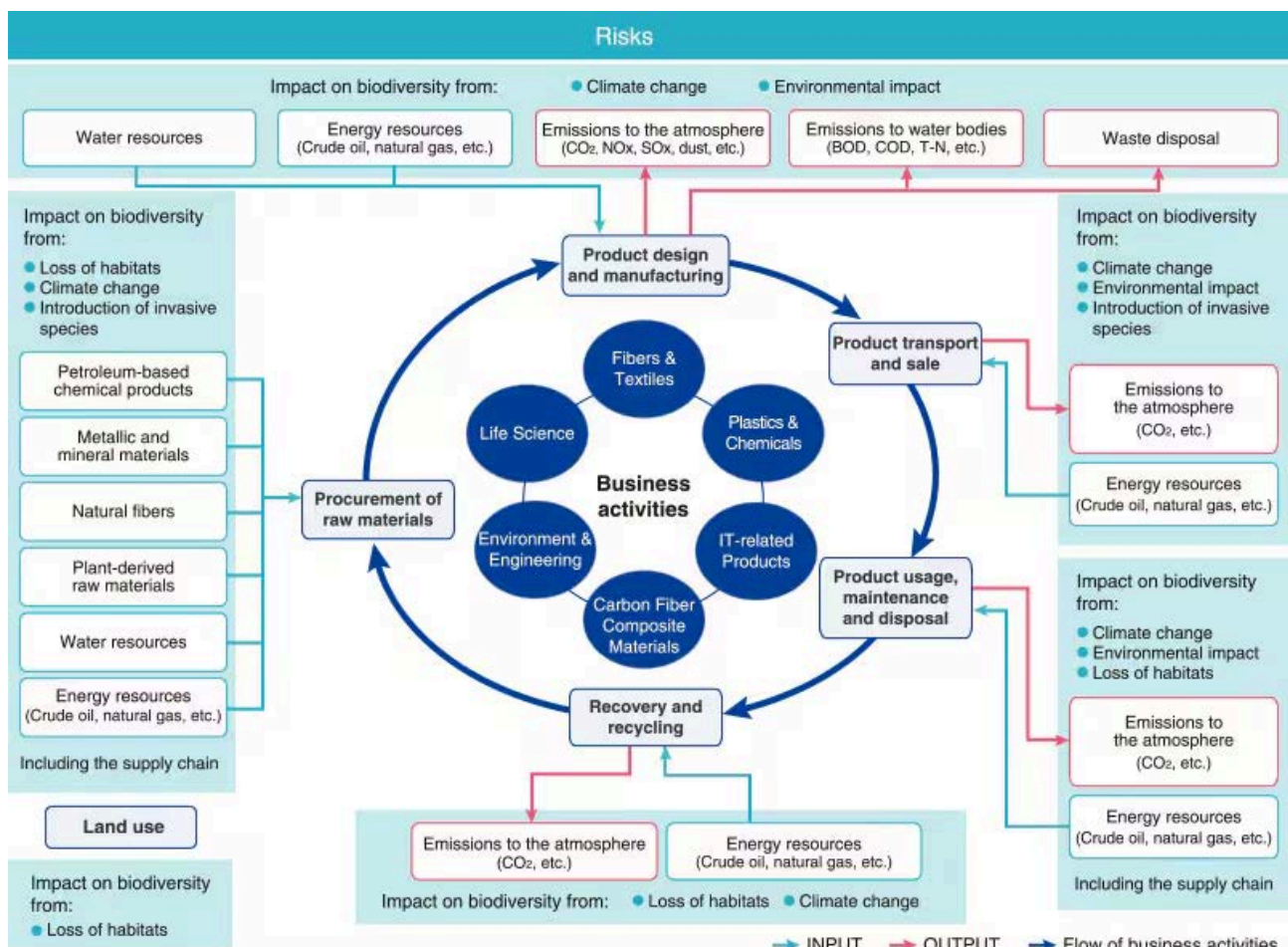
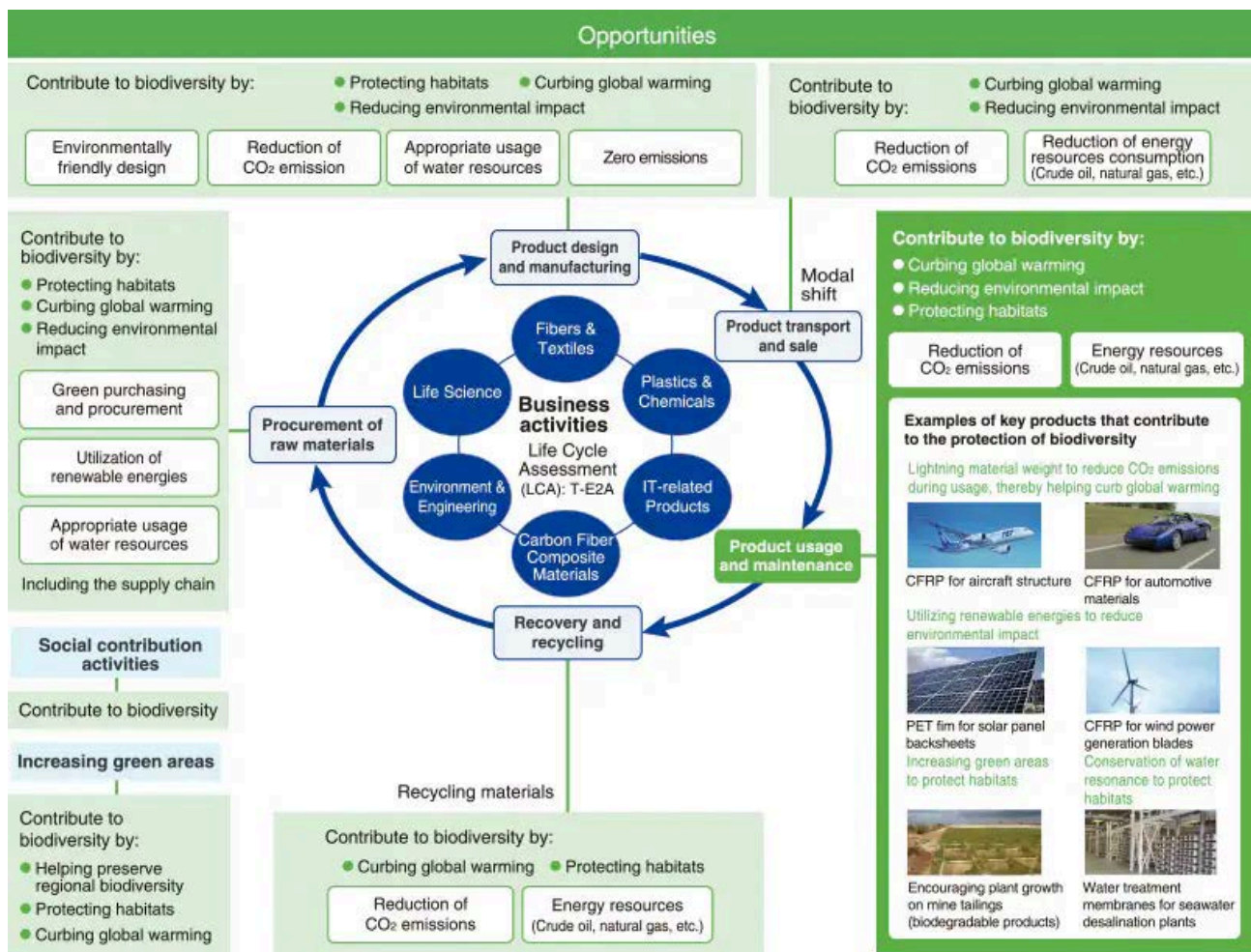
#### Analysis of Biodiversity-related Opportunities and Risks Across the Supply Chain

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 CO<sub>2</sub> 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. As one of these goals, the Group declared its aim of achieving a world with a restored natural environment, with clean water and air for everyone—in other words, a nature positive world.

To this end, Toray Group is advancing six themes identified as being of overall high importance to the Group: reducing environmentally burdensome substance use, improving water-use efficiency, reducing GHG emissions, promoting a circular economy, reducing and optimizing the use of natural resources, and conserving nature and ecosystems.

In May 2020, the Long-Term Corporate Vision TORAY VISION 2030 was announced. Then in March 2023, the three-year Project AP-G 2025 was launched.

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. 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.

## Specific Initiatives

### Green Initiatives as Part of Business Activities (Products and Technologies)

Through its business activities, Toray Group works to help preserve biodiversity and achieve a nature positive world. These activities include the use of water treatment technology to produce clean and reliable drinking water, water resource conservation through the reuse of wastewater, and air purification using textile materials for filters, as well as the recycling of plastic products, switching to bio-based raw materials, and transitioning to clean energy and hydrogen fuel.

### Related Information

- [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](#)
- [Contributing Solutions to Social Issues through Business Activities](#)

## Production Activity Initiatives

### Initiatives to reduce the impact of emissions during operations, etc.

Toray Group 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. The Group is also committed to a variety of initiatives, including waste reduction through recycling and reuse, and self-audits and training to strengthen the environmental management system.

### Related Information

- > [Initiatives for Managing Water Resources](#)
- > [Initiatives to Prevent Air and Water Pollution](#)
- > [Initiatives to Reduce Waste](#)

### 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 procurement and use of sustainable palm oil that is both 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 working to build a global system for the collection and reuse of the packaging materials that come with Toray products.

### Related Information

- > [Establishing Sustainable Supply Chain](#)
- > [Toray Group Distribution Initiatives](#)

### Local Community Initiatives

### Increasing Green Areas

#### Toray Group's Basic Policy for Increasing Green Areas

Established June 2012<sup>1</sup>



- Toray Group contributes to the preservation of the natural environment by promoting tree planting using planting methods suitable for the biodiversity of local habitats.
- Toray Group aims to surround its production plants with greenery by giving priority to tree planting in areas at the boundaries of factory sites.
- 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 Areas. The plans encompass initiatives to conserve green areas, including natural forests<sup>2</sup> that have been protected since the plants began operating. Sustainable greenery conservation initiatives also help to conserve the environment for communities.

Under the guidance of the late Akira Miyawaki, professor emeritus at Yokohama National University and renowned plant ecologist, Toray Industries has been promoting an initiative to create forests on its manufacturing sites. This initiative involves collecting acorns from nearby shrines and forests to cultivate saplings for planting. The aim is to help grow forests that preserve the genetic characteristics of local ecosystems.

In 1973, this activity began at the Mishima Plant when approximately 4,000 employees collected acorns from Mishima Taisha Shrine and Mount Hakone. Over the past 50 years, these efforts have created an environmental conservation belt surrounding the plant. The native trees grown from these acorns, including Japanese bay tree, camphor, and bambooleaf oak, now cover an area of approximately 10,000 square meters. It is still working to conserve the environment by increasing green areas.

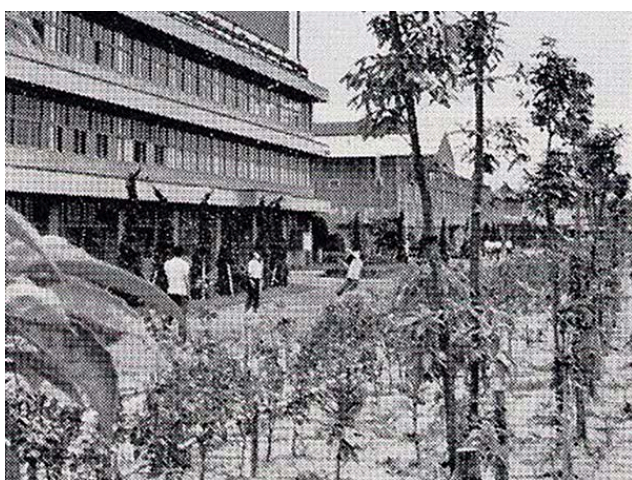
Altogether, Toray Industries has created green areas covering approximately 200,000 m<sup>2</sup> at 12 plants, including Mishima Plant and the Basic Research Center through the shrine forest method<sup>3</sup>.

<sup>1</sup> Toray Group Basic Policy on Increasing Green Areas was established in 2012, evolving out of greenery policies that were first established in 1973.

<sup>2</sup> Natural groves or forestation by species based on potential native vegetation

<sup>3</sup> 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 production sites.

### Toray Industries, Inc. (Mishima Plant)



A greening initiative has taken root, and through decades of care, the trees are still flourishing (The photo on the left shows the trees just after planting in 1973)

As a result of its efforts to conserve biodiversity and help develop the next generation of human resources, the Toray Industries Tokai Plant 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)<sup>4</sup>, 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 its first certified sites.

4 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 2025, 157 corporate green spaces have been certified.



A chestnut tiger butterfly in a plant biotope



Fujibakama (*Eupatorium japonicum*) being cultivated at the Tokai Plant



SEGES Excellent Stage 2 certification



Aichi Biodiversity Certified Company logo

The Toray Industries Shiga Plant is actively engaged in community-based green space management, including maintenance of the Sonoyama Park green space located on its grounds. This park is open to the public as a place of relaxation for local residents and also serves to strengthen ties with the community.

In addition, while working to reduce the environmental burden associated with production activities, the plant promotes the manufacture, research, and development of products that contribute to environmental conservation, such as fuel cell components and technologies for water treatment and water electrolysis systems.

These initiatives were recognized in fiscal 2024, when the plant achieved the highest rating (three stars) under the Shiga Biodiversity Initiative Certification<sup>5</sup>.

<sup>5</sup> Shiga Biodiversity Initiative Certification: Established by Shiga Prefecture in fiscal 2018, this program certifies companies engaged in biodiversity conservation and the sustainable use of natural resources. The program aims to make such corporate initiatives visible, enhance the brand value of certified companies, and promote awareness of the importance of biodiversity-conscious practices in social and economic activities. Depending on the scope of initiatives, companies are given a rating of up to three stars. As of March 2025, a total of 70 organizations have been certified.



Sonoyama Park green space



Shiga Biodiversity Initiative Certificate (3-star rating)

## Social Contribution Activities

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.

### Related Information

> [Activities Carried Out in Fiscal 2024 \(Social Contribution Activities as a Good Corporate Citizen\)](#)

## Initiatives for Internal Education on Biodiversity and Environmental Management

### Promotion of Internal Education on Biodiversity

Toray Group is promoting internal education to deepen employee understanding of biodiversity and natural capital. In February 2025, the Group held a > [CSR webinar](#) featuring an outside expert as the speaker, with 135 employees participating.

The webinar presented the nature positive concept, international environmental trends, and details of the Toray Group TNFD Report, thereby fostering greater understanding of the importance of natural capital and its relevance to business activities.

Through ongoing educational opportunities, the Group is building a framework that enables each employee to incorporate consideration for natural capital into daily decisions.

### Education and Audit Activities to Strengthen Environmental Management

Toray Group is working to strengthen its environmental management framework through the appropriate control of environmentally burdensome substances.

To enhance environmental management at each production site, regular internal audits are conducted by executive officers of Toray Industries and the Environment & Safety Department. In addition, regular meetings to exchange information are held for wastewater managers from Toray Industries and group companies in Japan.

Finally, group companies worldwide invite external wastewater management experts to provide guidance at special meetings.

## Disclosure Based on TNFD Recommendations

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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.

Toray Group compiled the results of its research and analysis based on the LEAP approach, along with the initiatives of the Toray Group, and published the Toray Group TNFD Report Ver.1 in December 2024.



[Toray Group TNFD Report Ver.1 \(4.66MB\)](#) [PDF](#)


## Responding to Deforestation

Toray Group recognizes that deforestation is a critical issue that has significant impacts on the global environment and human lives, contributing to wildlife extinction, accelerating climate change, and spreading infectious diseases. Based on this recognition, the Toray Group Biodiversity Basic Policy stipulates that the Group will strive to conserve biodiversity and ensure its sustainability. In this context, preventing deforestation is considered an important element of biodiversity conservation.

Furthermore, to help address this issue, Toray Group follows the first of its Ten Basic Environmental Rules, namely, “prioritize environmental preservation.” In following this rule, the Group complies 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.

In addition, the Toray Group Policy for Human Rights and the Toray Group CSR Procurement Policies emphasize respect for human rights, explicitly stating that the Group will not engage in or be complicit in human rights violations such as forced labor or child labor. In accordance with these policies, the Group conducts its business activities with the utmost consideration for forest conservation and the protection of related human rights.

### Examples of Toray Group Activities

1. For its “[Message to Shareholders \(6.32MB\)](#)  (in Japanese only)” and internal newsletter publication, the Group uses Forest Stewardship Council (FSC) certified paper made from wood harvested from responsibly managed forests.
2. The Group promotes green procurement, actively purchasing and using recycled paper.
3. The Group reduces its usage of paper resources such as those used to make paper cups and copy paper.
4. Each group plant and company makes efforts to preserve nearby green spaces.
5. Employee tree planting activities are conducted as part of social contribution initiatives in collaboration with local residents and local governments.

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

## Index of Environmental Impact Per Unit of Sales and Scope of Aggregation

### Index of Environmental Impact Per Unit of Sales

	Toray Industries, Inc.					Group companies in Japan					Group companies outside Japan				
	2021	2022	2023	2024	Year-on-year comparison (points)	2021	2022	2023	2024	Year-on-year comparison (points)	2021	2022	2023	2024	Year-on-year comparison (points)
GHG emissions	57.0	48.5	46.7	42.1	4.6	75.1	53.7	40.5	47.6	-7.1	50.1	44.4	40.8	37.0	3.8
PRTR atmospheric emissions	30.2	22.0	23.6	22.2	1.4	8.9	12.9	10.7	11.9	-1.2	24.4	28.6	31.0	20.5	10.5
SOx emissions	3.7	3.6	3.6	3.9	-0.3	4.8	3.8	11.0	10.1	0.9	4.2	1.5	0.8	0.4	0.4
Water usage volume	74.2	66.0	65.2	61.4	3.8	64.9	93.0	41.2	49.0	-7.8	31.7	37.6	25.4	25.3	0.1
BOD emissions	30.7	27.3	25.9	23.1	2.8	15.5	11.3	10.9	16.9	-6.0	10.3	40.3	10.0	7.2	2.8
Landfilled waste volume	0.9	0.6	1.4	1.2	0.2	7.0	10.5	4.6	3.5	1.1	29.9	27.2	21.1	27.2	-6.1

Note: 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.

### Scope of Aggregate Environmental Impact Data

	Toray Industries, Inc.	Group companies in Japan	Group companies outside Japan
GHG	All 13 plants and 1 research laboratory	47 plants at 27 companies	84 plants at 65 companies
PRTR Law-specified substances	All 13 plants and 1 research laboratory	42 plants at 25 companies	80 plants at 63 companies
SOx, NOx, dust	All 13 plants and 1 research laboratory	39 plants at 25 companies	80 plants at 63 companies
BOD	All 13 plants and 1 research laboratory	39 plants at 25 companies	80 plants at 63 companies
COD <sup>1</sup>	All 13 plants and 1 research laboratory	39 plants at 25 companies	80 plants at 63 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	80 plants at 63 companies

<sup>1</sup> 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).



## Chemical Substance Emissions and Transfer Data

PRTR Law-Specified Substance<sup>1</sup> Emissions and Transfer Data for Fiscal 2024

<sup>1</sup> Chemical substances designated Class 1 under the April 2023 revision of Japan's PRTR Law

Toray Industries, Inc.	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	6.9	2.9	0.0	0.5
Acetaldehyde	1.9	0.0	0.0	0.0
Antimony and its compounds	0.0	0.0	0.0	0.5
Xylene	2.0	0.0	0.0	0.0
Cresol	0.0	0.0	0.0	1.4
Chromium and chromium(III) compounds	0.0	0.0	0.0	0.1
Chlorobenzene	0.1	0.0	0.0	2.2
Chloroform	0.9	0.0	0.0	7.3
Cobalt and its compounds	0.0	0.5	0.0	3.3
4,4'-diaminodiphenyl ether	0.0	0.0	0.0	0.3
Inorganic cyanide compounds (except for complex salts and cyanates)	23.9	0.0	0.0	0.0
1,4-Dioxane	0.0	4.5	0.0	0.0
Cyclohexane	10.4	1.7	0.0	58.7
2,2-Dichloro-1,1,1-trifluoroethane	0.1	0.0	0.0	0.0
3-(3,4-Dichlorophenyl)-1,1-dimethylurea (Diuron)	0.0	0.0	0.0	0.4
Dichlorobenzene	9.8	0.0	0.0	2.4
Dichloromethane	36.2	0.0	0.0	1.8
2,6-Di-tert-butyl-4-cresol (BHT)	1.8	0.0	0.0	0.2

Toray Industries, Inc.	Tons (dioxins: mg-TEQ)			
Substance name	Atmospheric emissions	Water emissions	Soil emissions / company landfill	Waste transfers
N, N-dimethylacetamide	3.9	0.0	0.0	272.8
N, N-dimethylformamide	4.4	0.0	0.0	86.4
Styrene	5.1	0.0	0.0	1.1
Tetrahydrofuran (THF)	0.1	0.0	0.0	1.7
Terephthalic acid	0.0	0.0	0.0	40.4
Dimethyl terephthalate	0.0	0.0	0.0	3.4
1,3,5-Triazine-2,4,6-triamine (Melamine)	0.0	0.0	0.0	8.3
Trichloroethylene	1.7	0.0	0.0	24.3
Toluene	5.3	0.0	0.0	44.2
Nickel	0.0	0.0	0.0	8.6
Nitrobenzene	0.0	0.0	0.0	11.1
Biphenyl	0.1	0.0	0.0	4.6
Phenylenediamine	0.0	0.0	0.0	1.8
Phenol	0.0	1.9	0.0	3.5
Bromomethane	30.0	0.0	0.0	0.0
Hexamethylenediamine	0.0	0.0	0.0	0.2
Hexane	0.1	0.0	0.0	2.3
Benzene	2.1	0.7	0.0	0.0
Poly(oxyethylene) alkyl ether (limited to those the alkyl group is C=12-15 and mixture thereof)	0.4	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	1.0
Manganese and its compounds	0.0	0.3	0.0	1.3
Methyl methacrylate	3.2	0.0	0.0	20.6
Methyl isobutyl ketone (MIBK)	0.1	0.0	0.0	2.9
N-Methyl-2-pyrrolidone (NMP)	3.1	0.0	0.0	409.1
Methylenebis (4,1-phenylene) diisocyanate	0.0	0.0	0.0	50.2
Tritolyl phosphate	0.0	0.0	0.0	0.1



Toray Industries, Inc.	Tons (dioxins: mg-TEQ)			
Substance name	Atmospheric emissions	Water emissions	Soil emissions / company landfill	Waste transfers
Total	153.9	12.9	0.0	1,088.4
Dioxins	0.0	0.4	0.0	0.0

Note: The list shows emissions and transfers of 45 substances (out of Toray Industries' 71 PRTR Law-specified substances) exceeding 50 kg and dioxins.

Group companies in Japan	Tons (dioxins: mg-TEQ)			
Substance name	Atmospheric emissions	Water emissions	Soil emissions / company landfill	Waste transfers
Allyl alcohol	0.1	0.0	0.0	3.7
Ethylbenzene	20.8	0.0	0.0	26.6
2-Ethoxyethanol	0.3	0.0	0.0	0.4
Ethylene glycol monobutyl ether (Butyl cellosolve)	0.0	0.0	0.0	6.7
Epichlorohydrin	0.0	0.0	0.0	26.9
Xylene	20.8	0.0	0.0	17.5
Cyclohexane	0.1	0.0	0.0	4.1
1,2-Dichloroethane (Ethylene dichloride)	0.0	0.0	0.0	1.2
N, N-dimethylacetamide	13.7	0.0	0.0	370.1
N, N-dimethylformamide / DMF	13.2	0.0	0.0	136.8
Silicon carbide	0.0	0.0	0.0	2.5
Tetrahydrofuran (THF)	1.5	0.0	0.0	152.0
Triethylamine	0.0	0.0	0.0	1.1
Toluene	24.5	0.0	0.0	309.1
Nickel	0.0	0.0	0.0	0.1
Hydroquinone	0.0	0.0	0.0	0.2
Hexane	1.4	0.0	0.0	55.9
Heptane	5.9	0.0	0.0	14.4
Poly(oxyethylene) alkyl ether (limited to those the alkyl group is C=12-15 and mixture thereof)	0.0	3.2	0.0	48.4
Formaldehyde	0.1	0.0	0.0	0.1

Group companies in Japan	Tons (dioxins: mg-TEQ)			
Substance name	Atmospheric emissions	Water emissions	Soil emissions / company landfill	Waste transfers
Acetic anhydride	0.1	0.0	0.0	6.8
Methacrylate acid	0.0	0.0	0.0	12.8
Methyl methacrylate	0.1	0.0	0.0	0.0
Methyl isobutyl ketone (MIBK)	0.4	0.0	0.0	1.6
Methylnaphthalene	5.7	0.0	0.0	0.0
3-Methylpyridine	0.4	0.0	0.0	10.1
N-Methyl-2-pyrrolidone (NMP)	0.1	0.0	0.0	112.4
Methylenebis (4,1-phenylene) diisocyanate	0.0	0.0	0.0	1.3
Total	109.2	3.2	0.0	1,323.0
Dioxins	0.0	0.0	0.0	0.0

Note: The list shows emissions and transfers of 28 substances (out of the 57 PRTR Law-specified substances for group companies in Japan) exceeding 50 kg and dioxins.

## Sites with ISO 14001 Certification

As of April 2025, the Toray Group sites with ISO 14001 certification are as follows:

<b>Toray Industries, Inc.: All 13 plants</b>
Shiga, Seta, Ehime, Nagoya, Tokai, Aichi, Okazaki, Mishima, Chiba, Tsuchiura, Gifu, Ishikawa, Nasu
<b>Group companies in Japan: 32 plants at 23 companies<sup>1</sup></b>
<ul style="list-style-type: none"> <li>• Ichimura Sangyo Co., Ltd.</li> <li>• Sowa Textile Co., Ltd. [Hakui]<sup>2</sup></li> <li>• TORAY LYCRA CO., LTD.</li> <li>• Toray Coatex Co., Ltd. [Kyoto, Chemical Products]</li> <li>• Toray Textiles, Inc. [Tokai]</li> <li>• Du Pont-Toray Co., Ltd. [Tokai]</li> <li>• Toray Hybrid Cord, Inc.</li> <li>• Toray Monofilament Co., Ltd.</li> <li>• Toray Plastics Precision Co., Ltd. [Mishima, Koriyama]</li> <li>• Toray PEF Products Inc. [Konan]</li> <li>• Toray Celanese Co., Ltd.</li> <li>• Toray KP Films Inc.</li> <li>• Toray Advanced Film Co., Ltd. [Takatsuki, Fukushima, Nakatsugawa]</li> <li>• Soda Aromatic Co., Ltd. [Noda, Koriyama, Okayama Chemicals]</li> <li>• DuPont Toray Specialty Materials Kabushiki Kaisha</li> <li>• Toray Fine Chemicals Co., Ltd. [Moriyama, Matsuyama, Tokai, Chiba]</li> <li>• Toray Carbon Magic Co., Ltd.</li> <li>• Suido Kiko Kaisha, Ltd.</li> <li>• Toray Engineering Co., Ltd. [Numazu]</li> <li>• Toray Building Materials Co., Ltd. [Fukushima]</li> <li>• Toray Medical Co., Ltd.</li> <li>• Toray International, Inc.</li> <li>• Chori Co., Ltd.</li> </ul>

Group companies outside Japan: 68 plants at 51 companies	
<p>America: 9 plants at 7 companies</p> <p>United States</p> <p>Mexico</p>	<ul style="list-style-type: none"> <li>• Toray Fluorofibers (America), Inc.</li> <li>• Toray Resin Co.</li> <li>• Toray Plastics (America), Inc. [Rhode Island, Virginia]</li> <li>• Toray Composite Materials America, Inc. [Decatur, Tacoma]</li> <li>• Toray Membrane USA, Inc.</li> <li>• Toray Advanced Textile Mexico, S.A. de C.V.</li> <li>• Toray Resin Mexico, S.A. de C.V.</li> </ul>
<p>Europe: 12 plants at 11 companies</p> <p>United Kingdom</p> <p>Germany</p> <p>France</p> <p>Italy</p> <p>Czech Republic</p> <p>Hungary</p>	<ul style="list-style-type: none"> <li>• Toray Textiles Europe Ltd.</li> <li>• Toray Advanced Composites UK Ltd.</li> <li>• Euro Advanced Carbon Fiber Composites GmbH</li> <li>• Greenerity GmbH</li> <li>• Toray Films Europe S.A.S.</li> <li>• Toray Carbon Fibers Europe S.A. [Abidos, Lacq]</li> <li>• Alcantara S.p.A.</li> <li>• Composite Materials (Italy) s.r.l.</li> <li>• Delta-Tech S.p.A.</li> <li>• Toray Textiles Central Europe s.r.o.</li> <li>• Zoltek Zrt.</li> </ul>
<p>MiddleAsia_Africa: 1 plant at 1 company</p> <p>Saudi Arabia</p>	<ul style="list-style-type: none"> <li>• Toray Membrane Middle East LLC</li> </ul>
<p>Asia: 46 plants at 32 companies</p> <p>East Asia</p> <p>Southeast Asia</p> <p>South Asia</p>	<ul style="list-style-type: none"> <li>• Toray Fibers (Nantong) Co., Ltd.</li> <li>• Toray Fibers &amp; Textiles Research Laboratories (China) Co., Ltd.</li> <li>• Toray Polytech (Nantong) Co., Ltd.</li> <li>• Toray Sakai Weaving &amp; Dyeing (Nantong) Co., Ltd.</li> <li>• Toray Plastics (Chengdu) Co., Ltd.</li> <li>• Toray Plastics (Suzhou) Co., Ltd.</li> <li>• Toray Plastics Precision (Zhongshan) Ltd.</li> <li>• Toray Plastics (Shenzhen) Ltd.</li> <li>• Toray Film Products (Zhongshan) Ltd.</li> <li>• Toray BlueStar Membrane Co., Ltd.</li> <li>• Toray Membrane (Foshan) Co., Ltd.</li> <li>• Toray Medical (Qingdao) Co., Ltd.</li> <li>• Toray Advanced Materials Research Laboratories (China) Co., Ltd.</li> <li>• Toray Advanced Film Kaohsiung Co., Ltd.</li> <li>• Cangzhou Toray Fine Chemicals Co., Ltd.</li> <li>• Toray Advanced Materials Korea Inc. [M1, M2, M3, M4, M5, Anseong, Yugu, Gunsan, Advanced Materials Research Center]</li> <li>• Toray BSF Coating Korea Limited</li> <li>• Toray Battery Separator Film Korea, Limited</li> <li>• STEMCO, Ltd.</li> <li>• P.T. Acryl Textile Mills</li> <li>• P.T. Century Textile Industry Tbk</li> <li>• P.T. Easterntex</li> <li>• P.T. Indonesia Synthetic Textile Mills</li> <li>• P.T. Indonesia Toray Synthetics</li> <li>• P.T. Toray Polytech Jakarta</li> <li>• Toray Textiles (Thailand) Public Company Limited [Nakhonpathom, M2, M3]</li> <li>• Thai Toray Synthetics Co., Ltd. [Bangkok, Ayutthaya, Nakhonpathom]</li> <li>• Toray BASF PBT Resin Sdn. Berhad</li> <li>• Toray Plastics (Malaysia) Sdn. Berhad</li> <li>• Penfabric Sdn. Berhad [M2, Head Office]</li> <li>• Penfibre Sdn. Berhad [Fiber, film]</li> <li>• Toray Industries (India) Private Limited</li> </ul>

<sup>1</sup> In addition, 12 plants at 10 companies received certification as affiliated companies on Toray Industries' sites.

<sup>2</sup> Information in brackets refers to the names of the plants.

# 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 <sub>2</sub> /year	tons/year	tons/year	tons/year											tons/year
Shiga Plant	5.9	0.7	0.0	0.0	159.7	0.0	29.1	2.2	33.1	34.7	12.2	3,270.0	6.0	0.0	<ul style="list-style-type: none"><li>Base material of ultrasuede™ man-made suede</li><li>TOPTICAL™ color filter</li><li>TORAYVINO™ home water purifier</li></ul>	
Seta Plant	0.2	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	102.8	0.0	0.0	<ul style="list-style-type: none"><li>TORAYLON™ acrylic fiber</li><li>Medical devices(Inoue Balloon catheters, ANTHRON™ P-U catheters)</li></ul>	
Ehime Plant	58.6	37.3	6.8	0.0	206.3	259.7	651.1	72.9	103.3	107.6	30.1	4,635.3	2.6	2.6	<ul style="list-style-type: none"><li>TORAY TETORON™ polyester staple fiber</li><li>TORAYCA™ carbon fiber</li><li>ROMEMBRA™ reverse osmosis membrane module</li><li>TORAYCON™ PBT resin</li></ul>	
Nagoya Plant	7.2	10.4	0.0	0.0	33.2	0.0	45.1	0.8	46.5	85.4	23.0	2,898.2	5.2	5.2	<ul style="list-style-type: none"><li>AMILAN™ nylon resin</li><li>TORAYCON™ PBT resin</li><li>Various fine chemicals</li></ul>	
Tokai Plant	49.0	44.1	6.0	0.0	200.0	2.4	228.4	0.2	155.8	207.7	18.7	5,154.8	0.0	0.0	<ul style="list-style-type: none"><li>Caprolactam</li><li>Tereph-thalic acid</li><li>TORAY TETORON™ polyester chips</li><li>TORELINA™ PPS resin</li></ul>	
Aichi Plant	1.7	0.0	0.0	0.0	20.4	0.0	1.4	0.1	0.0	0.0	1.5	176.6	0.5	0.0	<ul style="list-style-type: none"><li>Nylon filament yarn</li><li>RAYTELA™ plastic optical fiber</li></ul>	

	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 <sub>2</sub> / year	tons/ year	tons/ year	tons/ year											tons/ year
Okazaki Plant	7.0	10.2	0.0	0.0	328.9	0.0	51.2	1.2	12.5	31.8	9.6	2,683.8	4.1	4.1	<ul style="list-style-type: none"><li>Nylon filament yarn</li><li>TORAY WATERLESS PLATE™ printing plate</li><li>Filtryzer™ hemodialyzers</li><li>TORAYVINO™ home water purifier</li></ul>	
Mishima Plant	11.7	4.5	0.0	0.0	81.3	0.0	76.0	0.0	16.2	18.6	31.5	652.8	1.2	0.0	<ul style="list-style-type: none"><li>LUMIRROR™ polyester film</li><li>TORAY TETORON™ polyester filament yarn</li><li>DORNER™ oral administration prostacyclin PGI2 derivative</li><li>FERON™ natural interferon-β preparation</li></ul>	
Chiba Plant	1.0	9.8	0.0	0.0	1.2	0.0	9.4	0.0	5.6	59.9	4.9	1,378.8	16.3	9.8	<ul style="list-style-type: none"><li>TOYOLAC™ ABS resin</li></ul>	
Tsuchiura Plant	2.1	0.0	0.0	0.0	0.0	0.0	4.1	0.1	1.3	1.2	0.2	405.7	0.0	0.0	<ul style="list-style-type: none"><li>TORAYFAN™ BO polypropylene film</li></ul>	
Gifu Plant	6.2	1.9	0.0	0.0	2.7	0.0	19.2	0.2	18.5	7.5	10.8	673.6	0.6	0.6	<ul style="list-style-type: none"><li>ultrasuede™ man-made suede</li><li>LUMIRROR™ polyester film</li><li>TORELINA™ PPS film</li></ul>	
Ishikawa Plant	4.3	0.7	0.0	0.0	53.3	0.0	0.0	0.0	5.5	4.8	6.9	787.2	4.4	2.7	<ul style="list-style-type: none"><li>TORAY TETORON™ polyester filament yarn</li><li>Nylon filament yarn</li><li>TORAYCA™ prepreg</li></ul>	
Nasu Plant	1.6	34.4	0.0	0.0	0.0	0.0	21.5	0.5	0.1	0.0	0.1	48.3	63.3	3.5	<ul style="list-style-type: none"><li>Lithium-ion rechargeable battery</li></ul>	
Toray Hybrid Cord, Inc.	1.0	0.1	0.0	0.0	2.8	0.1	0.9	0.0	1.1	1.6	0.2	645.1	0.0	0.0	<ul style="list-style-type: none"><li>Tire cord</li><li>Carpet pile fiber</li></ul>	
Toray Fine Chemicals Co., Ltd. [Chiba]	2.3	2.1	0.0	0.0	56.6	1.2	2.9	5.4	0.0	0.0	0.0	1,463.4	9.9	7.0	<ul style="list-style-type: none"><li>DMSO and DMS</li><li>Functional acrylic resin</li></ul>	
Malaysia Penfibre Sdn. Berhad [Fibers & Textiles]	1.5	0.0	0.0	0.0	0.0	1.2	13.2	3.0	0.5	3.8	0.1	106.3	43.6	40.0	<ul style="list-style-type: none"><li>TORAY TETORON™ polyester staple fiber</li></ul>	
France Toray Films Europe S.A.S.	2.9	0.0	0.0	0.0	2.0	0.0	10.1	0.0	2.0	6.6	0.7	1,830.0	838.0	681.0	<ul style="list-style-type: none"><li>LUMIRROR™ polyester film</li></ul>	

## 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 2024.

## 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.

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

> [Chemical Management](#)

## Structure

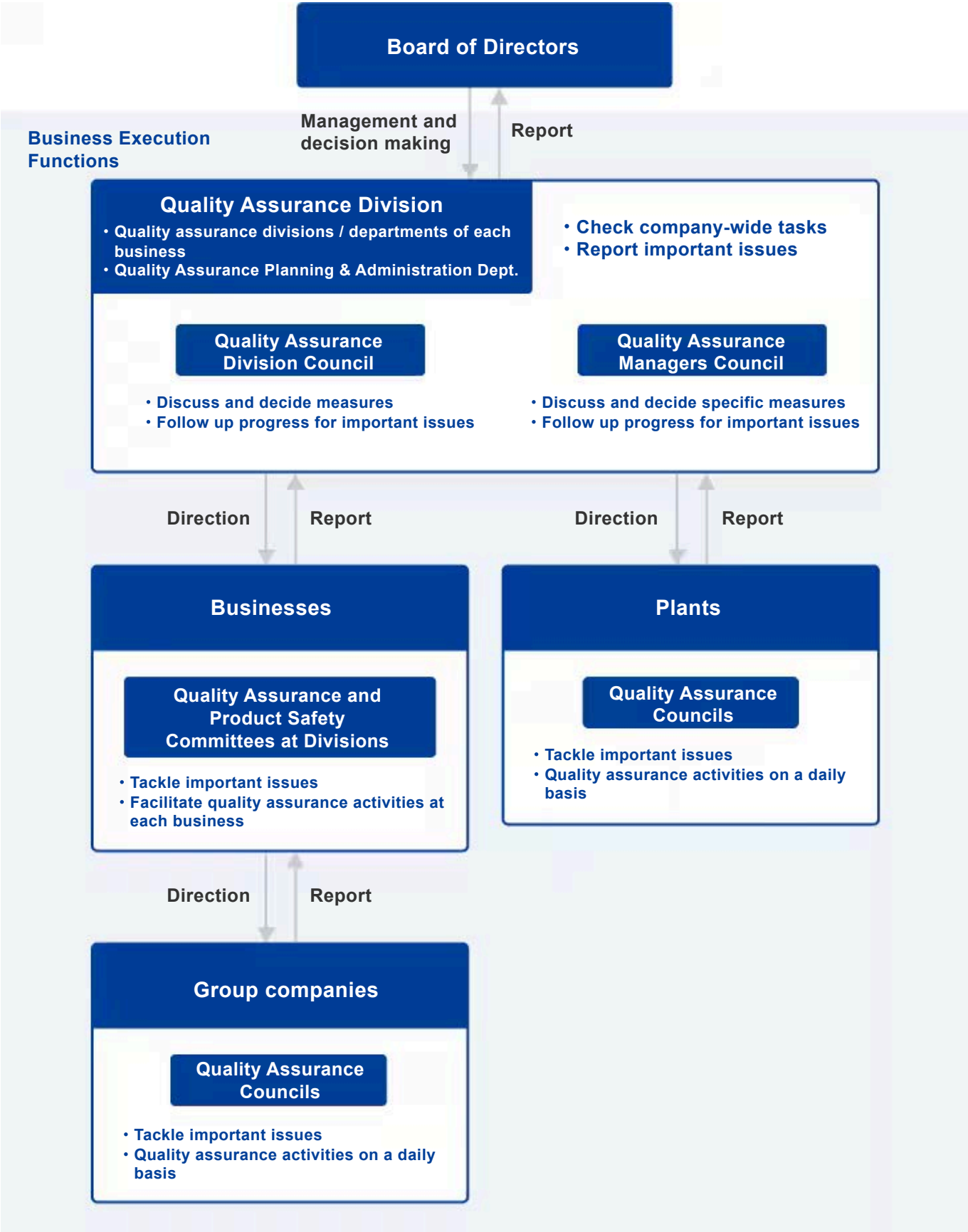
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### Framework for Quality Assurance

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.

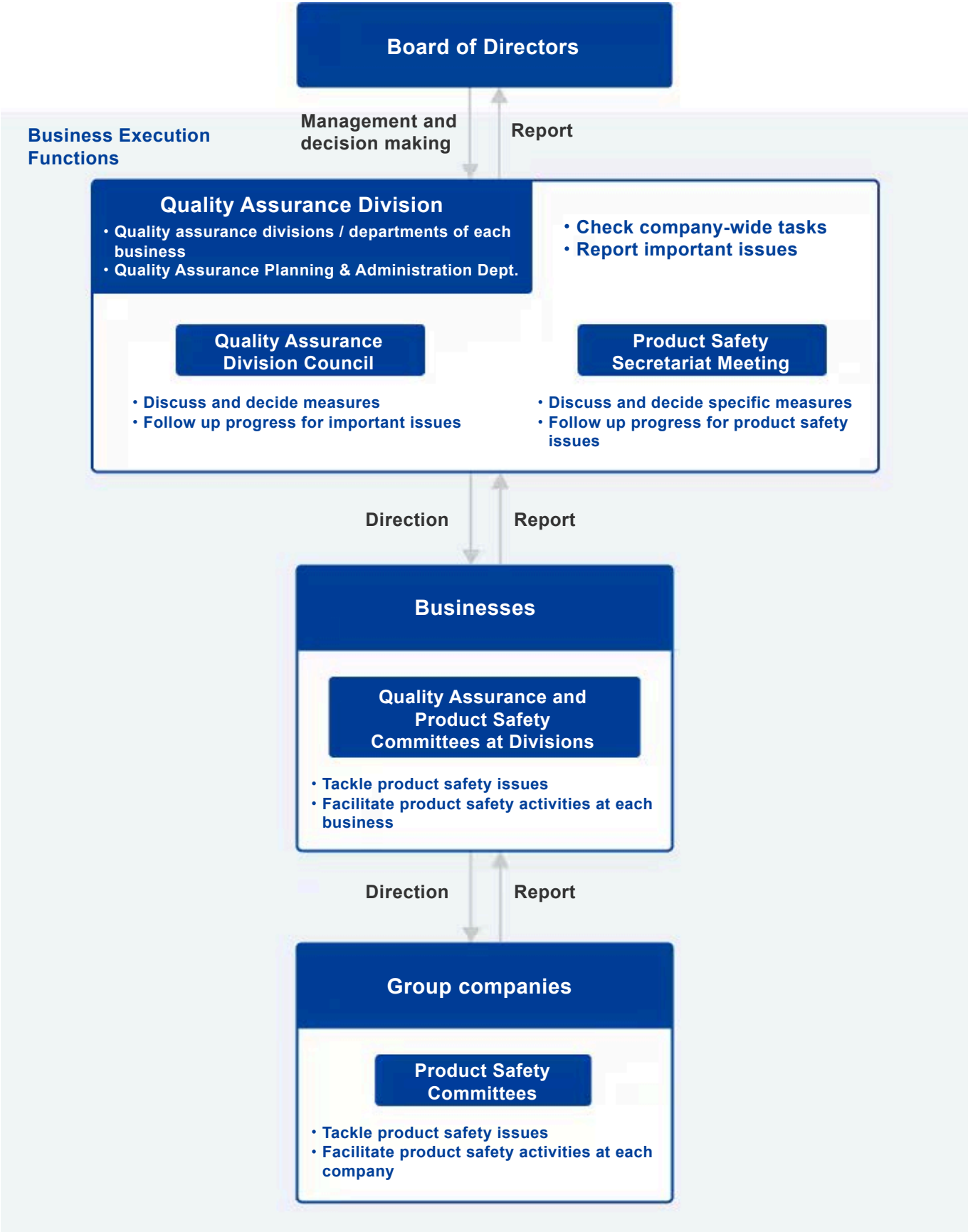


Framework for Quality Assurance



## **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.



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 2024, self-inspections were conducted by group companies outside Japan.

CSR Roadmap 2025 Targets and Results

CSR Roadmap goals	
<div>1. Enhance the group-wide frameworks for quality control, quality assurance, and product safety management</div> <div>2. Achieve zero product accidents</div>	

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)	Targets / Results		
	Fiscal 2023	Fiscal 2024	Fiscal 2025
4-① Quality assurance compliance education (% of people trained)	100% / 100%	100% / 100%	100% / -
4-② Quality and product safety audit implementation rate (%)	100% / 100%	100% / 100%	100% / -
4-③ Number of product accidents	0 / 1	0 / 0	0 / -

Reporting Scope: Toray Group

### Related Materiality for CSR

- Enhancing Product Quality and Safety

Click [here \(536KB\)](#) **PDF** for the Materiality View of CSR Roadmap 2025.

## Looking to the Future

In fiscal 2025 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 \(771KB\)](#) **PDF** for the main initiatives and KPIs for CSR Guideline No. 4 "Product Quality and Safety" during the CSR Roadmap 2025 period (fiscal 2023–2025).

# 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 Month<sup>1</sup> 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 24,841 employees received training in fiscal 2024.)

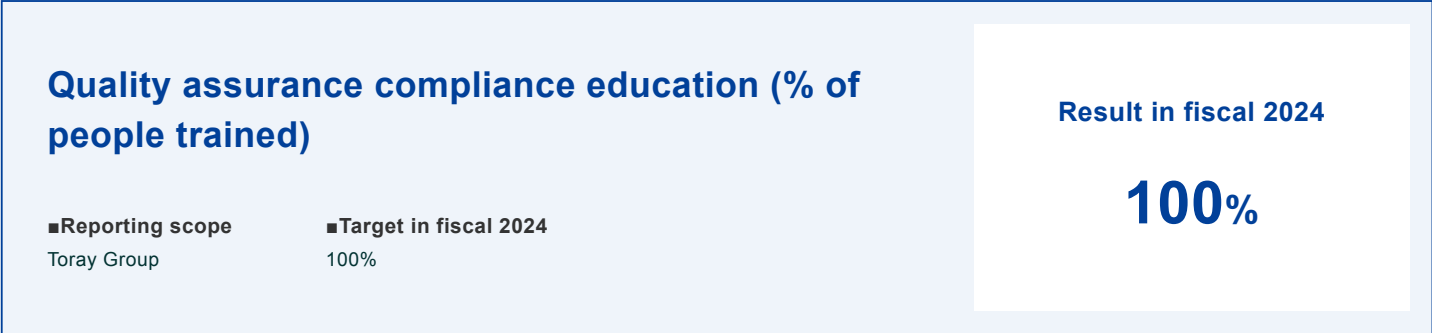
### 4. Review and adjustment of actual contracts with customers regarding quality (assurance)

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

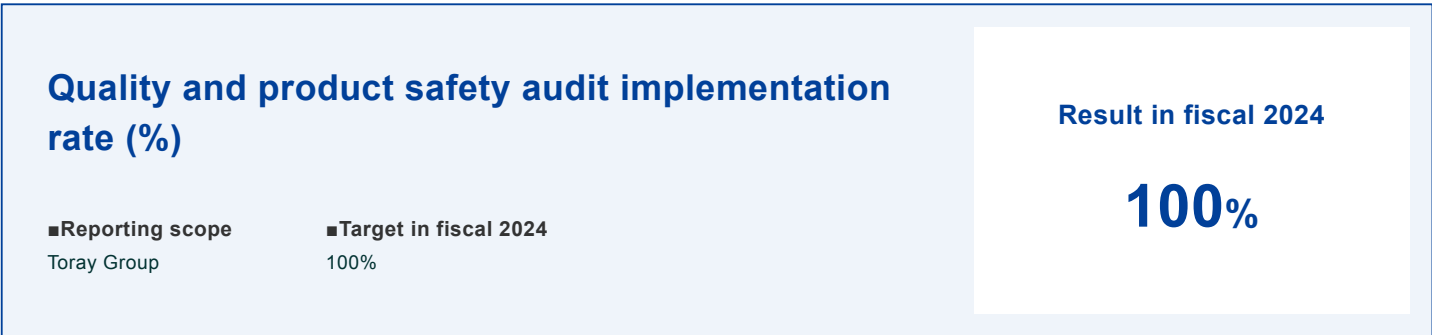
Toray Industries and its group companies around the world are developing data management systems that minimize human involvement, such as by automating measurement, transfer of measurement data, and issuance of inspection reports.

<sup>1</sup> 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.



In addition to quality assurance compliance training conducted during Quality Assurance Enhancement 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 Enhancement Month, has been set as a KPI under the CSR Roadmap 2025, and these activities are being actively promoted. In fiscal 2024, the implementation rate was 100%, helping to raise group-wide awareness of quality assurance compliance.



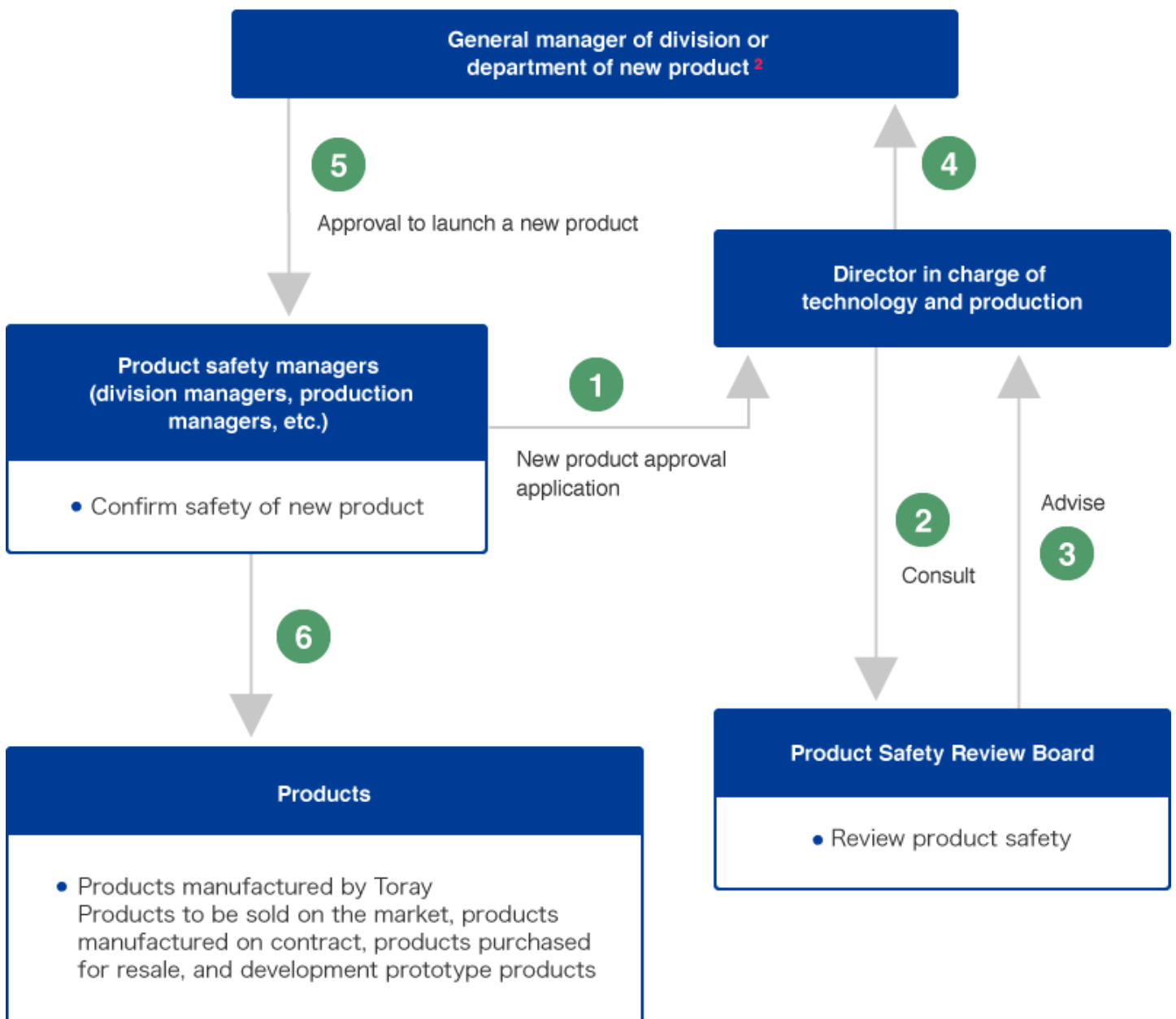
The implementation rate for audits of worldwide business sites and group companies by the Quality Assurance Departments responsible for each business division of Toray Industries has been set as a KPI under the CSR Roadmap 2025, and audits are being promoted accordingly. In fiscal 2024, the audit rate 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.

### Product Safety Review Flow Chart (Toray Industries, Inc.)



<sup>2</sup> 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 2024  
0

Result in fiscal 2024

0

## 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

1. The right to satisfaction of basic needs
2. The right to safety
3. The right to be informed
4. The right to choose
5. The right to be heard
6. The right to redress
7. The right to consumer education
8. The right to a healthy environment

Click > [here](#) for the main initiatives for CSR Guideline 4, "Product Quality and Safety" in CSR Roadmap 2025.

## 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 2025)

CSR Roadmap 2025  
Main Initiatives (2)

<b>Toray Industries, Inc.: All 13 plants</b>
Shiga, Seta, Ehime, Nagoya, Tokai, Aichi, Okazaki, Mishima, Chiba, Tsuchiura, Gifu, Ishikawa, Nasu
<b>Group companies in Japan: 25 companies</b>
<ul style="list-style-type: none"> <li>• Ichimura Sangyo Co., Ltd.</li> <li>• Sowa Textile Co., Ltd.</li> <li>• Toray Amtecs Inc.</li> <li>• TORAY LYCRA CO., LTD.</li> <li>• Toray Coatex Co., Ltd.</li> <li>• Toray Textiles, Inc.</li> <li>• Du Pont-Toray Co., Ltd.</li> <li>• Toray Hybrid Cord, Inc.</li> <li>• Toray Monofilament Co., Ltd.</li> <li>• Toray Plastics Precision Co., Ltd.</li> <li>• Toray PEF Products, Inc.</li> <li>• Toray Celanese Co., Ltd.</li> <li>• Toray KP Films Inc.</li> <li>• Toray Advanced Film Co., Ltd.</li> <li>• Soda Aromatic Co., Ltd.</li> <li>• Dow Toray Co., Ltd.</li> <li>• DuPont Toray Specialty Materials Kabushiki Kaisha</li> <li>• Toray Fine Chemicals Co., Ltd.</li> <li>• Toray Carbon Magic Co., Ltd.</li> <li>• Suido Kiko Kaisha, Ltd.</li> <li>• Toray Engineering Co., Ltd.</li> <li>• Toray Building Materials Co., Ltd.</li> <li>• Toray Construction Co., Ltd.</li> <li>• Toray Precision Co., Ltd.</li> <li>• Toray Research Center Inc.</li> </ul>

Group companies outside Japan: 49 companies	
America : 7 companies	
United States	<ul style="list-style-type: none"> <li>• Toray Fluorofibers (America), Inc.</li> <li>• Toray Plastics (America), Inc.</li> <li>• Toray Composite Materials America, Inc.</li> <li>• Zoltek Corporation</li> <li>• Toray Advanced Composites USA Inc.</li> <li>• Toray Membrane USA, Inc.</li> </ul>
Mexico	<ul style="list-style-type: none"> <li>• Toray Advanced Textile Mexico, S.A. de C.V.</li> </ul>
Europe : 9 companies	
United Kingdom	<ul style="list-style-type: none"> <li>• Toray Textiles Europe Ltd.</li> </ul>
Germany	<ul style="list-style-type: none"> <li>• Euro Advanced Carbon Fiber Composites GmbH</li> <li>• Greenerity GmbH</li> </ul>
France	<ul style="list-style-type: none"> <li>• Toray Films Europe S.A.S.</li> <li>• Toray Carbon Fibers Europe S.A.</li> </ul>
Italy	<ul style="list-style-type: none"> <li>• Alcantara S.p.A.</li> <li>• Composite Materials (Italy) s.r.l.</li> <li>• Delta-Tech S.p.A.</li> </ul>
Czech Republic	<ul style="list-style-type: none"> <li>• Toray Textiles Central Europe s.r.o.</li> </ul>
MiddleAsia_Africa : 1 company	
Saudi Arabia	<ul style="list-style-type: none"> <li>• Toray Membrane Middle East LLC</li> </ul>
Asia : 32 companies	
East Asia	<ul style="list-style-type: none"> <li>• Toray Fibers (Nantong) Co., Ltd.</li> <li>• Toray Fibers &amp; Textiles Research Laboratories (China) Co., Ltd.</li> <li>• Toray Polytech (Foshan) Co., Ltd.</li> <li>• Toray Polytech (Nantong) Co., Ltd.</li> <li>• Toray Sakai Weaving &amp; Dyeing (Nantong) Co., Ltd.</li> <li>• Toray Plastics (Chengdu) Co., Ltd.</li> <li>• Toray Plastics (Suzhou) Co., Ltd.</li> <li>• Toray Plastics Precision (Zhongshan) Ltd.</li> <li>• Toray Plastics (Shenzhen) Ltd.</li> <li>• Toray Film Products (Zhongshan) Ltd.</li> <li>• Yihua Toray Polyester Film Co., Ltd.</li> <li>• Toray BlueStar Membrane Co., Ltd.</li> <li>• Toray Membrane (Foshan) Co., Ltd.</li> <li>• Toray Advanced Materials Research Laboratories (China) Co., Ltd.</li> <li>• Toray Advanced Film Kaohsiung Co., Ltd.</li> <li>• Toray Advanced Materials Korea Inc.</li> <li>• Toray Battery Separator Film Korea Limited</li> <li>• STEMCO, Ltd.</li> </ul>
Southeast Asia	<ul style="list-style-type: none"> <li>• P.T. Acryl Textile Mills</li> <li>• P.T. Century Textile Industry Tbk</li> <li>• P.T. Easterntex</li> <li>• P.T. Indonesia Synthetic Textile Mills</li> <li>• P.T. Indonesia Toray Synthetics</li> <li>• P.T. Toray Polytech Jakarta</li> <li>• Toray Textiles (Thailand) Public Company Limited</li> <li>• Thai Toray Synthetics Co., Ltd.</li> <li>• Toray BASF PBT Resin Sdn. Berhad</li> <li>• Toray Plastics (Malaysia) Sdn. Berhad</li> <li>• Penfabric Sdn. Berhad</li> <li>• Penfibre Sdn. Berhad</li> </ul>
South Asia	<ul style="list-style-type: none"> <li>• Toray Industries (India) Private Limited</li> <li>• Toray Kusumgar Advanced Textile Private Limited</li> </ul>

Click > [here](#) for the main initiatives for CSR Guideline 4, "Product Quality and Safety" in CSR Roadmap 2025.

## 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 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 General Administration, Legal & Risk Management Division to manage overall risk under normal conditions and to ensure a quick response when crises do occur.

The general manager of the General Administration, Legal & Risk Management 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.

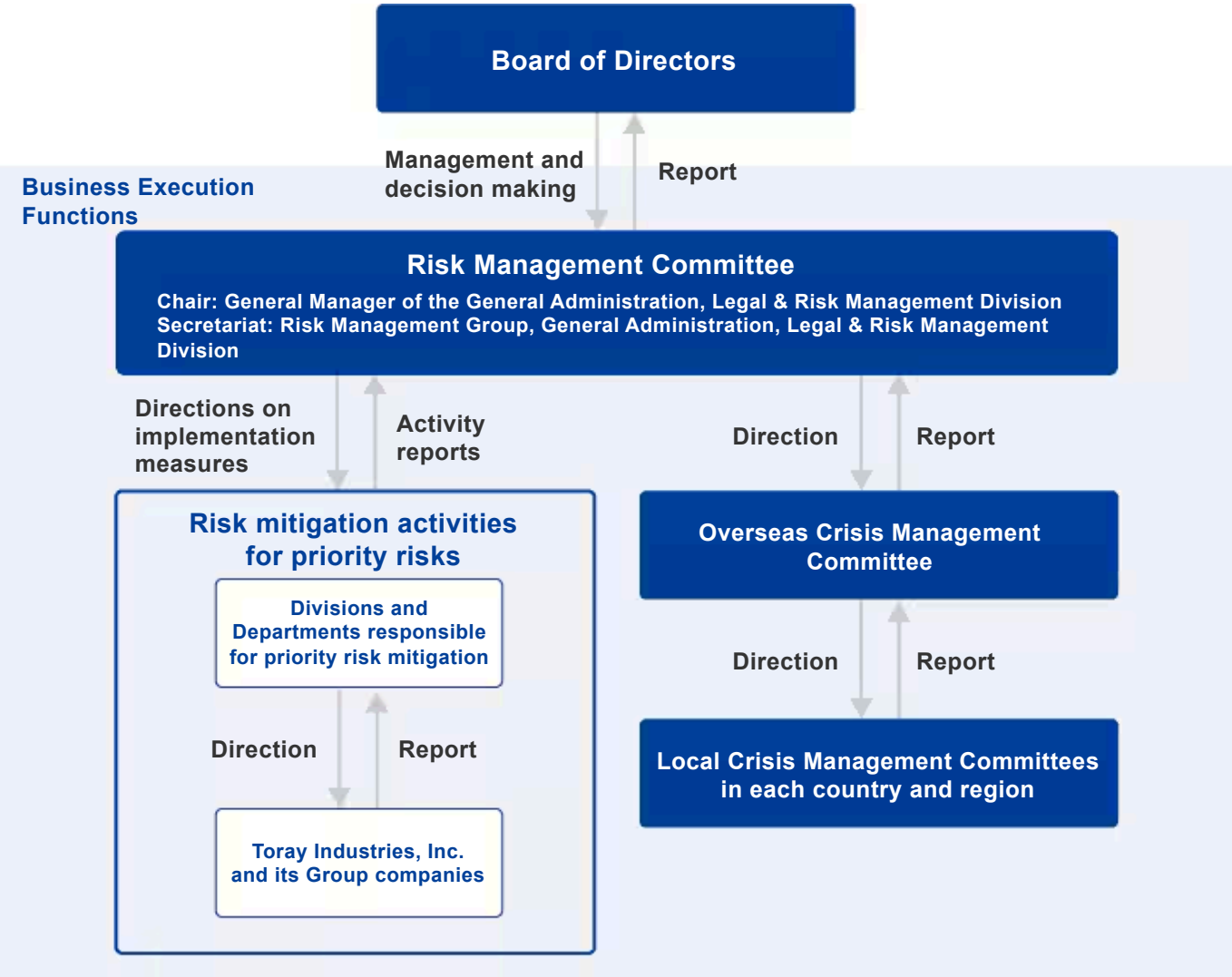
In addition, risk management activities across Toray Group are conducted in accordance with the Risk Management Regulations, which are defined as group-wide rules. Deliberation, discussion, and information sharing are carried out through the Risk Management Committee.

### Structure of the Risk Management Committee

Chaired by the general manager of the General Administration, Legal & Risk Management Division<sup>1</sup>, 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 Model<sup>2</sup>, 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**



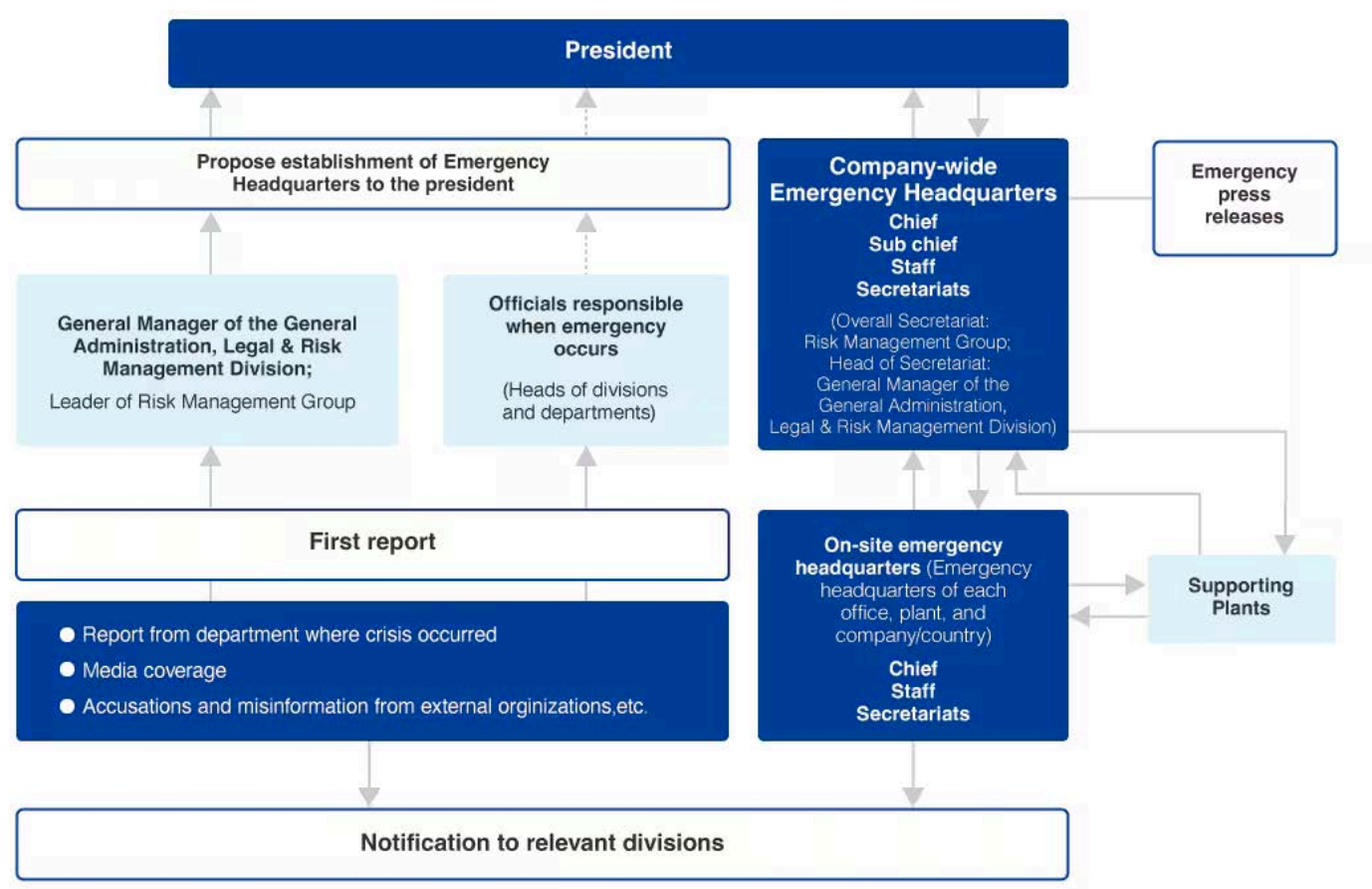
<sup>1</sup> As of July 2025, a senior vice president serves as the Risk Management Committee Chair.

<sup>2</sup> 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

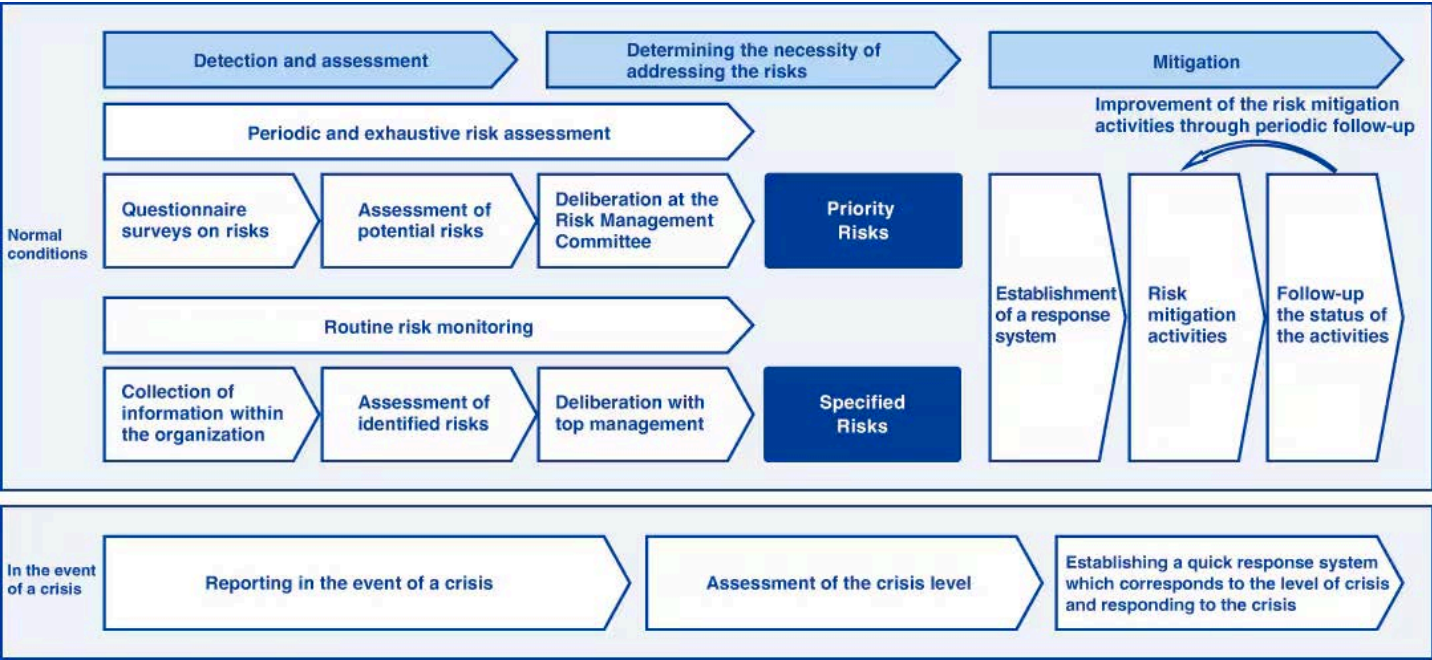




# Risk Management Activity Process

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. In addition, the Auditing Department of Toray Industries conducts internal audits of these activities every six months.

## 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.

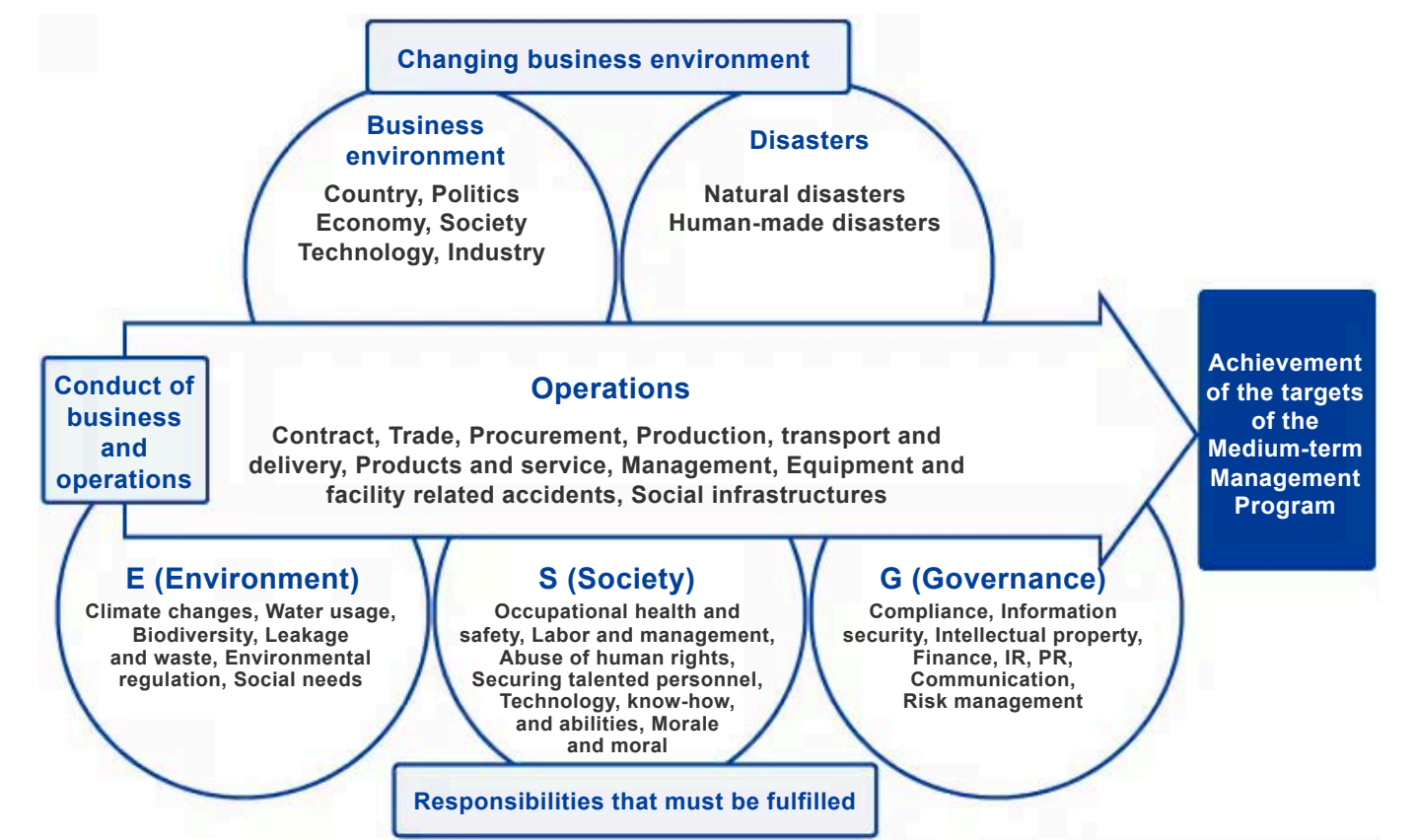
With regard to Specified Risks, Toray Industries routinely monitors domestic and overseas risk trends, conducts surveys and analyses, identifies and assesses risks that may have a major impact on management, and designates risks as Specified Risks in consultation with top management.

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

See the following page for information on Toray Group Priority Risks and other major risks that could have a significant impact on the Group, as well as its mitigation measures.

> [Business Risks](#)

CSR Roadmap 2025 Targets and Results

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)	Targets / Results		
	Fiscal 2023	Fiscal 2024	Fiscal 2025
<b>5-① Group companies implementing self-assessment and results follow-up using the internal control checklist (%)</b> <sup>3</sup>	35% / 35%	70% / 70%	100% / -
<b>5-② Group companies implementing information security evaluation and risk reduction (%)</b>	35% / 35%	70% / 54%	100% / -

Reporting scope: Toray Group

<sup>3</sup> 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. In fiscal 2024, self-assessments and results follow-ups were completed regarding specific risk management activities at group companies. This marked a 70% achievement level for the second stage. Self-assessments and follow-ups regarding the level of improvement in the plan-do-check-act (PDCA) cycle are planned for the third stage in fiscal 2025.

### Related Materiality for CSR

- Strengthening Corporate Governance

Click [here \(536KB\)](#) **PDF** for the Materiality View of CSR Roadmap 2025.

## Looking to the Future

In line with its CSR Roadmap 2025, Toray Group will continue to periodically and routinely identify potential risks in management activities, mitigate risks, and prevent crises from ever occurring.

In fiscal 2025, the Group will conduct a comprehensive group-wide risk review survey in preparation for the selection of the seventh set of priority risks covering the period of the next Medium-Term Management Program (fiscal 2026-2028).

Click [here \(771KB\)](#) **PDF** for the main initiatives and KPIs for CSR Guideline No. 5 "Risk Management" during the CSR Roadmap 2025 period (fiscal 2023–2025).

# 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 in the countries and regions where Toray Group operates, while facilitating rapid decision-making and action to ensure business operation continuity when such regions are affected by war. The General Administration, Legal & Risk Management Division is responsible for promoting initiatives in this risk area.

In fiscal 2024, based on the risk assessments conducted in fiscal 2023 across the countries and regions where Toray Group operates, response plans were formulated both locally and at the head office in Japan, tailored to contingency scenarios for specific emergencies.

In fiscal 2025, crisis response drills are scheduled to be conducted in accordance with these plans.

#### **Product supply disruption risks**

To mitigate the risk of interruptions in raw materials caused by supply disruptions from suppliers due to various factors such as economic fluctuations, natural disasters, or cyberattacks, this risk area was adopted with the aim of strengthening the continuity of product supply. Activities are being carried out under the leadership of the Purchasing and Logistics Division as the responsible department.

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 2024, Toray Industries asked 132 group companies worldwide selected based on their capital ratios, business scale, and other factors, to conduct self-assessments of their specific risk management activities. The Company then confirmed and followed up on the results.

In fiscal 2025, the Company will continue to follow up with companies identified as needing improvement on the progress made.

## Group companies implementing self-assessment and results follow-up using the internal control checklist (%)<sup>1</sup>

Result in fiscal 2024

70%

■Reporting scope

Toray Group

■Target in fiscal 2024

70%

<sup>1</sup> 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. In fiscal 2024, self-assessments and results follow-ups were completed regarding specific risk management activities at group companies. This marked a 70% achievement level for the second stage. Self-assessments and follow-ups regarding the level of improvement in the plan-do-check-act (PDCA) cycle are planned for the third stage in fiscal 2025.

### 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 conducts risk management training that includes crisis response every year. The training is provided to new employees, newly appointed managers, and department heads. This training was also provided in fiscal 2024.

## 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

> [Business Continuity Plan Initiatives](#)

## Economic Security Risk Initiatives

Toray Group established a specialized department in April 2021 to address economic security risks in response to increasing geopolitical risks. This department collects information on economic security policies in various countries. It also executes a comprehensive review of the Group's business activities, including supply chains, investment, technology, human resources, and data from the perspective of economic security risks, and provides management support for risk countermeasures.

Two key aims of these activities are the strengthening of supply chain resilience and the prevention of critical technology leakage.

To enhance supply chain resilience, the Group has established Supply Chain Management Rules on Economic Security and is adopting a third-party screening system to reduce the risk of inadvertently conducting transactions with sanctioned or restricted entities. In addition, for items dependent on other countries and become chokepoints in the supply chain, follow-up on procurement planning is being conducted.

To prevent sensitive technology leakage, the Critical Technologies Management Rules on Economic Security have been established to clarify the technologies that must be protected by Toray Group. Furthermore, rules to ensure research security have been developed to mitigate the risk of technology leaks from joint research and development partners.

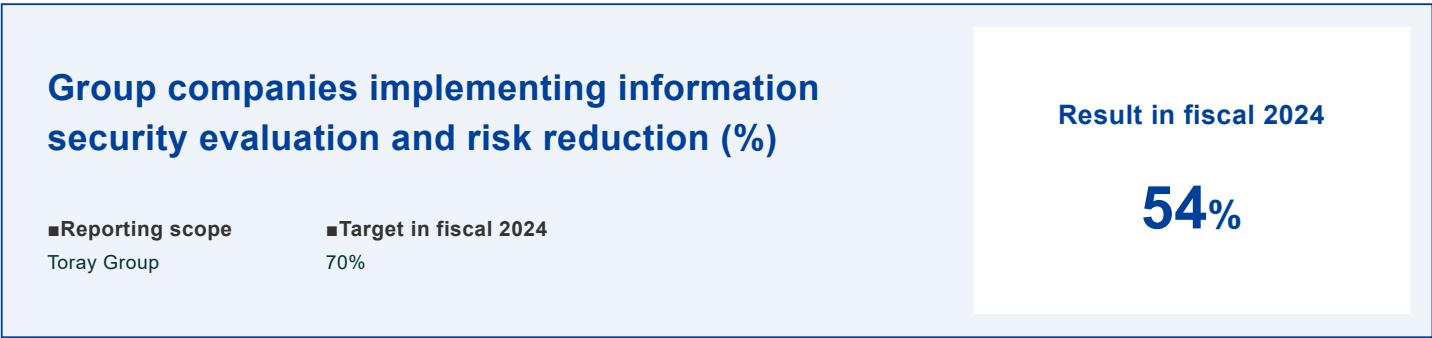
## Information Security

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.

As of the end of fiscal 2024, 60 of the 111 target group companies had met the security standards. However, due to factors such as the time required for some group companies to meet the standards, the achievement rate was 54%, falling short of the 70% target. In fiscal 2025, Toray Group will aim for a 100% achievement rate among the target companies and will promote group-wide risk reduction by strengthening the support framework provided by Toray Industries.





## Related Information

> [Addressing Information Security Risks](#)

Click > [here](#) for the main initiatives for CSR Guideline 5, "Risk Management" in CSR Roadmap 2025.

## 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 response drills online to enable a swift and appropriate response in the event of an emergency.

The Noto Peninsula Earthquake struck on January 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.



Twelfth Company-Wide Earthquake Response Headquarters Drill Conducted in Fiscal 2024

## Related Information

See the following page for information on Toray Group's recovery support efforts after the 2024 Noto Peninsula Earthquake.

> [Activities Carried Out in Fiscal 2024 \(Social Contribution Activities as a Good Corporate Citizen\)](#)

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.

## Addressing Information Security Risks

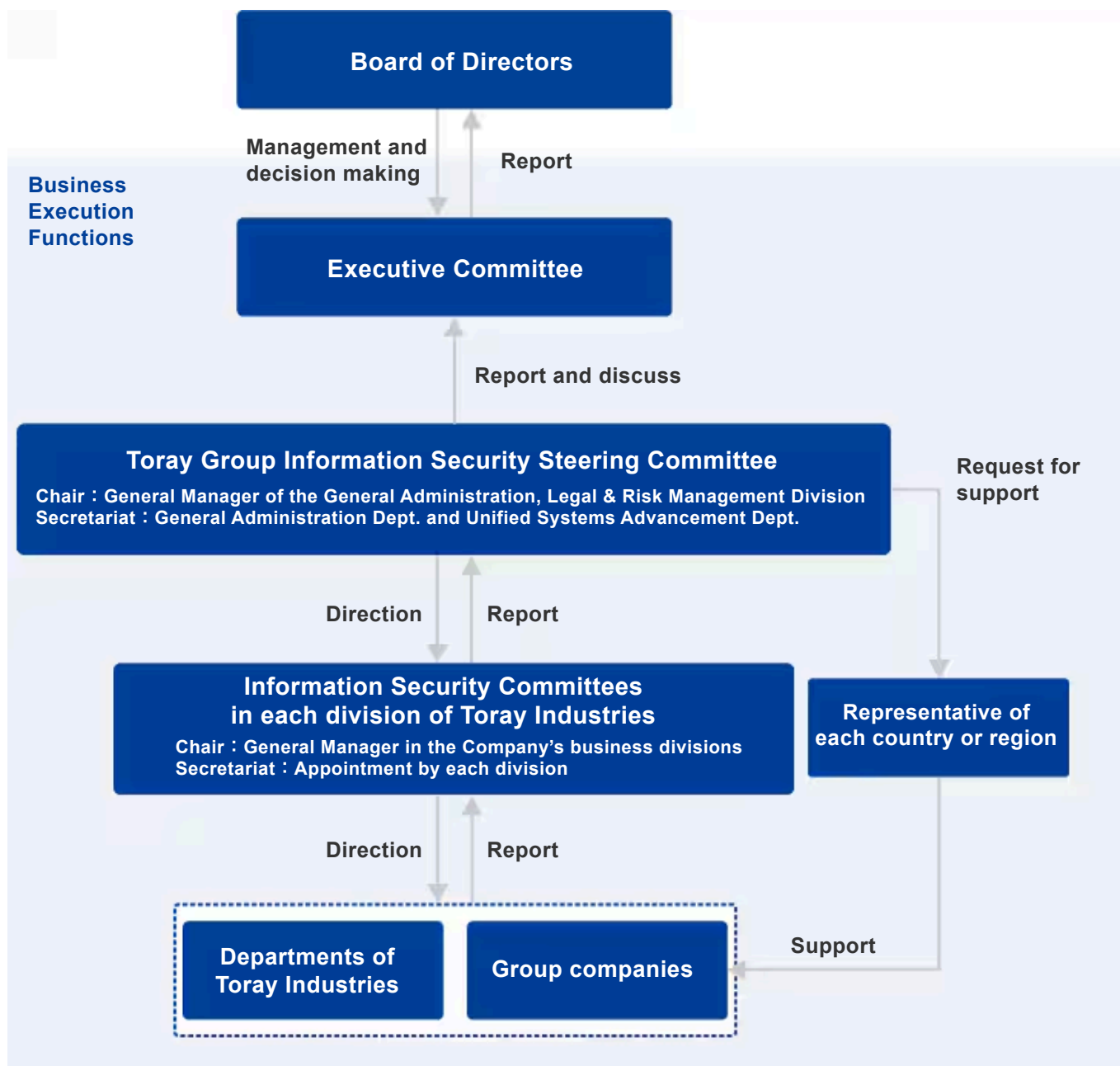
Toray Group regards information security as an important management issue and is working to maintain and enhance it across the entire Group. As part of this effort, it established the Toray Group Information Security Basic Policy, which outlines how all executives and employees, including contracted, 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. Meeting every six months, it is chaired by the general manager of the General Administration, Legal & Risk Management Division at Toray Industries<sup>1</sup>, with the general manager of the Digital Solutions Division as vice-chair<sup>1</sup>. The members include representatives from the Human Resources Division, Auditing Department, and other relevant departments.

The committee deliberates on information security policies and discusses risk mitigation measures. It also issues instructions to the Information Security Committees set up in each division, conducts follow-up on progress made, 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.



**1. Ascertaining the risk situation across the entire Toray Group and staying informed on global trends**

**2. Formulating Toray Group information security standards<sup>2</sup> and monitoring progress**

- Toray Industries has established security standards that comprehensively address risk factors such as cyberattacks, insider misconduct, employee operational errors, and natural disasters. These standards take into account the three elements of information security, namely, confidentiality, integrity, and availability. In addition to technical IT measures, they also include administrative and operational measures such as the management of information assets and education and training aimed at raising employee awareness. These standards also apply to business partners and cloud services used by the Company. Moreover, after conducting information security audits across Toray Group to check compliance with the standards, Toray Industries identifies areas for improvement and provides guidance as necessary.
- Group companies also conduct self-assessments to determine whether they are meeting the standards. They then develop improvement plans, which Toray Industries reviews and provides guidance on.

**3. Conducting regular diagnostic security assessments and monitoring**

Having third-party information security companies evaluate Internet security and performance at group companies (and as part of vulnerability analysis, conducting hacker attack simulations, etc.). Also, following up on progress made by group companies.

#### 4. Ensuring immediate response and prevention of damage escalation in the event of a security incident

Any department or group company discovering an incident must report it within 24 hours to the general manager of the General Administration, Legal & Risk Management 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.

<sup>1</sup> As of July 2025, a senior vice president serves as general manager of the General Administration, Legal & Risk Management Division and a corporate vice president serves as general manager of the Digital Strategy Division.

<sup>2</sup> 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.

## Policies

### 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.

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. They also regularly check their security management situations.

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 settings for its computers and smartphones and has established an Endpoint Detection and Response (EDR) system for centralized management of these devices, and for enabling quick detection of and response to any cyberattacks. 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. Strengthening Monitoring and Response Systems**

Information from monitoring and analysis related to endpoint, authentication, network, and server management has been consolidated to detect cyberattacks and enable a prompt response. In the event of a security incident, information is shared with executive management and relevant risk management departments to ensure measures are taken to minimize potential damage.

## **7. 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

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.

## 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.

## Policies

### 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.

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

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The Corporate 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, and gather any opinions, requests, complaints or other feedback they may have. 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 Brand Communications Department guides the implementation of social contribution initiatives, which are carried out by the business sites.

## CSR Roadmap 2025 Targets and Results

### 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)	Targets / Results		
	Fiscal 2023	Fiscal 2024	Fiscal 2025
<b>6-① Number of corporate website page views (per month)</b>	1 million page views / 1.12 million page views	1 million page views / 0.93 million page views	1 million page views / -
<b>6-② Interviews conducted to exchange opinions within the company (rate of progress)</b>	(First round) 100% completed / 100%	(Second round) 30% / 20%	(Second round) 60% / -
<b>6-③ Interviews with key investors in which management participates (number)</b>	Cumulative total of 120 / 197	Cumulative total of 120 / 123	Cumulative total of 120 / -
<b>6-④ News releases (number)</b>	200 / 178	200 / 169	200 / -

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 \(536KB\)](#) **PDF** for the Materiality View of CSR Roadmap 2025.

## 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 \(771KB\)](#) **PDF** for the main initiatives and KPIs for CSR Guideline No. 6 "Communication" during the CSR Roadmap 2025 period (fiscal 2023–2025).

## 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 2024  
1 million page views

Result in fiscal 2024

**0.93**  
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 2024, the page layouts for “Sustainability” and “Investor Relations” were updated to make these pages easier to view and understand.

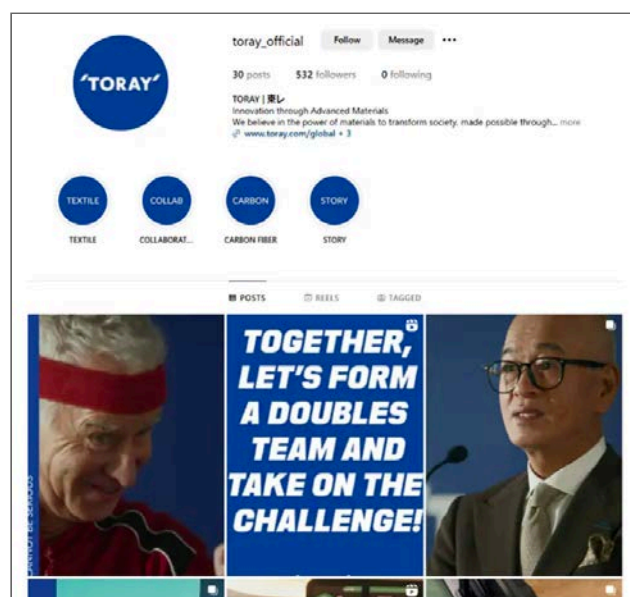
As part of activities related to each business, a new website was launched to provide a comprehensive introduction to Toray Group’s products and services related to the semiconductor business. The aim is to help enhance the Toray Industries presence in the semiconductor industry.

In addition, on the Japanese-language “Toray Official note” platform launched in February 2024, there are 28 articles highlighting the work of more than 80 Toray Group employees.

An official Toray Instagram account was also launched to further strengthen the brand.



[Toray Industries semiconductor business website](#)



Toray Official Instagram “[toray\\_official](#)”

(available only in Japanese)

\* An Instagram account is needed to view this page

## Communication with Customers

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.

### Customer Satisfaction Survey

Toray Industries, Inc. conducts annual customer satisfaction surveys in certain businesses. Satisfaction levels regarding quality, cost, and other factors are evaluated on a five-point scale. The results are shared internally so that each employee can recognize issues, leading to initiatives for improvement and the delivery of higher-quality customer service.

### Showrooms

Toray Industries has set up showrooms at the Toray Human Resources Development Center (Mishima), at the Innovation Plaza (Shiga Plant), and at other major Toray sites as spaces 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. In fiscal 2024, exhibit areas at two locations—the Innovation Gallery (Head Office) and the Innovation Plaza (Shiga Plant)—were also renovated.



Innovation Gallery (Toray Industries Inc. Head Office)



Innovation Plaza (Toray Industries Inc. Shiga Plant)



## 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.

A third installment was made in a series following the short film, "Straight Path," which portrays the life of Tri Q. Huynh, President of Toray Membrane USA, Inc., and the brand storytelling video "A Revolution in Aviation," illustrating Toray's collaboration efforts with the U.S. startup Joby Aviation, Inc., in developing urban air mobility systems (flying cars). This installment is entitled, *You Cannot Be Serious! - McEnroe x Toray announcement*. In this video, Toray Industries President Mitsuo Ohya and tennis legend John McEnroe passionately advocate for a hydrogen-based society and express their determination to confront the climate crisis.

These three videos are being shared worldwide as a powerful way to explain the value that Toray aims to create in society.



Toray brand video: [You Cannot Be Serious! - McEnroe x Toray announcement](#) 

Click > [here](#) for the main initiatives for CSR Guideline 6, "Communication" in CSR Roadmap 2025.

# 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. The Group continued to promote these efforts in fiscal 2024.

### 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 2024, there were a total of three events, including some hosted at plants. The number of participants for each event was 1,156 (9th event), 486 (10th event), and 1,247 (11th event). Except for the 10th event, which was held during working hours, each event saw over 1,000 participants, and participant satisfaction rates exceeded 90% for all events.

### 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. Entries were welcomed from individual challenge-takers or their co-workers and did not require any supervisor approval. After allowing all employees to review the entries, employee voting was conducted, and awards for the winning entries were presented at the Toray Employee Forum. For the second year of the program in fiscal 2024, there were 134 entries and 9,483 employee votes cast from Toray Group employees. This showed continued strong employee interest and promoted a shared sense of engagement.

This award program will continue as an annual activity.

### 3. Toray Group Employee Forum

The Toray Employee Forum was held for the first time 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. The second forum took place in November 2024 under the theme of “Let’s think about good jobs that are quintessentially Toray.” Through a live web conference covering 16 Toray sites in Japan, including the headquarters and various other offices and plants, 3,244 employees participated in the Toray Employee Forum in real time. Based on feedback received afterward, 90% of participants expressed satisfaction with the forum, while 92% 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 2025.



10th Real Talk Special Edition event (Toray Brand Film Screening & Special Talk)



11th Real Talk event (with 13 Toray Plant General Managers)



First Steps Award winners together with Chairman Akihiro Nikkaku (middle row, fourth from left) and President Mitsuo Ohya (same row, third from right)



Head Office venue for the Toray Group Employee Forum and remote Toray sites participating virtually

## Financial Results Briefings for Employees

Every six months, Toray Industries, Inc. 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



A meeting to explain financial results at the Shiga Plant, attended by President Ohya and other executives.

## 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 enhance the understanding and engagement of Group employees concerning 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 2024, initiatives such as Real Talk – Everyone's Voice, First Steps Award, and the Toray Group Employee Forum were implemented under the banner of "creating opportunities and momentum for challenge-taking." These initiatives were announced in the in-house magazines and related information was shared through video streaming on the Group's intranet.

### Toray Group's publications

#### Circulation of Toray Group's publications

Publication	Circulation	Frequency
Japanese edition of <i>People</i> in-house magazine	Around 16,000 copies per issue	Six times per year
English edition of <i>People</i> in-house magazine	Around 3,000 copies per issue	Four times per year
<i>Toray Management</i> magazine for managers	Around 7,000 copies per issue	Four times per year

## Promoting CSR Initiatives in Every Workplace

CSR Roadmap 2025  
Main Initiatives (4)

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

> [Corporate Social Responsibility \(CSR\) 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  
Toray Group

■Target in fiscal 2024  
(Second round) 30%

Result in fiscal 2024

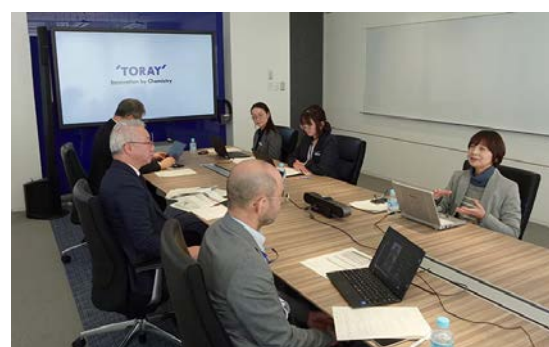
20%

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, Inc. has visited Toray Industries 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. This effort was transferred to the Corporate Sustainability Strategic Management Division in April 2025, further strengthening the promotion framework.

As of the end of fiscal 2024, the progress rate for internal opinion exchange meetings was 20%, compared to the target of 30% for the second round of visits. In fiscal 2025, opinion exchange visits will continue to be held to further ascertain the current status and challenges for CSR activities at each workplace and to leverage these insights in advancing CSR initiatives across Toray Group.

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 provides an e-learning course covering the fundamentals of CSR, CSR webinars designed to promote understanding and awareness of CSR issues, and other programs. Through these educational and support activities, Toray continues to deepen CSR understanding and awareness group-wide.



In fiscal 2024, a webinar was delivered by Professor Kaori Fujita of Tohoku University, who also serves as Senior Editor for *Nikkei ESG*

## CSR Webinars

FY	Topic
2021	Protecting the Global Environment by Tackling River and Ocean Waste
2022	What is the Circular Economy?
2023	What is CSR Procurement?
2024	Nature Positive and TNFD Initiatives to Support the Future of Our Business

## Activities to Promote Internal Communication

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New employee welcome party co-sponsored by the labor union and Company management (Toray Industries, Inc. Seta Plant)



Autumn Festival with many events, including a magic show and raffle (Toray Industries, Inc. Ehime Plant)



A total of 8 teams and approximately 50 staff members participated in a Mölkky (Finnish lawn bowling) tournament [Toray Industries, Inc. Basic Research Center (Kamakura)]



10th anniversary event [Toray Kusumgar Advanced Textile Private Limited (India)]

## Communicating with Employees' Families

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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.



Science experiment activity during a family day workplace tour (Toray Industries, Inc. Tsuchiura Plant)



BBQ event held for the first time in five years (Toray Industries, Inc. Nasu Plant)



Young participants learn about dialysis equipment during a factory tour for the first family day at the Shizuoka Plant (Toray Medical Co., Ltd.)



Two Toray Group companies hosted a joint employee picnic in Decatur, Alabama [Toray Fluorofibers (America), Inc. and Toray Composite Materials America, Inc.]

Click > [here](#) for the main initiatives for CSR Guideline 6, "Communication" in CSR Roadmap 2025.



## 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 2024

Cumulative total of 120

Result in fiscal 2024

Cumulative total of **123**

## 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 Management Briefings focusing on management activities and progress made on the Medium-Term Management Program, along with 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 the Management Briefing

Activities	Number of events	Number of meetings/participants
Meetings with institutional investors and securities analysts	As required	687 meetings
Management Briefings and IR seminars for institutional investors and securities analysts	3	232 participants
Briefing sessions for individual investors	1	286 participants
Information sessions for shareholders	2	100 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 2024, 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.	2024 Internet IR Awards Award for outstanding website
Nikko Investor Relations Co., Ltd.	2024 All Japanese Listed Companies' Website Ranking (AAA Website in overall ranking)
GOMEZ	Silver Prize (top in textiles and apparels industry) in IR Site Ranking 2024


## 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 2025
- 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
- Included in SOMPO Sustainability 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. For its general meeting of stockholders on June 25, 2024, Toray Industries added measures to improve stockholder convenience such as preparing meeting notices in full-color and adding prerecorded audio narration for reporting items. 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 \(1.47MB\)](#)  , 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 2025, the general meeting of stockholders was held on June 26. 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.

## Communication with Local Communities

Toray Group creates various opportunities for communication with people who live near its business sites.

In fiscal 2024, the Group continued to > [contribute actively to local communities](#).



Opinion exchange meeting with the Okazaki Police Department  
(Toray Industries, Inc. Okazaki Plant)



Briefing for local residents using the CSR Activity Report [Toray Industries, Inc. Basic Research Center (Kamakura)]



Company visit for high school teachers in Okazaki City (Toray Monofilament Co., Ltd.)



Fifth graders from a nearby elementary school on a factory tour  
(Toray Industries, Inc. Shiga Plant)



Employee participants carry out a cleanup activity at a nearby elementary school to mark the third anniversary of the plant's environmental cleanup activities. (Toray Industries, Inc. Okazaki Plant)



Employees participate again in this year's 28th Nagaizumi Wakuwaku Festival Dance Parade (Toray Industries, Inc. Mishima Plant)





Science lesson delivered at the St. Louis Japanese Language School [Zoltek Corporation (United States)]



Thirteen Japanese employees from Toray Group companies in Malaysia participate in the Penang Bon Odori Festival, running the goldfish scooping and water balloon fishing stalls. [Toray Industries (Malaysia) Sdn. Berhad]



Employees participate in a hike on Haishou Island organized by the municipal government of Jiujiang Town. (Toray Group Companies in Foshan)

## 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.

For more information: > [Establishing Sustainable Supply Chain](#).

## Communication with Government Agencies and Other Organizations

With the aim of helping to realize a sustainable society, Toray Group is advancing initiatives to address social issues in collaboration with governmental agencies and various organizations. While aligning with international environmental policies and goals, the Group also complies with all relevant laws and regulations in locations where it operates, as part of efforts to fulfill its corporate responsibilities.

Regarding challenges faced by local communities and sustainability themes, the Group seeks effective measures through dialogue and cooperation with governmental bodies and organizations, striving to create social value.




The following are the main committees and subcommittees in which Toray Group participates, as well as collaborative projects with government agencies, and other relevant initiatives and frameworks.

### 1. Committees and subcommittees related to policy and regulatory compliance



Economics and General Industry:

- [Nippon Keidanren \(Japan Business Federation\)](#)  
[Sub-Committee on Global Environment, Committee on Environment](#)  
[Committee on Responsible Business Conduct & SDGs Promotion](#)   
[Keidanren Nature Conservation Council](#) 

Chemical and Textile Industries:

- [Japan Chemical Industry Association: Technical Affairs Committee](#) 
- [Japan Chemical Fibers Association: Sustainability Steering Committee](#) 
- [Japan Textile Federation: Environment and Safety Committee](#) 

Environmental and Technology Promotion:

- [Japan Environmental Management Association for Industry](#) 
- [Japan Association for Chemical Innovation](#) 

### 2. Government Collaboration and Joint Projects

- [GX League](#) 
- [Ministry of Economy, Trade and Industry: Circular Partners](#) 
- [Physical Internet Realization Council Chemicals Working Group](#) 



### 3. Initiatives, Industry Collaboration, and Frameworks

International Initiatives:


- [TCFD](#) 
- [TNFD](#) 
- [Climate Action 100+](#) 
- [ICCA E&CC LG WG](#) 
- [Textile Exchange](#) 



#### Domestic Industry Collaboration and Collaboration Frameworks:

- [Japan Clean Ocean Material Alliance \(CLOMA\)](#) 
- [Carbon Recycling Fund Institute \(CRF\)](#) 
- [Japan Partnership for Circular Economy \(J4CE\)](#) 
- [Japan Hydrogen Association \(JH2A\)](#) 
- [Fuel Cell Commercialization Conference of Japan \(FCCJ\)](#) 
- [Clean Fuel Ammonia Association \(CFAA\)](#) 
- [SusPla \(Sustainable Plastics Initiative\)](#) (available only in Japanese) 
- [Japan Sustainable Fashion Alliance \(JSFA\)](#) (available only in Japanese) 

#### Climate Action 100+ Recognizes Toray's Climate Change Initiatives

Since 2019, Toray Industries, Inc. has been engaging in ongoing dialogue with lead investors of Climate Action 100+, a global investor-led initiative that promotes corporate action on climate change toward achieving net zero by 2050. Toray's climate change efforts were featured in the [Progress Update 2023 \(2.02MB\)](#)  issued by Climate Action 100+.

In particular, the report highlights the significant strengthening of greenhouse gas emission reduction targets in Toray's Medium-Term Management Program established in 2023. The target for reducing greenhouse gas emissions per unit of revenue has been raised from the previous 30% to more than 50% (compared to fiscal 2013 intensity). Additionally, a new target has been set to reduce emissions from domestic production activities by more than 40% by 2030.

Climate Action 100+ welcomes these ambitious targets and expressed its expectations for Toray Industries to establish even more concrete Scope 3 emission reduction targets and to accelerate its transition to clean energy.

#### Related Information

- > [Toray Group's Approach to Climate Change](#)
- > [Biodiversity Initiatives](#)
- > [Realizing a Circular Economy](#)
- > [Toray Group Distribution Initiatives](#)

## Communication with the Media

CSR Roadmap 2025  
Main Initiatives (6)

### News releases (number)

■Reporting Scope	■Target in fiscal 2024
Toray Group	200

### Result in fiscal 2024

**169**

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 PR 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 2024, Toray Group issued 169 press releases and carried out 228 interviews in response to media requests.

### Related Information

> [Information Disclosure Principles](#)

Click > [here](#) for the main initiatives for CSR Guideline 6, "Communication" in CSR Roadmap 2025.

## 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, launched in fiscal 2023, Toray integrated the Green Innovation and Life Innovation businesses, creating a Sustainability Innovation (SI) Business to better meet diversifying sustainability needs.

By expanding the SI business, Toray Group aims to help achieve Four Perspectives of the World as Envisioned by the Group in 2050, namely, “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.

Through this business expansion, the Group is promoting initiatives for the sustainable development of society.

# Structure

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To promote activities designed to achieve the Toray Group Sustainability Vision, the Group is advancing SI business expansion and measures to help tackle global warming. It formulates and promotes medium- and long-term roadmaps and action plans to address 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 initiatives, 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.

In fiscal 2025, the Group established the Corporate Sustainability Strategic Management Division as a new organization reporting directly to the President. Its purpose is to centrally advance initiatives in three areas: expansion of the SI business, climate change measures, and sustainability information disclosure. Matters are submitted to the Sustainability Steering Committee, a standing deliberative body on sustainability, for discussion. When necessary, the Executive Committee deliberates, makes a determination, and reports the matter to the Board of Directors.

For more information on the Toray Group governance structure related to the issue of sustainability, please click [here](#).

## CSR Roadmap 2025 Targets and Results

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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 <sub>2</sub> reduction in the value chain <sup>1</sup>	7-②
(3) Expand water filtration throughput contribution by Toray's water treatment membranes <sup>2</sup>	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)	Targets / Results		
	Fiscal 2023	Fiscal 2024	Fiscal 2025
<b>7-① Revenues from Sustainability Innovation Business</b>	1,600 billion yen (Fiscal 2025) / 1,311.5 billion yen (Fiscal 2023), 1,368.9 billion yen (Fiscal 2024)		
<b>7-② Contribution to CO<sub>2</sub> reduction in value chain</b>	15 times compared to fiscal 2013 (Fiscal 2025) / 10.3 times (Fiscal 2023), 11.3 times (Fiscal 2024)		
<b>7-③ Contribution of Toray water treatment products</b>	2.9 times compared to fiscal 2013 (Fiscal 2025) / 2.7 times (Fiscal 2023), 2.9 times (Fiscal 2024)		

Reporting scope: Toray Group

<sup>1</sup> Toray calculates the value chain CO<sub>2</sub> 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).

<sup>2</sup> 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 \(536KB\)](#) **PDF** for the Materiality View of CSR Roadmap 2025.

## Looking to the Future

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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. Going forward societies will need to shift to consumption and production modes that more fully consider the environment and people's health.

Initiatives will likely be implemented for moving to a circular economy where products are manufactured, utilized, recycled, and then reutilized as raw materials for new products. This will enable a further transition from a mass production/mass consumption business model to those involving 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, namely, Four Perspectives of the World as Envisioned by the Group in 2050.

Click [here \(771KB\)](#) **PDF** 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).

## Sustainability Innovation Business Expansion Project

CSR Roadmap 2025  
Main Initiatives (1)(2)(3)(4)(5)(6)

Toray Group is actively expanding its Sustainability Innovation (SI) business to help realize the Four Perspectives of the World as Envisioned by the Group in 2050, which are outlined in the Toray Group Sustainability Vision (see table below).

As a growth area, the SI business is being promoted not only under the CSR Roadmap 2025, but also in the Group's Long-Term Corporate Vision, which serves as its management policy, and in the Medium-Term Management Program, Project AP-G 2025. Under this program, KPIs have been set for SI business revenue as well as for avoided<sup>1</sup> CO<sub>2</sub> emissions and water filtration throughput contribution<sup>2</sup>—both quantified measures of the benefits that Toray Group products provide to the environment and society.

Four Perspectives of the World as Envisioned by the Toray Group in 2050	Domain	Key Initiative Details
A net zero emissions world, where greenhouse gas emissions are completely offset by absorption	CN (Carbon Neutral)	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 CO <sub>2</sub> . 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.
A world where resources are sustainably managed	CE (Circular Economy)	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.
A world with a restored natural environment, with clean water and air for everyone	NP (Nature Positive)	This primarily involves promoting water treatment membranes and pollutant reduction/alternative technologies, with a focus on water treatment, air purification, and environmental impact reduction.



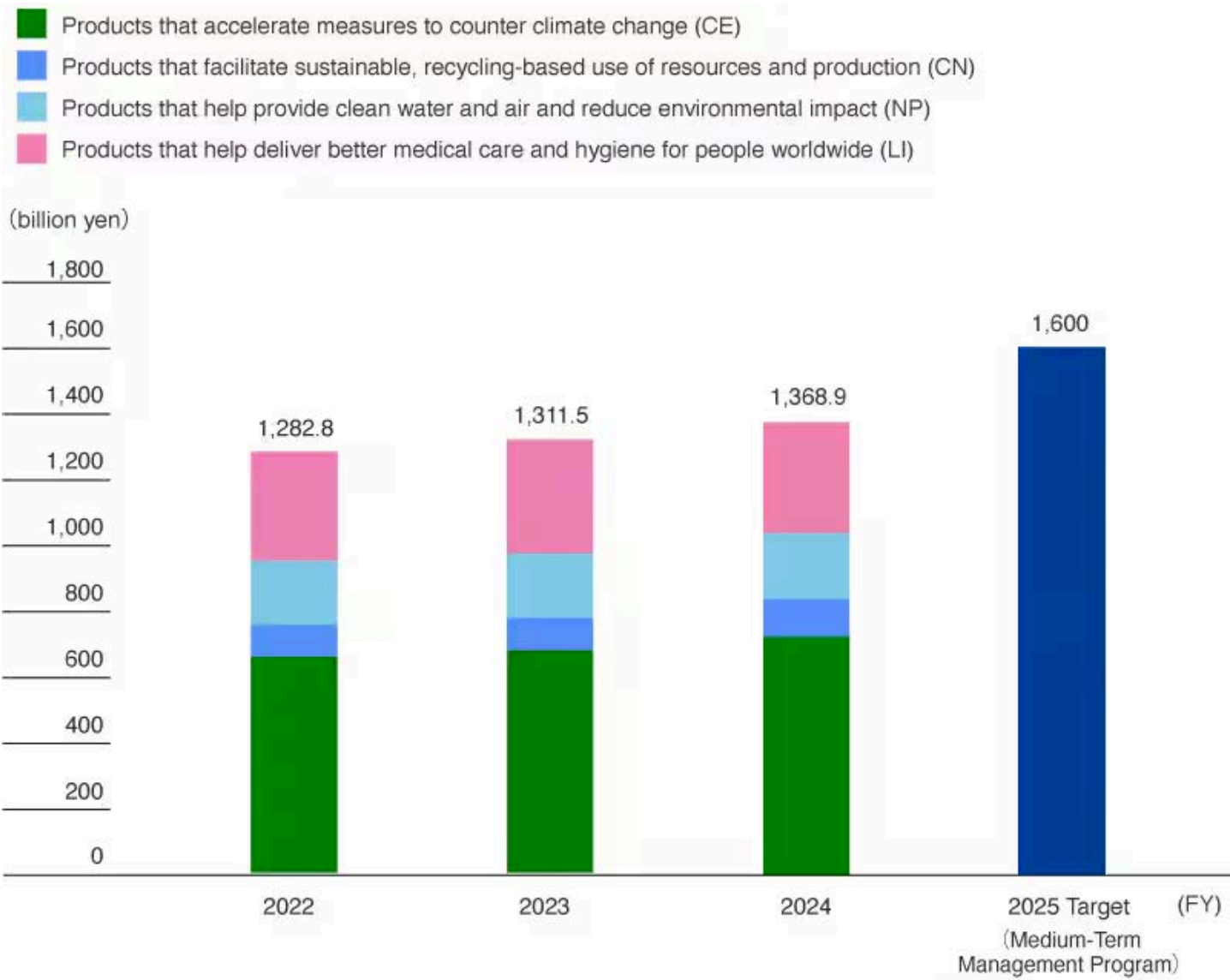
Four Perspectives of the World as Envisioned by the Toray Group in 2050	Domain	Key Initiative Details
A world where everyone enjoys good health and hygiene	LI (Life Innovation)	Products for improving the quality of medical care, health, longevity, and human safety. The focus is on expanding businesses related to pharmaceuticals, medical devices, hygiene products, safety, and health.

- 1
Toray calculates the value chain CO<sub>2</sub> 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.



In fiscal 2024, consolidated revenue from the SI business totaled 1,368.9 billion yen, representing a year-on-year increase of 4.4%. While demand for wind turbine blade applications in the Carbon Fiber Composite Materials business continued to be affected by inventory adjustments, as in the previous fiscal year, this was offset by a recovery in products for aircraft applications within the same business, along with growth in products such as films made with recycled materials and resins for automotive use. Revenue from the SI business accounted for 53% of Toray Group’s consolidated revenue in fiscal 2024.

Net Sales (Revenue) from Sustainability Innovation Businesses (Toray Group)

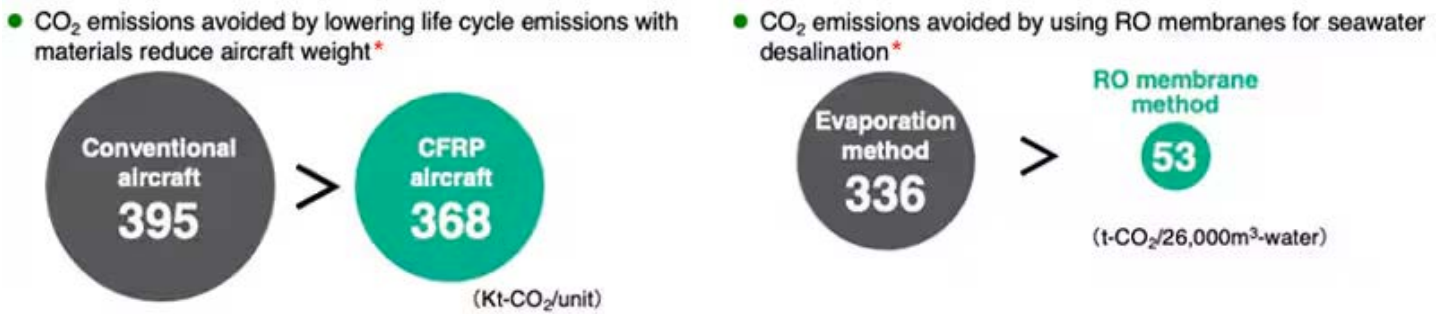


In fiscal 2024, Toray Group products helped to reduce CO<sub>2</sub> emissions in the value chain by 432.76 million tons (11.3 times higher than in fiscal 2013) and added 79.00 million tons of water filtration (2.9 times higher than in fiscal 2013).

Contribution to CO<sub>2</sub> reduction in value chain in fiscal 2024

432.76 million tons-CO<sub>2</sub>  
(11.3 times compared to fiscal 2013)

Volume CO<sub>2</sub> emissions avoided through use of Toray products



\* Figures in the circles above represent CO<sub>2</sub> 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 2024	79.00 million tons (2.9 times compared to fiscal 2013)
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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.

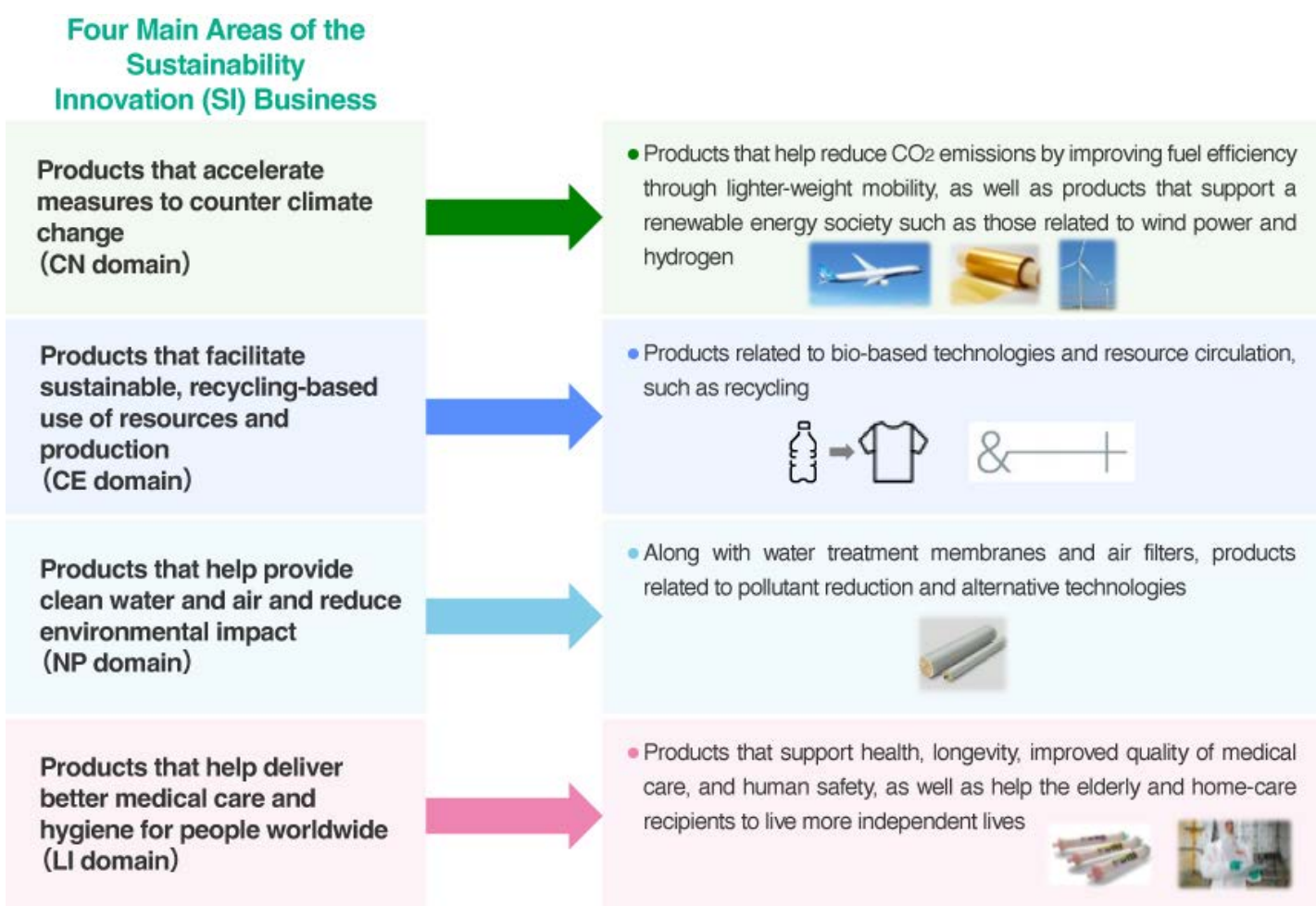
Click > [here](#) for the main initiatives for CSR Guideline 7, "Contributing Solutions to Social Issues through Business Activities" in CSR Roadmap 2025.

## Initiatives for Sustainability Innovation Business and Product Promotion

CSR Roadmap 2025  
Main Initiatives (1)(2)(3)(4)(5)(6)

Through its Sustainability Innovation (SI) business, Toray Group is helping to realize a sustainable society. The Group defines the products that constitute its Sustainability Innovation (SI) business as products and technologies that contribute to the four domains outlined in the Toray Group Sustainability Vision, and the products are selected based on the Group's own criteria.

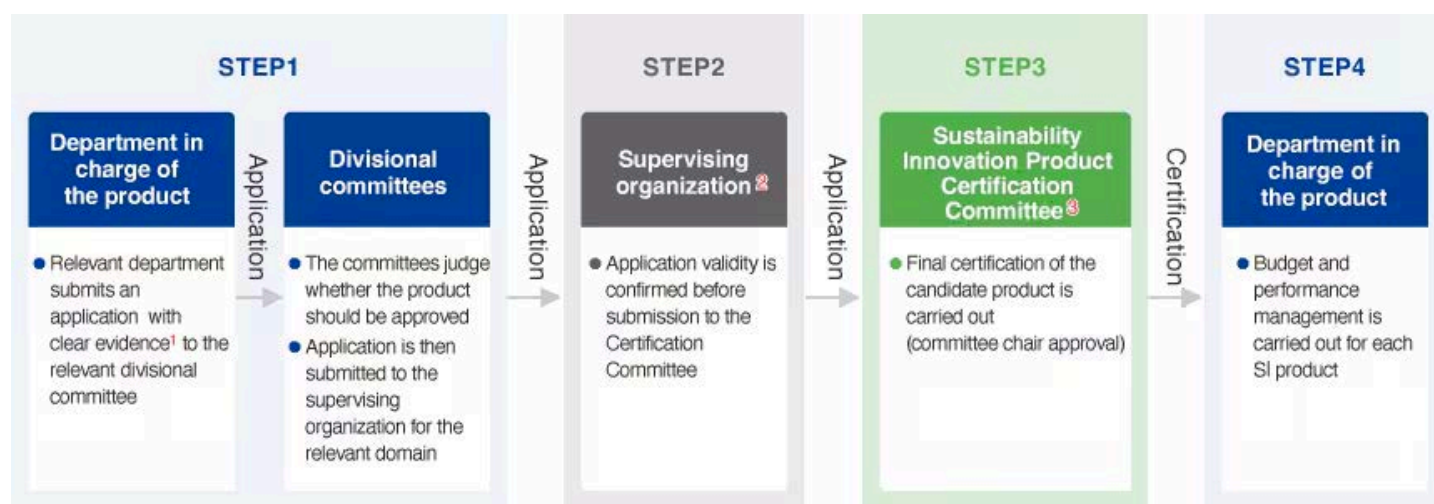
### Specific Examples of SI Products



### Sustainability Innovation Product Certification Process

To certify its SI products, the Group has established a Sustainability Innovation 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.



<sup>1</sup> In addition to estimates of CO<sub>2</sub> 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)

<sup>2</sup> Supervising organizations (domains of responsibility):

- Corporate Sustainability Strategic Management Division  
Sustainability Business Development Dept. (Circular Economy and Life Innovation)
- Corporate Sustainability Strategic Management Division  
Environmental Transition Strategy Dept. (Carbon Neutral and Nature Positive)

<sup>3</sup> Sustainability Innovation Product Certification Committee: SI Business Expansion leader (committee chair: General Manager of Corporate Sustainability Strategic Management Division), General Manager of Corporate Marketing Planning Department, General Manager of Technology Center Planning & Administration Department, as well as external experts when necessary

## Sustainability Innovation-Related Products and R&D Announced in Fiscal 2024

CSR Roadmap 2025  
Main Initiatives (1)(2)(3)(4)(5)(6)

### Toray Launches TBW-XHR Series Reverse Osmosis Membrane Elements Enabling Ultrapure Water Production from Recycled Wastewater<sup>4</sup>

Toray Industries, Inc. has developed the TBW-XHR series of neutral molecule high-removal, low-pressure reverse osmosis (RO) membrane elements. These membrane elements double the urea removal efficiency compared with conventional membranes when using recycled wastewater as a feed source for producing ultrapure water for applications such as semiconductor manufacturing. The Company has begun advance sales to domestic water treatment engineering companies.

With water shortages intensifying worldwide, reusing water in semiconductor manufacturing processes has become a critical issue. This has created demand for technologies capable of producing high-quality ultrapure water from diverse sources such as recycled wastewater and seawater.

Urea, in particular, must be removed with high efficiency because it adversely affects photolithography processes in semiconductor production.



Neutral Molecule High-Removal, Low-Pressure RO Membrane Elements "TBW-XHR Series"

With innovations to RO membrane structure control technology, Toray has developed a new membrane structure control technology that allows selective water permeation and enhances the removal of urea, boron, alcohol, and other substances. This technology doubles the urea removal efficiency, which has been a major challenge, while achieving high water permeability even at low pressure.

Advanced analytical technology from Toray Research Center, Inc. was utilized in developing this product.

Internal evaluations show that the TBW-XHR series achieves a urea removal rate of nearly 90%, reducing urea concentrations by half when producing ultrapure water from recycled wastewater. The product meets the stringent water quality standards required by advanced semiconductor fabs.

In addition to enhancing the water quality of existing ultrapure water production systems, the product could play an important role in constructing new systems, such as those using recycled wastewater. Looking ahead, Toray plans to expand applications to seawater desalination, industrial wastewater treatment, and brackish water desalination from sources such as rivers.

<sup>4</sup> Recycled wastewater: In recent years, in areas facing severe water shortages, biologically treated wastewater (secondary-treated water) has been further filtered through ultrafiltration and reverse osmosis membranes to produce “recycled water,” which is then used as a source for drinking water and other applications.

### **Toray Develops High-Precision Hollow Fiber Membrane Module with Nano-Structural Control that Can Streamline Food Production and Reduce Carbon Dioxide Emissions and Costs**

Toray Industries has developed a high-precision hollow fiber membrane module for food and bio-related applications by employing its nano-pore structural control technology. This module features a pore size (molecular weight cut-off<sup>5</sup>) around one-quarter that of conventional products, while retaining high heat resistance and permeability. This enhances recovery rates and concentration ratios for proteins and polysaccharides, improving production process efficiency while also helping to reduce CO<sub>2</sub> emissions and manufacturing costs.

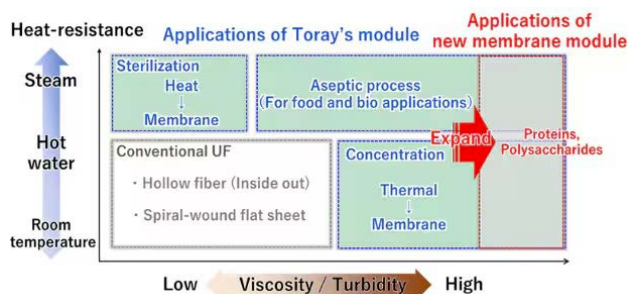
These products feature an outside-in module, enabling it to handle even highly turbid and viscous liquids. Toray’s proprietary composite hollow fiber membrane structure ensures high permeability and low fouling<sup>6</sup>. In addition, the module is highly resistant to steam and hot water temperatures of up to 125°C, making it possible to shift from conventional thermal concentration methods to membrane-based concentration, thus helping to cut CO<sub>2</sub> emissions. In recent years, customer demand has grown for technologies, including those for functional foods, that concentrate relatively low-molecular-weight proteins and polysaccharides. By combining its proprietary composite separation membrane with a new manufacturing process retaining the high heat resistance of the membranes, Toray has realized a module that achieves both fine pore size and high permeability. The new products has a molecular weight cut-off of 10,000–20,000 daltons, allowing it to handle a wider range of molecular weights than conventional products.

Toray has begun shipping samples of the new modules to customers, several of whom are conducting assessments. In the future, customers will be able to optimize their production processes by selecting between the new and existing modules depending on the target molecular weight for concentration or purification.

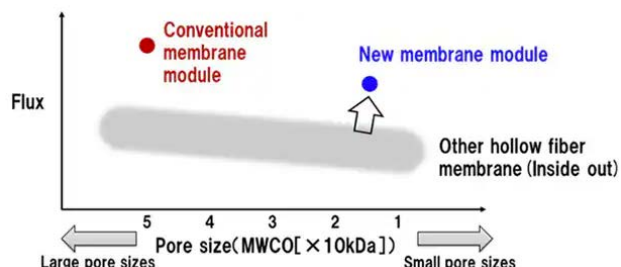
<sup>5</sup> Molecular weight cut-off: Indicates the ability of a membrane to retain substances of a certain molecular weight

<sup>6</sup> Fouling: A phenomenon in which contaminants accumulate or block the surface or pores of the separation membrane, impairing its separation performance. Low fouling means the membrane is resistant to such accumulation or blockage.





Applications of new membrane module



Relationship between module's pore size and liquid permeability (high concentration example)

## Full-Scale Launch of Nano-Multilayer Window Film that Delivers Both Solar Control and Transparency

Toray Industries has begun the full-scale rollout of its nano-multilayer film PICASUS<sup>™</sup> IR for window film applications. This innovative film combines outstanding solar control performance with glass-like transparency. In recent years, driven by rising temperatures and the push for energy saving solutions, demand has grown for window films with excellent solar control performance. In particular, in buildings and automobiles, there is a strong need for highly transparent products that do not impair visibility or spoil views. To meet these needs, Toray developed PICASUS<sup>™</sup> IR, a film that offers both transparency and infrared-ray blocking capability through advanced nano-multilayer technology, and has deployed it in applications such as automotive windshields. Leveraging this technology, the Company has now released a new standard type with a thickness of 50  $\mu\text{m}$ , suitable for installation on windows of buildings and automobiles. In addition to its high transparency and solar control performance, it offers excellent rework properties needed during installation. Toray is also evaluating a high solar-control type with approximately 40% improved solar control performance and is working to expand the product lineup. PICASUS<sup>™</sup> IR also features outstanding electromagnetic wave transmittance, minimizing interference with 5G communications, thereby contributing to both safety and comfort.

	Standard Type	High heat insulation Type
Thickness	50 $\mu\text{m}$	77 $\mu\text{m}$
Heat Shielding	<p>Heat shielding: 21%</p>	<p>Heat shielding: 30%</p>

Comparisons of standard and high heat shielding films



## Toray Launches International Joint Clinical Trial of RAPROS™ to Treat Chronic Kidney Disease in Cats

Toray Industries carried out an international multicenter clinical trial in Europe for RAPROS™, an oral treatment for chronic kidney disease (CKD) in cats.

Feline CKD leads to symptoms such as loss of appetite and weight loss due to declining kidney function, and ultimately is a life-threatening condition. RAPROS™ is the first veterinary medicine recognized for its efficacy in suppressing the decline of kidney function.

This clinical trial targeted 300 cats with CKD and evaluated the safety and efficacy of RAPROS™ over 182 days, aiming to obtain manufacturing and marketing approval in Europe.

The trial was conducted after securing approval from European countries to conduct a clinical trial, following scientific advice from the European Medicines Agency (EMA).

Concurrently, Toray is pursuing development in other regions, including USA and China.



## Exhibition Highlight in Fiscal 2024

### Participation in JEC World 2025

Toray Group completed its first joint exhibition by five group companies at JEC World 2025, one of the world's largest composite material trade shows held in Paris, France, from March 4 to 6, 2025.

Under the theme, "Creating new value and a sustainable future through technology and collaboration," the Toray Group booth showcased the Group's vertically integrated structure, a diverse global product lineup, and examples of technology development. Exhibits included TORAYCA™ carbon fiber, towpreg, high-performance thermoset composites, thermoplastic composites, and research and development technologies, broadly communicating Toray's comprehensive capabilities in the composite materials field.

The exhibits were organized into five categories: Sustainability, Mobility, Energy, Quality of Life, and New Products, highlighting Toray's product and technology contributions in each area.

Participating alongside Toray Industries, Inc. were European subsidiary companies: Toray Carbon Fibers Europe S.A. (France / manufacturing and sales of carbon fiber and intermediate materials), Toray Advanced Composites Netherlands B.V. (Netherlands / intermediate materials), Composite Materials (Italy) s.r.l. (fabrics and prepregs), and Delta Preg S.p.A. (Italy / prepregs).

This joint exhibition provided a valuable opportunity to demonstrate the strengths of Toray Group's global business collaboration based on the cooperation of the companies involved.



Toray Group exhibition booth  
Photo by Frederic JOLY / Design by TRIANGLE EXPOSITIONS

## Award Achievements in Fiscal 2024

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### Toray's Water Treatment Membrane Technology Receives Minister of the Environment Prize at the Global Environmental Awards

Toray Industries, Inc. was recognized for its contribution to solving global water scarcity issues through its water treatment membrane technology, receiving the Minister of the Environment Prize at the 32nd Global Environmental Awards. Toray's history with water treatment membranes dates back to 1968, when research on RO membranes began. Today, the Company operates 35 sales offices worldwide, six manufacturing plants, and four research and technology development centers. Toray's water treatment membranes are used in water treatment plants across more than 100 countries. Additionally, following the January 2024 Noto Peninsula earthquake, Toray's membranes played an active role in producing household and potable water from sources such as ponds in the affected areas.



Toray's award ceremony attendees (center: President Ohya)

### Toray's PFAS-Free Technology Wins "GX Award" at nano tech 2025

Toray Industries, Inc.'s development of PFAS-free technology was recognized with the Green Transformation (GX) Award at nano tech 2025 (the 24th International Nanotechnology Exhibition & Conference). This marks the Company's second consecutive year receiving the GX Award since 2023. The award recognized Toray's promotion of advanced materials and technologies leveraging nanotechnology, contributing to the environmental, semiconductor, and mobility fields, under the main theme of "Toray's Initiatives toward Innovation Creation."



Professor Tomoji Kawai (left), Chairman of the nano tech Executive Committee, at the GX Award ceremony

Click > [here](#) for the main initiatives for CSR Guideline 7, "Contributing Solutions to Social Issues through Business Activities" in CSR Roadmap 2025.

## 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 CO<sub>2</sub> 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 recycling<sup>1</sup>, which enables the reuse of discarded products and process remnants, such as fibers/textiles, resins, and films. In addition, chemical recycling<sup>2</sup>, which converts products and process waste that are not suitable for material recycling back into basic chemicals such as monomers and gases, is already implemented for nylon fiber products.

Toray Group is also working to develop materials that use biomass-derived resources 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 CO<sub>2</sub> 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.

Toray has identified the opportunities and risks associated with the transition to a circular economy as follows.

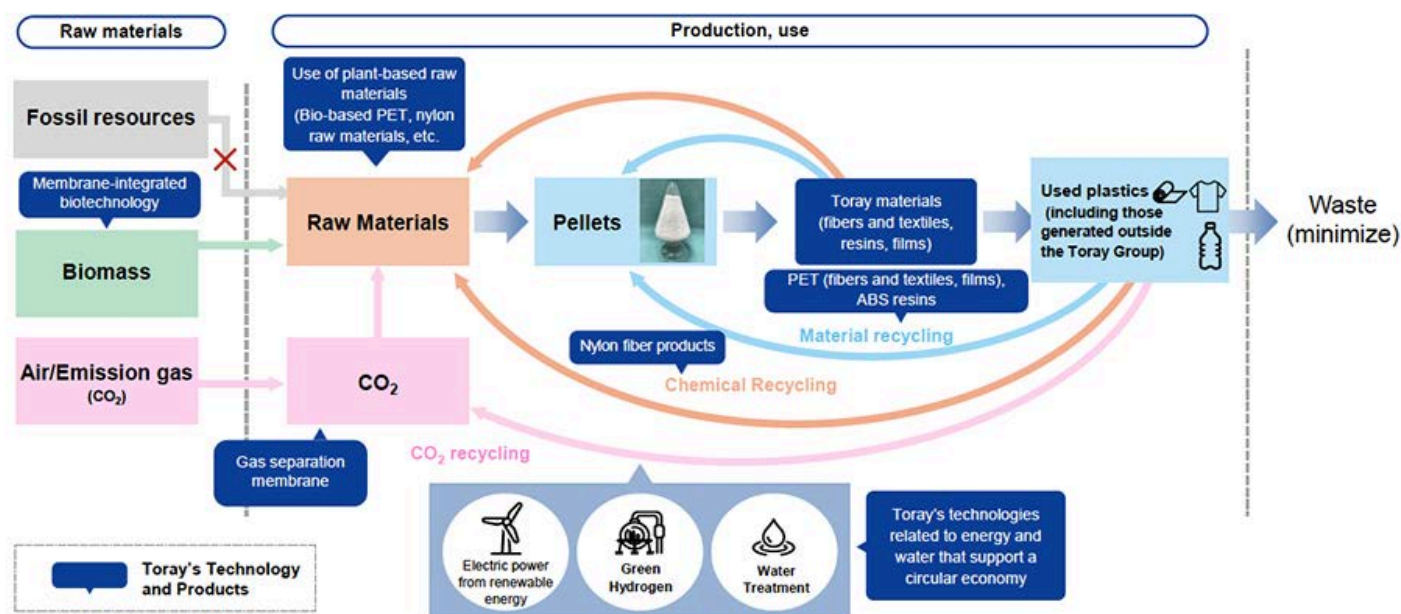
### Opportunities

1. Growth of materials business through use of biomass-derived materials
2. Growth of materials business through use of recycled materials
3. Growth of businesses that help reduce waste (waste reduction, and product durability)

### Risks

1. Increased cost of waste processing
2. Contraction of the materials market due to a shift away from mass production and consumption
3. Lost opportunities due to any delay in adapting to the circular economy

In order to reduce the risks and maximize the opportunities, the Group is promoting the use of biomass-derived and recycled materials 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 process that regenerates pre-consumer or post-consumer materials into recycled materials through physical means. Examples include cutting, sorting, crushing, washing and decontamination (removal of dirt and foreign matter), and melting.
- 2 Chemical recycling is a process that chemically decomposes pre-consumer or post-consumer materials to recover useful chemical substances. Examples include decomposition, liquefaction, gasification, and depolymerization.

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 2024 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 approach<sup>3</sup>. 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. (Tokyo Head Office, Ehime Plant, Nagoya Plant, Tokai Plant, Okazaki Plant, Chiba Plant, Gifu Plant, Ishikawa Plant)
- Toray Celanese Co., Ltd.
- Toray International, Inc. (Tokyo Head Office, Osaka Head Office, Singapore)
- Toray Plastics (America), Inc. [Rhode Island, Virginia]
- Toray Composite Materials America, Inc. [Decatur, Spartanburg]
- Toray Films Europe S.A.S.
- Toray Carbon Fibers Europe S.A. [Abidos, Lacq]
- Delta-Preg S.p.A.
- Toray Advanced Materials Korea Inc. [Head Office, Gumi Plant 1, Gumi Plant 3]
- Toray Plastics (Malaysia) Sdn. Berhad

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 biomass 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.

The Group has also established new internal certification criteria in its Toray Group Certification Standards for Recycled and Biomass-based Products. These standards set out criteria defining which Toray products are eligible to be labeled a “recycled product” or a “biomass-based product,” allowing this to be clearly communicated to customers and markets. Verification and control of target products is carried out in accordance with these standards.

## 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.

## 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](#)

## Participation in Initiatives to Promote a Circular Economy

In cooperation with various external organizations, Toray Industries, Inc. is working to address challenges in achieving a circular economy. The main initiatives in which Toray Industries participates are as follows.

- [Ministry of Economy, Trade and Industry: Circular Partners](#)
- [SusPla \(Sustainable Plastics Initiative\) \(available only in Japanese\)](#)
- [Textile Exchange](#)

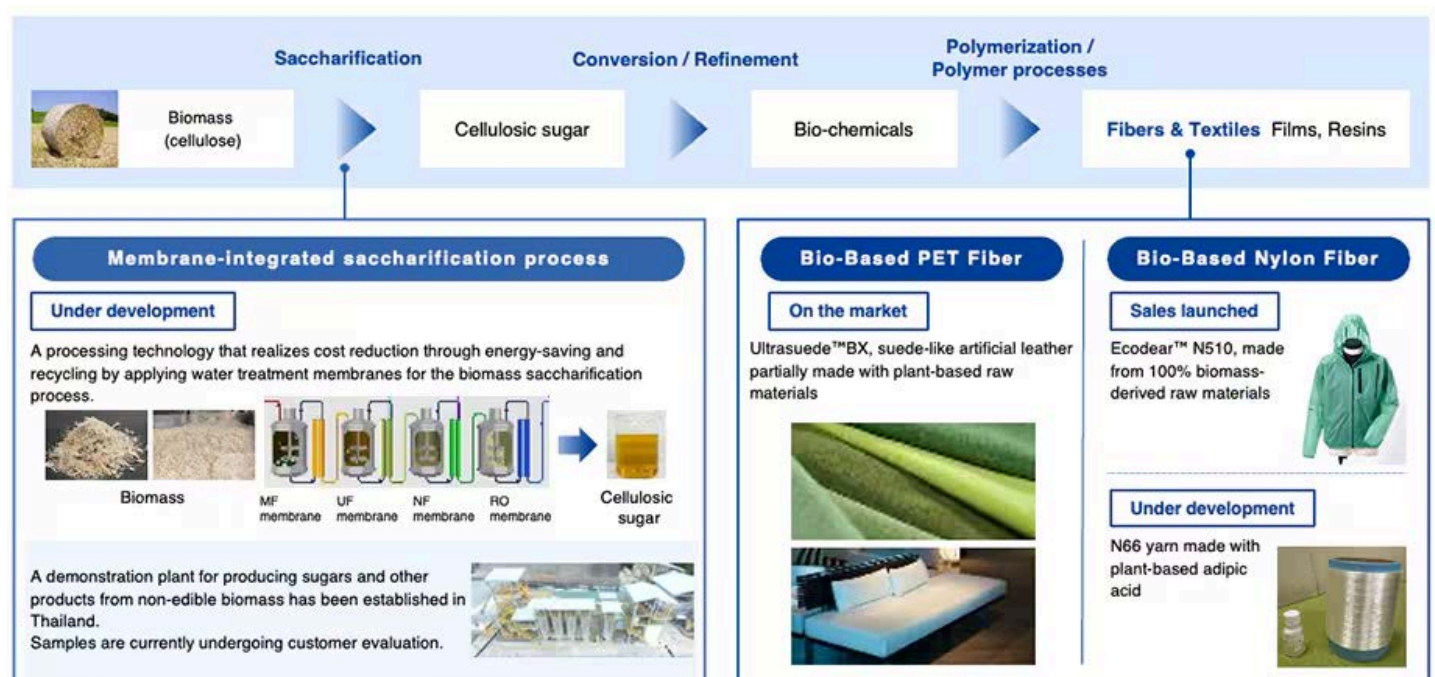


Toray Group is promoting initiatives related to biomass-derived raw materials under a unified brand, Ecodear™. It is developing these products using raw materials derived from biomass-derived resources rather than fossil resources. For example, Toray Group mass produces partially bio-based polyethylene 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 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. The Group is also developing membrane-integrated bioprocesses for the in-house production of biomass-derived 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. As part of collaborative projects, this fiber has been utilized for the TANKER series of bags by Yoshida Co., Ltd. and in the STRINGS lineup of clothing from ISSEY MIYAKE Inc.

### Membrane-Integrated Bioprocesses

Toray Group is developing a membrane-integrated bioprocess to enable biomass-derived 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 materials made from biomass-derived 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.

In 2023, Toray Industries, Inc. and PTT Global Chemical Public Company Limited began jointly developing technology to produce muconic acid and bio-based adipic acid—raw materials for nylon 66—using sugars derived from non-edible biomass as feedstock. These sugars are manufactured at Cellulosic Biomass Technology Co., Ltd. (Thailand), in which Toray holds an 84% stake. This effort led to the world's first successful pilot-scale production.



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 &+™ (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 &+™ brand.

In 2024, the Group analyzed the depolymerization reaction of Nylon 66 using subcritical water<sup>4</sup> and, through its proprietary technology that suppresses side reactions, successfully recovered two types of monomers at high yield and efficiency, then repolymerized them to regenerate Nylon 66. This nylon is mainly used in automotive and industrial applications such as airbags, leaving open the possibility of expanding the range of applications in chemical recycling.

By utilizing waste fibers, resin, and film, the Group is promoting initiatives to create systems that recycle materials for various uses.

<sup>4</sup> Subcritical water: Water in a high-temperature, high-pressure state just below its critical point (374°C, 22 MPa), possessing properties such as the ability to dissolve and hydrolyze organic compounds. This state differs from the characteristics of water at room temperature and regular atmospheric pressure.

## Fiber and Textile Recycling

### &+™ 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 &+™ 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 &+™ 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 &+™ 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.



In addition, Toray Industries is also promoting industry–academia collaboration projects utilizing &+™. In its initiative with Otsuma Women’s University, Toray partnered with the university student brand “m\_r tokyo” to jointly develop an environmentally conscious parasol with heat-shielding, light-shielding, and UV-protection functions. In its initiative with Bunka Fashion College, Toray carried out a fabric printing and design project for yukata (summer kimonos) using &+™, aimed at fostering the next generation of designers.

The Group also intends to expand its recycled fiber material lineup to enable product planning that will further satisfy the needs of consumers.

[&+™ \(product site\)](#) 

## Promoting Recycling with UNIQLO Co., Ltd.

Together with UNIQLO Co., Ltd., Toray Industries has been promoting new initiatives for sustainable products.

Since 2020, Toray has jointly developed fibers derived from PET bottles, supplying them for use in some of UNIQLO’s quick-drying wear DRY-EX brand polo shirts and for its functional innerwear AIRism.

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 using recycled and biomass-derived 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 Resin “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 (polybutylene terephthalate) resin “Ecouse” TORAYCON™

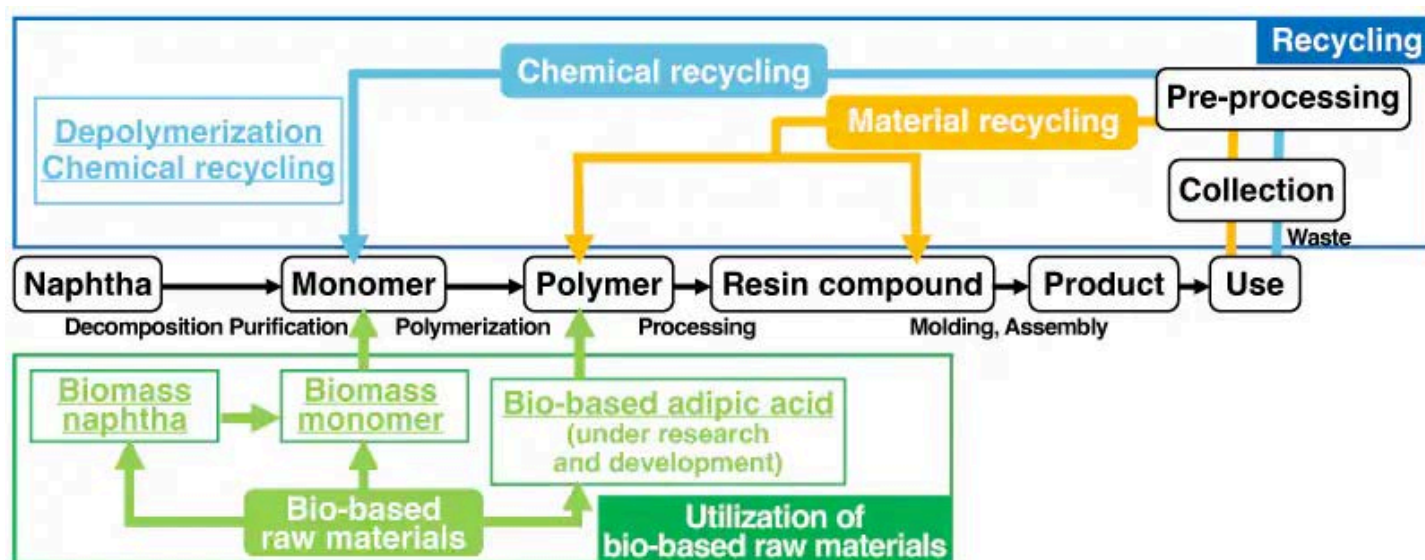
Toray has launched a recycled PBT resin, “Ecouse” TORAYCON™, as a chemically recycled resin with physical properties comparable to virgin materials.

## 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 biomass-derived raw material use, Toray has established a supply system for bio-based ABS (acrylonitrile butadiene styrene) resin, bio-based PPS resin, and chemically recycled PPS resin (ISCC PLUS certified) using the mass balance approach.

### Resin Resource Recycling Initiatives

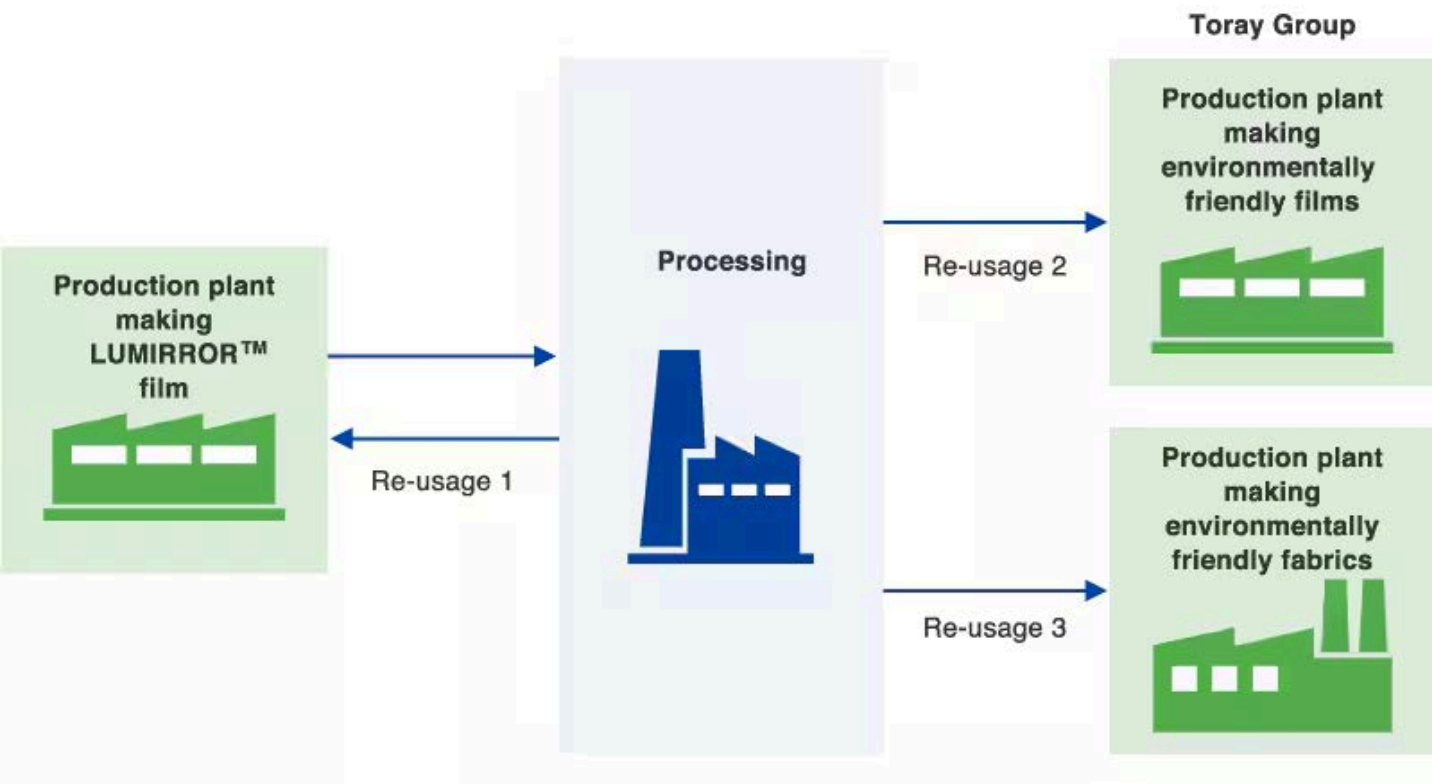


## Film Recycling

CSR Roadmap 2025  
Main Initiatives (1)(2)(4)(5)

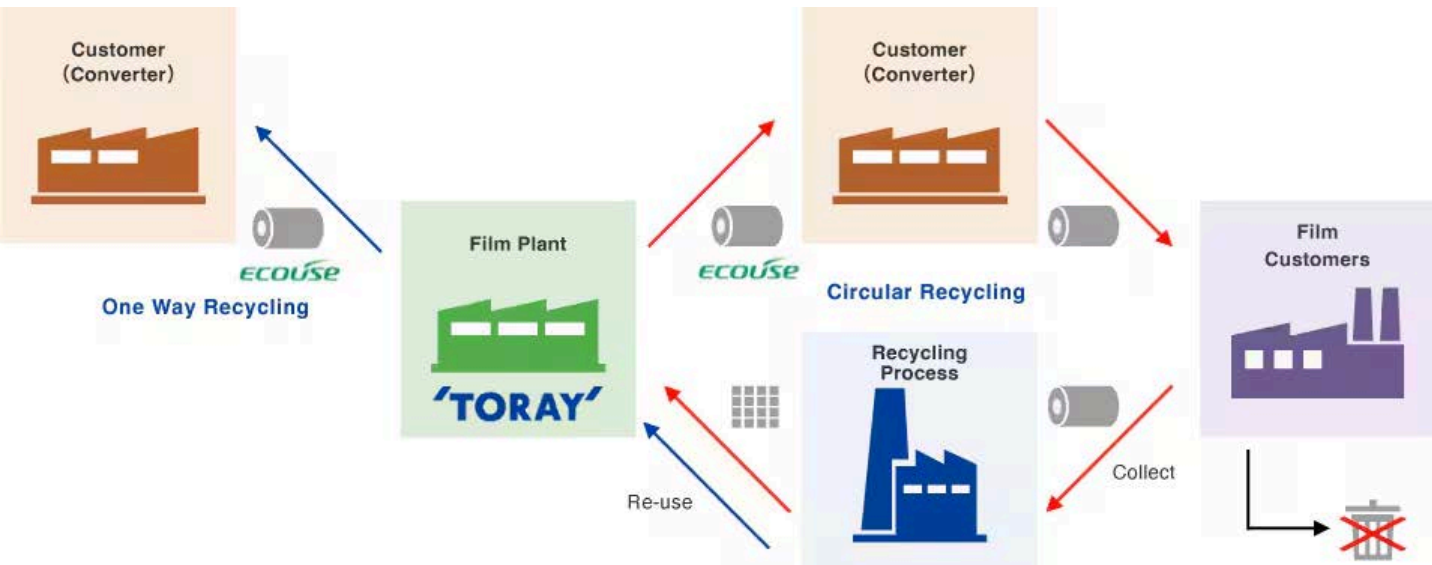
Toray Industries is promoting production activities that use resources carefully. PET plastic generated as waste in PET film LUMIRROR™ manufacturing and other processes are collected and re-pelletized for use in making textiles and resin products and film. In addition, the Company operates a system for collecting used PET film from customer manufacturing processes, and then recycling it as raw material for film.

Processing and Reusing Recovered Raw Materials Generated from Manufacturing Processes

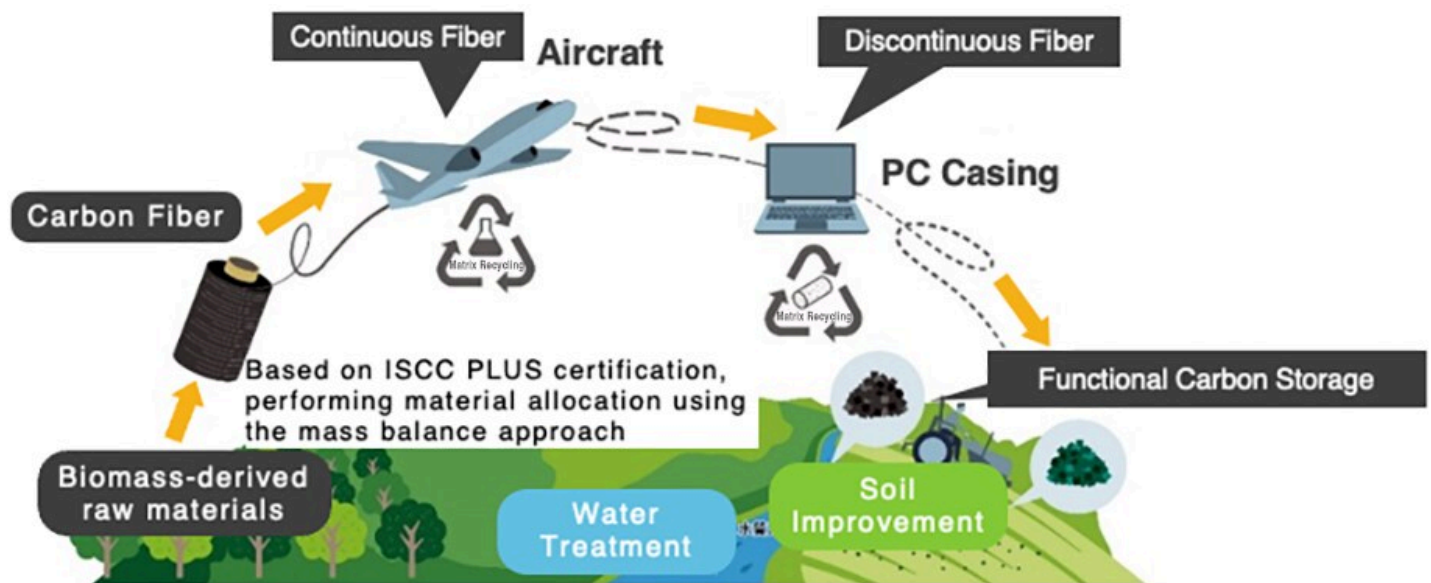


Reusing waste PET film from customer manufacturing processes

Toray Industries has established a recycling system to collect waste PET films from electronic component applications and recover them for use in the production of PET films, launching the Ecouse™ series. This contributes to creating a world where resources are managed sustainably, as outlined in the Toray Group Sustainability Vision. The company combined mechanical recycling process technologies, which remove 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 CO<sub>2</sub> emissions by up to 50% compared to conventional films. The company will continue to utilize this system to help build a circular economy.



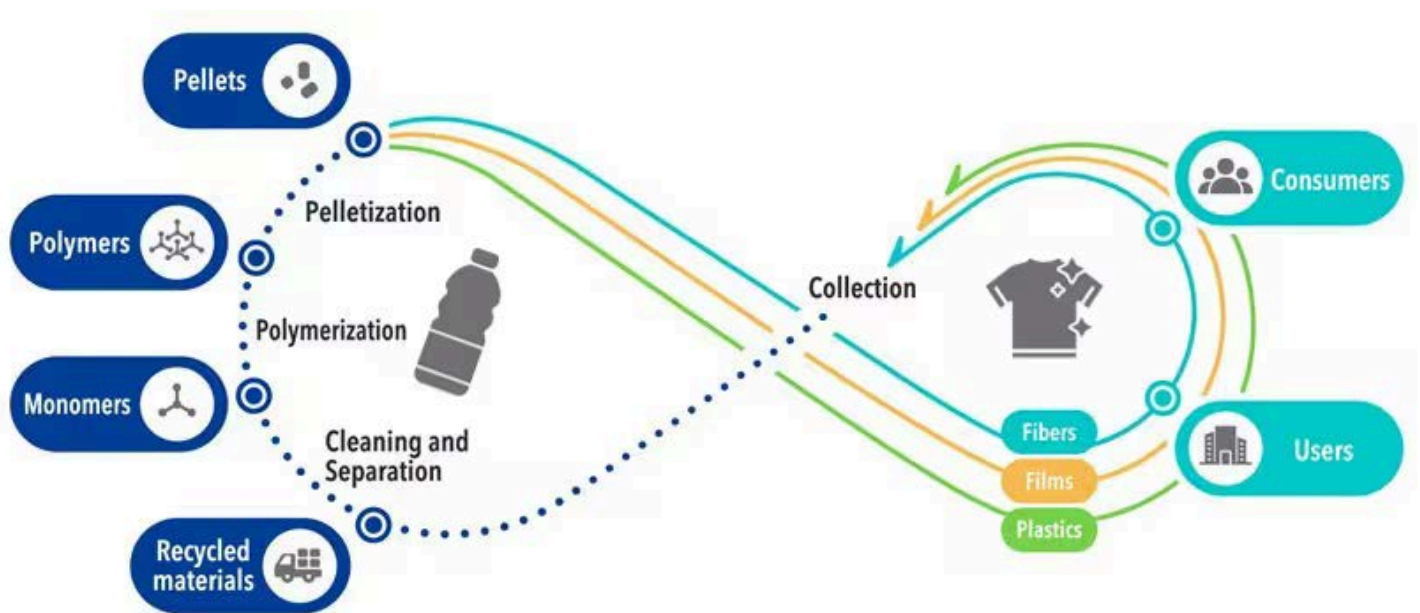
TORAYCA™ carbon fiber, with its excellent mechanical properties, provides products that are lighter in weight and have longer lives. Carbon fiber also contributes to the reduction of CO<sub>2</sub> emissions throughout the product's lifecycle, helping to solve global environmental issues. In particular, the use of TORAYCA™ in applications such as large wind turbines, aircraft, and hydrogen tanks significantly reduces CO<sub>2</sub> 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 has also begun exploring the recycling of scrap and waste materials from customers' factories for use as recycled carbon fiber (rCF) reinforcement materials. In collaboration with partners, Toray is accelerating product development of high value-added products 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 biomass-derived raw materials. By leveraging these strengths, Toray Industries aims to build a "Material Eco SYSTEM" for carbon fiber.



## Blockchain-based Traceability

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.



## 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 region concerned. Specifically, the Group complies with the labor laws and regulations of each country or region with regard to employment regulations, minimum wages, overtime work, fair wage systems, and the granting of annual leave. At the same time, the Group places the highest priority on employee job security and works to create a comfortable working environment based on cooperative labor-management relations. In addition, by ensuring appropriate wage levels that take into account the concept of a living wage and by implementing fair employment practices, the Group seeks to improve employees' quality of life.

These initiatives are carried out in close collaboration between Toray Industries and group companies worldwide, with conditions being monitored as appropriate.

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.

**Enhancing People-Centric Management**

Since its founding, Toray Group has made human resource development a core business priority, based on the philosophy that the success or failure of a company is decided by its people, and that employees shape its destiny. To further clarify this philosophy and strengthen its global human resource strategy, the Toray Global HR Management Fundamental Policy was established in 2011. Since then, the Group has continually made securing and developing outstanding human resources as one of its most important tasks and a fundamental management priority, while adapting to a changing business environment.

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. The Group has created a human resources strategy to maximize corporate value and enhance employee well-being. The focus is on inclusion of diverse human resources and values, developing human resources and organizations that can adapt to change, and fostering identification with the Toray Philosophy and the development of fulfilling, engaging careers.

**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.



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.

## 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.

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.

## Structure

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 and Results

## 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
<b>Human Rights Promotion</b>	
(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	-
<b>Human Resources Development</b>	
(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)	Targets / Results		
	Fiscal 2023	Fiscal 2024	Fiscal 2025
8-① Group companies implementing human rights education and training (%)	100% / 100%	100% / 100%	100% / -
8-② Group companies that have achieved legally mandated employment rate of persons with disabilities (%)	100% / 59.4%	100% / 52.9%	100% / -
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 101%	Year-on-year increase / Year-on-year 99%	Year-on-year increase / -
8-④ Employees returning to work from childcare leave (%)	100% / 99%	100% / 99%	100% / -
8-⑤ Male employees taking childcare leave or other leave for the same reason (%)	Year-on-year increase / Year-on-year 106%	Year-on-year increase / Year-on-year 106%	Year-on-year increase / -
8-⑥ Reduction in employees who exceed 45 hours/month of non-statutory working hours	Year-on-year reduction / Year-on-year 81.1%	Year-on-year reduction / Year-on-year 120.3%	Year-on-year reduction / -
8-⑦ Available annual paid leave used by labor union members (%)	90% / 95.7%	90% / 93.7%	90% / -

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 \(536KB\)](#) **PDF** for the Materiality View of CSR Roadmap 2025.

## Looking to the Future

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### 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 2025.

### 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. Alongside its efforts to systematically secure talents, the Group also works continually to enhance its grade-specific management training designed to strengthen frontline capacity and upgrade selective training programs to foster executive candidates capable of leading the Group management in the future.

Click [here \(771KB\)](#) **PDF** 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).

# 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 2024
Toray Group	100%

Result in fiscal 2024

**100%**

Toray Industries, Inc. promotes year-round awareness-raising activities at each business site to foster proper understanding and awareness of human rights. In addition, every February and March, there is a company-wide Human Rights Awareness Campaign. During this period, the Company carries out initiatives such as distributing posters and pamphlets, holding study sessions in workplaces, and conducting educational programs led by the leader of the Company's Human Rights Promotion Group.

In fiscal 2024, under the campaign theme, "Reflect on Your Words and Actions—Fostering Mutual Communication that Respects Others and Promotes Understanding," the Company continued distributing educational pamphlets to all employees and worked to further instill a workplace culture of mutual respect. In addition to strengthening efforts to prevent sexual harassment, pregnancy-based harassment, and power harassment, the Company introduced training programs and group discussion activities aimed at creating a more open and inclusive work environment. 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 2024, the leader of the Human Rights Promotion Group conducted remote and in-person group training sessions for members of the Human Rights Promotion Committee and implementation staff at the Company's offices and plants as part of the human rights awareness campaign. The training covered key points derived from actual harassment cases reported through the company's helpline channels, as well as initiatives aimed at fostering a more open and inclusive workplace culture. 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 2024 program was held in March and April 2024, and 99.8% 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 (59 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.

**FY 2024 Human Rights Training and Seminar**

Type of training		Number of sessions	Number of participants
Toray Industries, Inc.	Training at head office	24	1,444
	Training at offices and plants	1,978	17,369
	Training at outside company	28	55
Group companies in Japan	Training at companies	1,217	22,986
	Training at outside company	148	200

Total amount of time dedicated to training	1,623 hours
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Human rights awareness poster



Training session

**Identifying, Assessing and Mitigating Human Rights Risks for Toray Group**

CSR Roadmap 2025  
Main Initiatives (1)(3)

Toray Group recognizes the importance of respecting human rights in its business activities and works group-wide to identify, assess, and mitigate human rights risks. The Group’s approach is based on the fundamental principles found in the OECD Due Diligence Guidance for Responsible Business Conduct, and is implemented as outlined below.

## Due Diligence Process



Click [here \(229.7KB\)](#) PDF for more details on Toray Group's due diligence process.

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, the Group identifies potential human rights issues, problems, and concerns as human rights risks, including discrimination, harassment, forced labor, human trafficking, child labor, denial of right to collective bargaining, and unequal pay. It is promoting efforts to address these risks at relevant companies or group-wide in accordance with the human rights promotion system described above.

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.

Going forward, the Group will continue to strengthen its initiatives and improve its systems to ensure systematic and continual human rights due diligence.

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](#) 

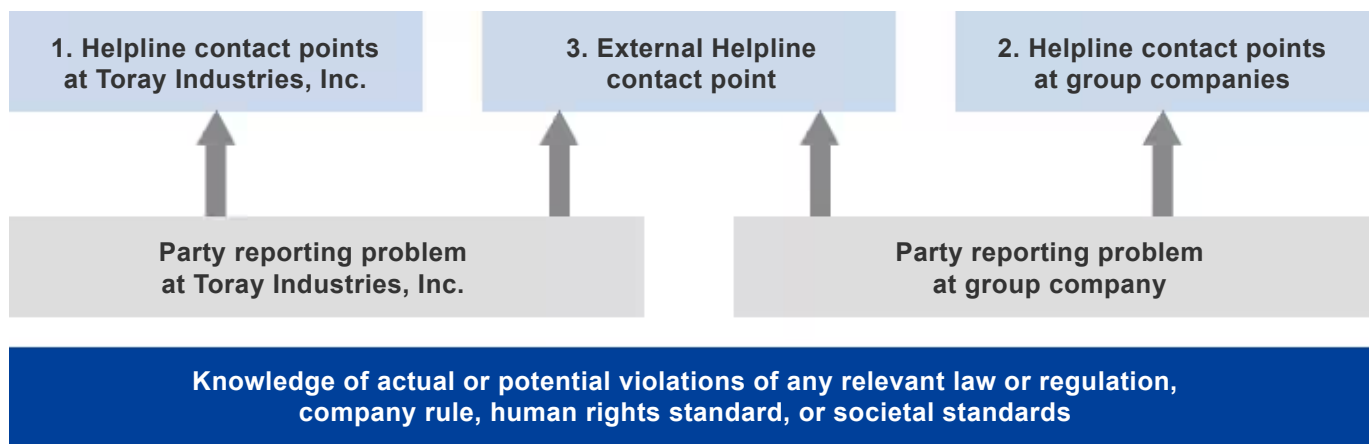
> [Socially Responsible Procurement Initiatives at Toray Group](#)

## Response to Reports and Consultations on Human Rights

CSR Roadmap 2025  
Main Initiatives (3)

### Process for Reporting or Consulting on Compliance Issues

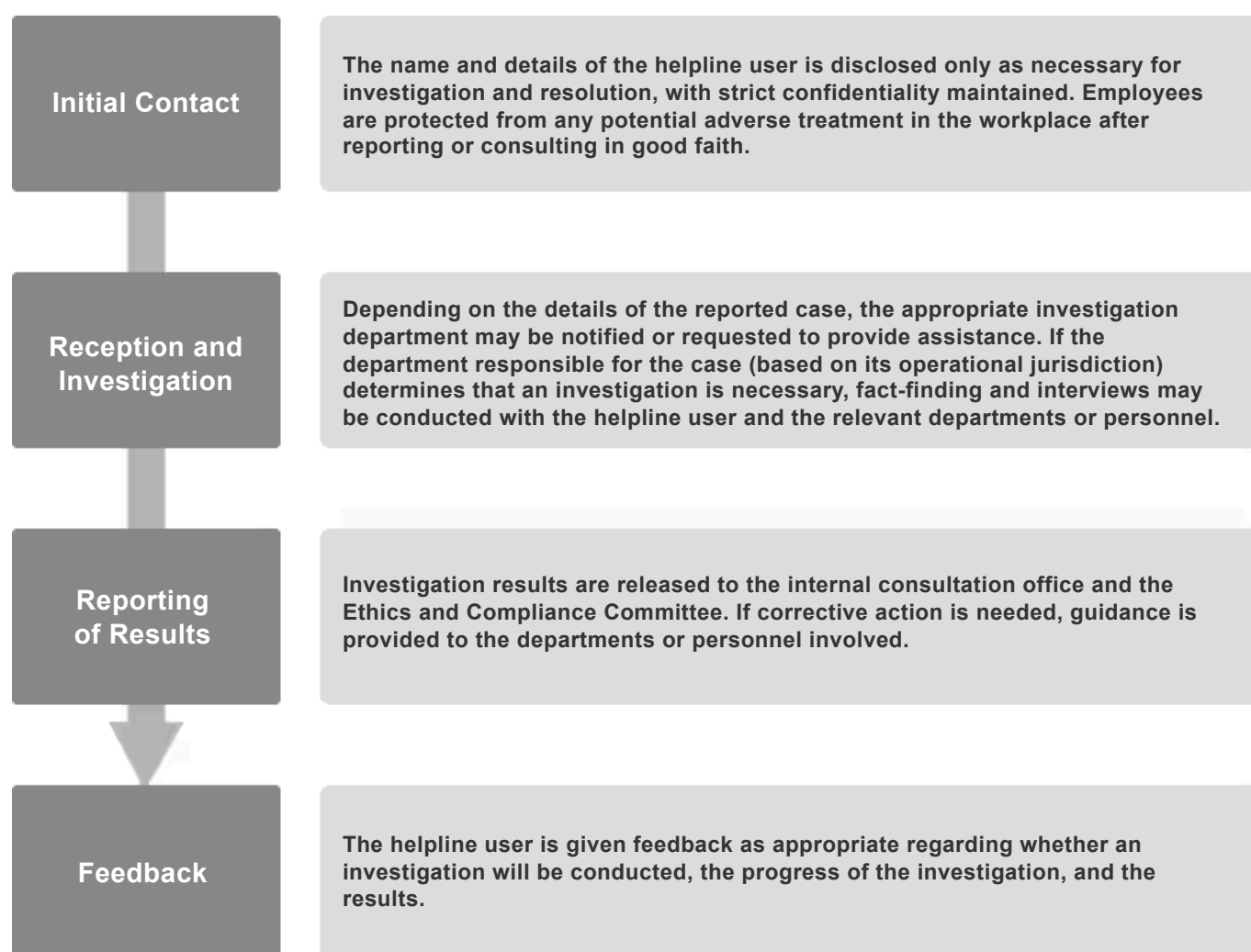
Toray Group has established helpline channels as shown below to allow everyone working within the Group in Japan to report or consult on human rights issues. In overseas locations, each group company maintains its own reporting and consultation channels.



### Helpline Rules

1. To confirm facts, resolve issues appropriately, and provide feedback on investigation results, helpline users are generally asked to provide their name, department, and contact information. Users can also report violations or consult on issues anonymously.  
Even if the user identifies themselves, the person may still request that no identifying information be shared with the Group.
2. Group employees may use either internal or external helpline channels.
3. Reports may concern workplace legal violations, breaches of internal rules such as employment regulations, harassment or other human rights infringements, or failing to meet societal standards. This includes not only incidents known to have occurred, but also those suspected or likely to occur.
4. All reports are received and consultations are provided in strict accordance with internal operational standards.

## Helpline Process



In fiscal 2024, 65 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 such as harassment 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.

# 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.

To ensure that it continues to create new value, the Group has defined key transformation points in its human resources strategy as areas with gaps between the current state (As-Is) and the desired state (To-Be), identifying three areas for focus: 1) inclusion of diverse human resources and values, 2) creating human resources and organizations that adapt to change, and 3) fostering empathy with the Toray Philosophy and promoting career development with rewarding and engaging work. The Group is working to reform its organizational culture by addressing these strategic focuses in pursuit of maximizing corporate value and enhancing employee well-being.

## Pursuing both Maximization of Corporate Value and Enhancement of Employee Well-being (Conceptual Diagram)

### Key Factors for "Enhancement" = As Is/To Be Gap

1. Inclusion of Diverse Human Resources and Values
2. Creating Human Resources and Organizations that Adapt to Change
3. Empathy with Toray Philosophy and Career Development with Rewarding and Engaging Work







**Individuals who, leveraging advanced knowledge and experience, boldly take on the challenge of innovation and independently and proactively solve problems.**

**Fairness, high ethical standards, and a sense of responsibility**

**Foresight, leadership, and a sense of balance**

**Advanced specialized knowledge and skills applicable outside the company**

**Global mindset and skills**

## Human Resource Strategies and Details of Enhancement

Human Resources Strategies	Details of Enhancement
Inclusion of Diverse Human Resources and Values Diversity	<ol style="list-style-type: none"> <li>1. All employees at the Toray Group fully demonstrate their individual strengths, regardless of the differences in their values, life events, or other personal circumstances</li> <li>2. Current work responsibilities and capability demonstration are fairly assessed, irrespective of gender, age, nationality, or other attributes</li> </ol>
Creating Human Resources and Organizations that Adapt to Change Talent portfolio	<ol style="list-style-type: none"> <li>1. More extensive successor candidates for management personnel who will lead innovation</li> <li>2. Ability to stably secure (= hiring and retention) personnel who will take responsibility for the future of the Toray Group, to reliably pass on skills and know-how, and to appropriately promote generational transition</li> <li>3. A culture that focuses on taking the initiative on learning and that allows for ongoing self-directed learning, and organizations that can adapt to change</li> </ol>
Empathy with Toray Philosophy and Career Development with Rewarding and Engaging Work Engagement	<ol style="list-style-type: none"> <li>1. High degree of harmony between corporate HR strategies and individual career building allows employees to realize self-fulfillment at the Toray Group</li> <li>2. Employees can take on challenges without fear of failure, solve problems as a team, and attain a sense of growth and well-being through work</li> </ol>

## Employee Survey

Toray Group conducts an annual employee survey of personnel at group companies worldwide, with the aim of better understanding employee perceptions of the corporate culture, workplace environment, and human resource and compensation systems. The findings are used to devise future improvements.

In fiscal 2023, the survey was updated to capture the state of the organization from both the perspective of employees' expectations and their actual experiences. For its pilot implementation, the survey was limited to managers and occupational specialists, G-Course<sup>1</sup> employees, and core staff at group companies in Japan.

Based on the principle that each workplace is a driving force for organizational culture transformation, Toray Group also adopted a new system that allows immediate access to survey results. Certain indicators are further used as KPIs to track progress in enhancing people-centric management.

Survey results are released on the Group intranet, and examples of workplace-level discussions and best practices for improvement are shared group-wide. This supports individual workplaces and enables them to take ownership of organizational culture transformation and engage in the necessary initiatives.

#### FY 2024 Survey Results (Toray Industries, Inc.)

Human Resources Strategies	Employee Survey (KPI Question)	Target (Employee Perception)	FY 2024 Result	FY 2024 Result for the Subset of Previous Survey Participants	
				FY 2023	FY 2024
Inclusion of Diverse Human Resources and Values <div>Diversity</div>	We have a culture that accepts diverse values	7.0pt or higher	5.9pt	6.2pt	6.4pt
Creating Human Resources and Organizations that Adapt to Change <div>Talent portfolio</div>	Organizational improvements are being made without pushback by those resistant to change	7.0pt or higher	5.6pt	5.5pt	5.8pt
Empathy with Toray Philosophy and Career Development with Rewarding and Engaging Work <div>Engagement</div>	1. I am able to engage in work that I find meaningful 2. I am able to build a career that I find satisfying 3. I am proud to be a member of Toray Group	1. 7.0pt or higher 2. 7.0pt or higher 3. 7.0pt or higher	1. 6.3pt 2. 5.2pt 3. 6.6pt	1. 6.7pt 2. 5.5pt 3. 6.7pt	1. 6.9pt 2. 5.8pt 3. 6.9pt
EX Score <sup>®2</sup>		Year-on-year increase	66.1	64.8	66.7

<sup>1</sup> G-Course: A career path for Toray Group executive or upper-level professional candidates

<sup>2</sup> The EX Score<sup>®</sup> 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<sup>®</sup> is a registered trademark of HRBrain, Inc. which conducted the employee survey for the Group.



Using the intranet to spread initiatives based on employee survey results company-wide



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 119 non-Japanese as regular employees as of fiscal 2024. 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 FY 2020-2024 (Toray Industries, Inc. and group companies in Japan)

Result		2020	2021	2022	2023	2024
New graduates	Men	287	218	205	267	361
	Women	76	80	45	86	103
	Total	363	298	250	353	464
Mid-career hires	Men	113	148	200	256	278
	Women	28	55	60	95	95
	Total	141	203	260	351	373

Personnel System (Toray Industries, Inc.)

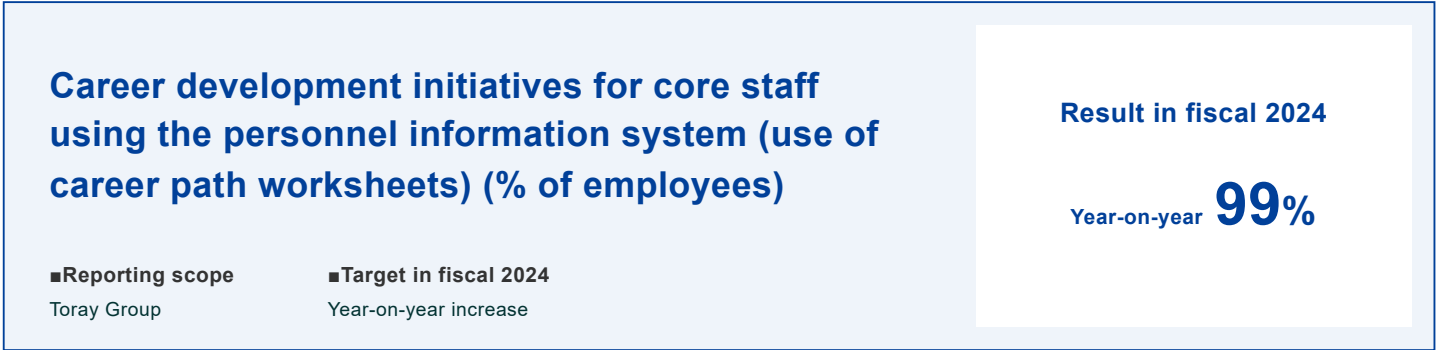
Management-by-objectives system	Each employee establishes annual objectives. At the end of the fiscal year, employees and their supervisors meet to review accomplishments and the extent to which they were able to meet their objectives.
Personnel appraisal system	Designed to facilitate a fair appraisal of employee contributions in terms of duties, responsibilities, capabilities, and performance. 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	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.

Note: The management-by-objectives, personnel appraisal, and individual meeting systems apply 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

“Performance” under the personnel appraisal system also includes efforts to address CSR-related issues.

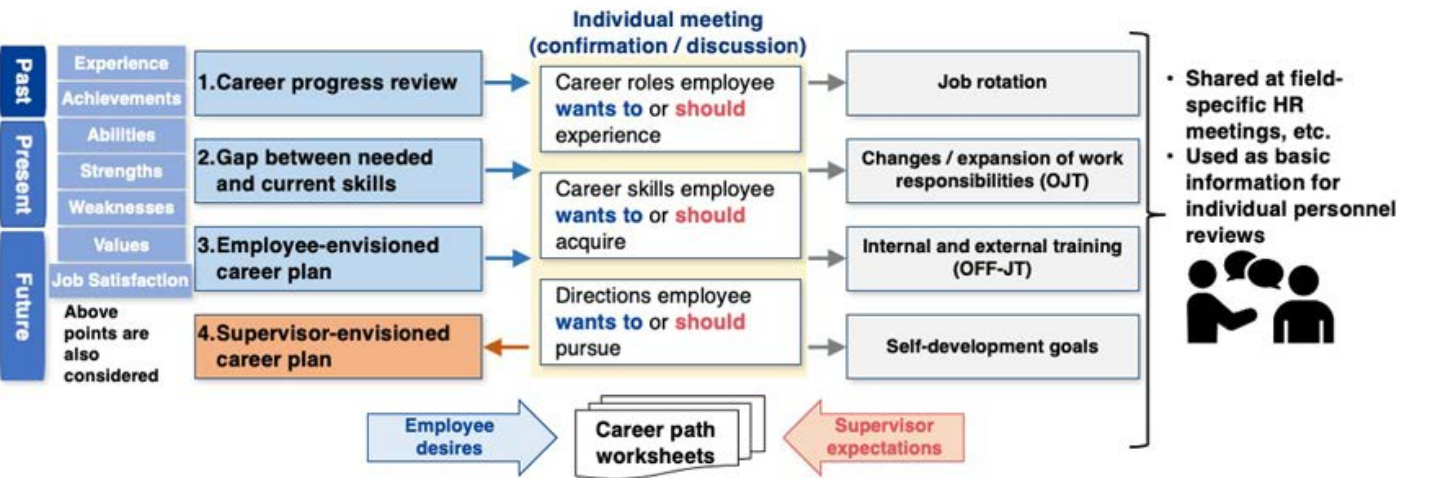


Toray Industries has introduced career path worksheets as a human resource development tool designed to promote employee growth. These worksheets encourage employees to reflect on their past work experience and the level of skill required in their field, as well as facilitate career-related discussions through interviews with supervisors and subordinates.

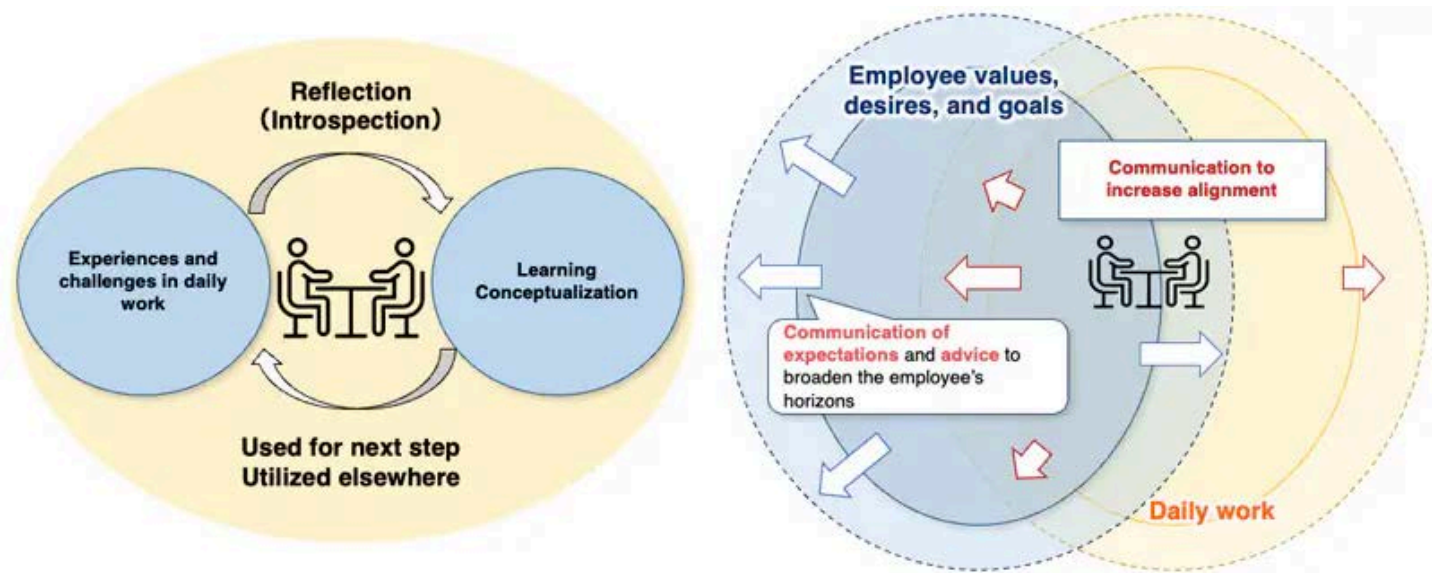
The career path worksheets were first introduced in fiscal 2020 for employees pursuing G-Course career paths in sales and corporate administration. In fiscal 2021, their use was extended to technical G-Course employees and, as of March 2022, has been expanded to all G-Course employees.

Since fiscal 2022, Toray Industries and some of its affiliated companies have adopted the career path worksheet program, and in April 2025, it was adopted by key group companies in Japan.

### Human Resource Development and Support for Independent Career Development Using Career Path Worksheets



### Alignment and Mutual Understanding Gained through Individual Career Meetings



## Systematic and Effective Training for Human Resource Development

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 its grade-specific management training programs, Toray Industries has long been working to strengthen leadership development. In recent years, 360-degree (full-circle) feedback has been incorporated into the training to help participants recognize their own leadership performance and apply it to further improvement. For training on the Toray Philosophy and history, a step-by-step learning framework has been designed to deepen understanding of the Company's management philosophy. The content for senior-level participants is structured to encourage participants to commit themselves to implementing these guiding principles.

Toray Industries is continually reorganizing its training system. 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 2024, training expenditures per employee at Toray Industries stood at 158,400 yen, compared to 146,300 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.



# FY 2024 Training Programs (Toray Industries Inc.)

	Management	Technical	Sales, Marketing, and Administration	Global	General
<b>Directors</b>	Director Training			Toray Group Executive Seminar (TGES)	
<b>Division and Department Managers</b>	Management Training for Executive Candidates Department Manager Training			Toray Group Senior Management Seminar (TGSMS)	
<b>Section Managers</b>	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)	
<b>Non-Managerial Senior Level</b>	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)	
<b>Non-Managerial Junior Level</b>	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	
<b>Newly-Hired Employees</b>	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 FY 2024 (Toray Industries, Inc.)

Training category	Persons enrolled			Time dedicated to training per employee (hour)
	Men	Women	Total	
1. Management	1,006	156	1,162	44.7
2. Technical	708	107	815	30.0
3. Sales, marketing, and administration	204	53	257	23.7
4. Global	113	17	130	46.0
Total	2,031	333	2,364	37.4

Note: Time dedicated to group training at the Toray Human Resources Development Center. It does not include time for correspondence learning or study abroad, etc.

## Development of Future Management Candidates for Toray Group

In 1991, Toray opened the Toray Management School, which selected 20 talented section managers who are expected to take over management in the future. This kind of program for systematically developing successors for management positions was unusual at the time and a cutting-edge initiative, and 640 employees in total, including 39 women, have completed the program as of fiscal 2024. Many of these graduates have excelled as those responsible for management at group companies in and outside of Japan. To date, 192 graduates have served as top management at Toray and its group companies worldwide.

Opened in 2006, the Toray Group Management School continues to serve as a management successor development institution for Toray group companies in Japan and for the members of the Toray Synthetic Textile Cluster.

Moreover, in 2021 Toray launched Management Training for Executive Candidates targeting talented individuals in general manager positions capable of serving as candidates for the next batch of top management for the Toray Group, as part of an effort to further expand training to systematically develop management successor candidates for the Toray Group.

## Strategies for Developing Future Management Candidates

Program	Participants	Purpose	Year started	Number of Participants in FY2024	Total participants through FY2024
Management Training for Executive Candidates	Department managers of Toray Industries	Develop management leaders at Toray Industries and group companies	2021	11	45
Toray Management School <sup>3</sup>	Section managers of Toray Industries	Develop future management candidates at Toray Industries and group companies	1991	20	640
Toray Group Management School	Department managers of group companies in Japan	Develop management candidates focusing on group companies in Japan	2006	23	371
Toray Group Executive Seminar	Board members/officers of group companies outside Japan	Develop core staff at group companies outside Japan	2004	Not held	113
Number of employees who participated in programs to develop future management candidates (cumulative total)					1,169

<sup>3</sup> As of July 2025, 17 of Toray Industries' 28 executive officers have completed the Toray Management School program. Toray Industries' non-consolidated sales grew from 599.2 billion yen in fiscal 1991, when the school opened, to 651.7 billion yen in fiscal 2024.

## 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 the 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 29th session in 2024, the school has produced 844 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, producing 32 graduates in the first two years. 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.

## Systematically Securing, Developing, and Promoting Core Staff Outside Japan at Group Companies

CSR Roadmap 2025  
Main Initiatives (5)

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 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 2024, national staff were appointed as president at 24 key group companies outside Japan.

In fiscal 2024, a total of five core staff outside Japan help manage Toray Group, with one serving as vice president of Toray Industries and four 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.

As a result of these initiatives, approximately 60% of key positions (factory and department manager or higher) at major group companies in Europe and the United States and about 45% of comparable positions in Asia are now held by locally hired national staff. Today, a diverse workforce supports Toray Group's global management.

## FY 2024 Training Courses Held for Core Staff Outside Japan

### Japan-based courses

Training program	Managerial category	Participants
Toray Group Executive Seminar	Corporate executives of group companies outside Japan	None (held every other year; no seminar in 2024)
Toray Group Senior Management Seminar	Department managers of group companies outside Japan	33 (including 14 Japanese-speaking national staff)
Toray Trainee Program	Section managers of group companies outside Japan	18
Total participants		51

### Courses held outside Japan

Training program	Managerial category	Participants
Toray Group U.S. Management Training	Department managers / section managers	37
Toray Group EU Management Seminar	Department managers / section managers	54
Toray Group Indonesia Management Seminar	Department managers / section managers	27
Toray Group China Management Seminar	Department managers / section managers	63
Toray Group Korea Management Seminar	Department managers / section managers	20
Toray Group India Management Seminar	Section managers	20
Total participants		221

\* Training organized and carried out by sites outside Japan is not included in Toray Industries' company-wide training system.

### Toray Group Senior Management Seminar for Japanese-Speaking National Staff (TGSMS-J) (Toray Industries, Inc.)

The Toray Group Senior Management Seminar (TGSMS) was launched in 1996 for senior managers (mainly general manager level) at group companies outside Japan. Its aim is to deepen understanding of the Group's management policies, strategies, and management style, while fostering leaders capable of advancing their respective companies. The seminar is conducted in English, and to date, more than 350 national staff have participated.

In fiscal 2024, in response to national staff who expressed interest in having the seminar in Japanese rather than English, the first-ever Toray Group Senior Management Seminar in Japanese (TGSMS-J) was held. Fourteen participants from 13 companies across various countries and regions took part. Through the seminar, they gained a deeper understanding of the Group and its management approach, strengthened their appreciation of the corporate culture, and formulated action plans to improve their own organizations in ways consistent with that culture. After completing the seminar, participants reflected on their own workplace initiatives in follow-up online sessions. It is worth noting that the planning and holding of TGSMS-J were handled by a national staff member from a group company in China (currently a manager in that company's HR department) as the primary theme of her OJT program in Japan.

Click > [here](#) for the main initiatives for CSR Guideline 8, "Human Rights Promotion and Human Resources Development" in CSR Roadmap 2025.

## Promoting Diversity

Toray Group is committed to promoting employee diversity to help build thriving workplaces where each individual's abilities can flourish.

### Initiatives to Promote 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 2025, women held 10.5% of unit manager or higher positions and 6.6% 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 2025.) Furthermore, as of July 2025, two women are serving as outside directors and one as outside corporate auditor. As of May 2025, 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:

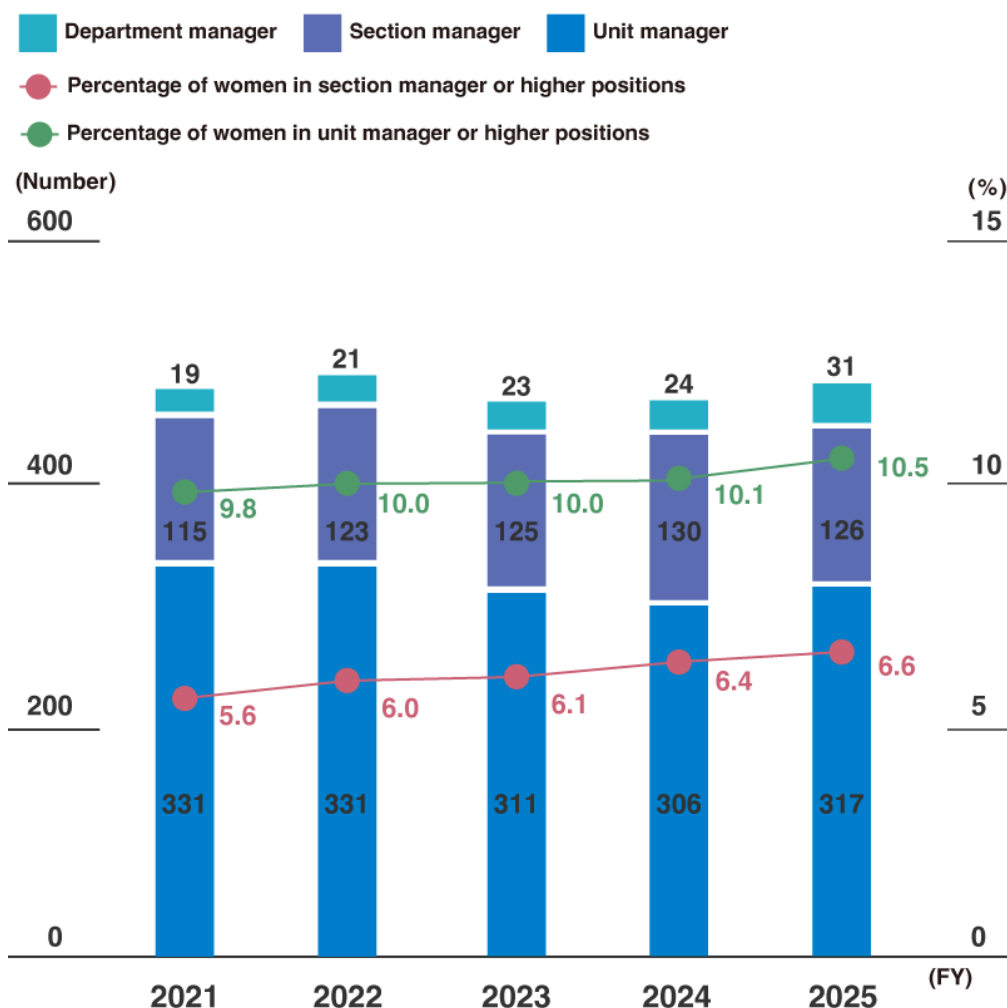
1. Increase the percentage of management positions held by women each year, with a specific initial target of raising this percentage from the 5.1% in fiscal 2020 to 6.5%
2. Achieve a 1:1 ratio of men and women employees continuously employed for each employment management category (among those who have 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.

5. Conduct morale survey (measuring effectiveness of initiatives) to ascertain status of above initiatives, analyze results, and identify measures for improvement.

### Number of Women in Management Positions and Women as a Percentage of Total Management (Toray Industries, Inc.)



\* As of April each year

### Gender Pay Gap

Toray Industries calculates the difference in earnings between men and women according to the provisions of Japan’s Act on Promotion of Women’s Participation and Advancement in the Workplace (Act No. 64, 2015). Among regular employees, the gender pay gap exceeds 90% for both managerial and non-managerial positions. However, since the proportion of women in managerial positions remains relatively low compared with men, the overall figure for all employees is 70.7%.

In the case of part-time and fixed-term employees as well, a certain share of male employees are rehired as contract employees after serving as managers, and this higher proportion of men in managerial positions influences the wage gap.

Wage disparities are affected by multiple factors, including job type, employment status, and years of service. Toray Industries will continue to actively recruit and promote women, while also advancing initiatives that support both men and women in balancing work and family life. At the same time, the Company will analyze and monitor the factors contributing to wage differences and maintain ongoing efforts in this area.

## Gender Pay Gap (Female Earnings as a Percentage of Male Earnings)

Employee Category	Gende pay gap
All employee types	70.7%
Regular employees	83.5%
Part-time and fixed-term workers	54.4%

## Gender Pay Gap by Employee Category

Employee Category	Gender pay gap
Managers	95.6%
Union Members (non-managerial)	91.8%
Contract Employees	78.3%
Part-time Employees	158.7%

Note: "Managers" and "Union Members (non-managerial)" are counted as regular employees, while "Contract Employees" and "Part-time Employees" are counted as part-time and fixed-term workers.

## Career Development Support and Network Building

CSR Roadmap 2025  
Main Initiatives (6)

To help employees flourish while striking a balance between work and life events, Toray Group holds training sessions and discussion meetings to help employees share their diverse values and career perspectives and address the particular challenges faced by female employees. Through discussions at these training and networking opportunities, the Group gains a broad understanding of workplace realities and employee opinions and resolve their issues steadily, one at a time. Toray Group believes that this will in turn 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 eight times as of fiscal 2024.

Developed and launched by female general managers, these seminars aim to help women learn about diverse career paths, leadership, and the importance, particularly now, of forming personal networks to facilitate learning from one another. Participants in past seminars have been encouraged through interaction with diverse role models. Each of the seminars is attended by the chairman and president of Toray Industries and the senior vice president of the Human Resources Division, who deliver messages and engage in dialogue with the participants. In fiscal 2024, the eighth Career Advancement Seminar for Women Serving as Managers and Occupational

Specialists was held, which was the final of this series of training sessions planned by female general managers. This time, in addition to female employees, male managers and professionals who supervise female employees were also welcomed. Participants learned about Toray Group's human capital management and its initiatives to date and current status regarding the promotion of greater female participation, and listened to a talk by an external expert on promoting paternity leave. Over four months, they also engaged in voluntary team activities, divided into 24 groups, focusing on themes such as workplace culture reform and enhancing communication, and then presented their findings.

Dates	Seminar / Discussion Meeting	Overview
February 13 – 14, 2015	First career advancement seminar for women serving as managers and occupational specialists	Provided support for networking and career development among diverse participants. Former Yokohama Mayor Fumiko Hayashi (who has also worked for the Company) gave a talk.
January 29 – 30, 2016	Second career advancement seminar for women serving as managers and occupational specialists	Career plans were developed using role model examples and the means to achieve them were clarified through individual statements of intent. A talk was given by a speaker specializing in human resource development.
From August through December 2016	Discussion meetings for women	The meetings were held at all Toray Industries' offices and plants to understand the opinions of female employees in non-managerial and non-specialist positions and to facilitate a frank exchange of opinions regarding careers and work-life balance. Opportunities were created for sharing issues and mutual enlightenment.
February 28 and March 1, 2017	Third career advancement seminar for women serving as managers and occupational specialists	Problems faced at work were analyzed and recommended solutions provided, based on opinions from the discussion meetings for women and questionnaire results. Reinforced the problem-solving skills required for managers and occupational specialists. Participants followed up on the progress on the statements of intent they each made previously.
From December through March 2018	Follow-up discussion meetings	Held as a follow-up to the discussion meetings for women. Group discussions were carried out on the themes identified at these meetings. Measures to improve these issues were considered in line with conditions at each plant.

Dates	Seminar / Discussion Meeting	Overview
July 13– 14, 2018	Fourth career advancement seminar for women serving as managers and occupational specialists	Interviews with male managers and results analysis were conducted to identify issues and strengthen their ability to take action in promoting diversity. Using assessment tools, employees learned about themselves and became more aware of their leadership styles.
October 18– 19, 2019	Fifth career advancement seminar for women serving as managers and occupational specialists	Female general managers identified issues and developed action plans. Recommendations were made to facilitate promotions, retain young employees, and develop careers.
September 3– 4, 2020	Sixth career advancement seminar for women serving as managers and occupational specialists	Female managers and occupational specialists reported on the results and recommendations of their efforts to address the three issues defined in the fifth seminar.
November and December 2021	Online Discussion Meeting for Female G-Course <sup>1</sup> Employees	Female section managers facilitated an exchange of opinions and an understanding of career challenges. Female G-Course employees shared their concerns and sources of motivation. Networking was used to alleviate information gaps and anxieties, support career continuation, and help improve the workplace environment.
July and August 2022	Online Training for Female Section Managers and Male Section Managers with G-Course Female Subordinates	In response to career concerns voiced by female G-Course employees, male and female managers exchanged opinions and discussed positive behavioral changes.
August and September 2023	Discussion Meetings for G-Course Female Employees	To help ease concerns about balancing work and personal lives and foster career awareness, female managers shared their real-life experiences.
August to October 2023	Content Portal for G-Course Female Employees	Through messages from executive management and e-learning materials, the Company's policy to promote women's full participation in the workplace was shared, while providing opportunities to access career planning support.

<sup>1</sup> G-Course: A career path for Toray Group executive or upper-level professional candidates

The Company set up a babysitting space in the training center during the in-person career advancement seminars for women serving as managers and occupational specialists so that women who are raising children could participate with peace of mind.





Comments by Harumi Horinouchi, Director (*riji*) (Fifth career advancement seminar for women serving as managers and occupational specialists / fiscal 2019)



Seminar participants (Fifth career advancement seminar for women serving as managers and occupational specialists / fiscal 2019)

## Launch of HCM<sup>2</sup> Promotion Activities

The Group's activities to promote women's participation, led mainly by female general managers and carried out with an emphasis on workplace perspectives, have now achieved the initial goal of building an internal network of female managers and occupational specialists that goes beyond organizational boundaries.

However, going forward, the challenge is not only to promote women's advancement, but also to broaden the scope to include a wider range of employees. The aim is to foster initiatives that enable diverse talent to bring out their individual strengths, maximize their capabilities within Toray Group, and enhance overall well-being.

In light of this, the Group established a dedicated organization and, in August 2024, launched HCM Promotion Activities as Toray's version of DE&I<sup>3</sup> initiatives.

HCM Promotion Activities focus on themes such as expanding women's participation, developing young talent, and facilitating diverse and flexible work styles. The HCM Promotion Group, recently established within the Human Resources Division's Human Resources Strategy Department, serves as the secretariat.

To better gather opinions from employees, a working team of 11 members was created using volunteers from across Toray Group, representing diverse attributes that transcend gender, job type, and organizational level.

This working team, while also taking into account input from each business site, is addressing issues such as 1) enhancing understanding of and fostering a culture that embraces DE&I, 2) promoting the active participation of women in production and technical divisions, 3) enhancing career consultation, and 4) supporting increased utilization of childcare leave.

In addition, the team makes proposals on workplace culture reform to foster an environment where employees can freely share opinions and ideas and take on new challenges. Through these activities, the working team conveys the candid awareness of issues held by younger and mid-level employees, along with their proposals for improving the Group, directly to executive management.



HCM Working Team kick-off meeting (November 2024)

<sup>2</sup> HCM: Human-Centric Management

<sup>3</sup> DE&I: Diversity, Equity, and Inclusion

## Sharing Stories via the Company Intranet: Vibrant Employees Achieving Work-Life Balance

Toray Group gives specific examples on its corporate intranet of how employees—both men and women—balance work with major life events such as childcare and caregiving, as well as cases of self-directed career development and learning. Since 2016, a total of 43 stories have been shared, including four new examples in fiscal 2024, such as a man taking childcare leave and an employee returning to work under the Group's rehiring program.

By highlighting how employees with diverse values make use of group programs while leveraging their own strengths, 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 2024

### Nagoya 3C Activities (Toray Industries, Inc. Nagoya Plant)

At the Nagoya Plant, efforts are underway to create a workplace environment where all employees, regardless of gender, can work dynamically. These efforts focus on: 1) revitalizing communication, 2) supporting women's full participation, and 3) supporting the balance between work and family life. Named the "3C Activities" based on the keywords "Cheerful, Connection, and Challenge," the program is led by a team of ten men and women from various departments. The team plans and implements a variety of initiatives, such as DE&I seminars featuring outside speakers and discussion meetings for female employees.



Participants in a Nagoya Plant event to promote DE&I and paternity leave, held to mark International Women's Day

### Career Development Discussion Meeting (Toray Industries, Inc. Seta Plant)

A discussion meeting was held with the participation of 16 male and female Toray Group employees, including those with experience changing careers. The session allowed younger employees, who may be uncertain about their career paths, to learn about diverse approaches to career development. It also helped foster a workplace culture in which co-workers at the plant can openly discuss career-related topics.



Career discussion meeting

Group companies that have achieved legally mandated employment rate of persons with disabilities (%)

■Reporting scope  
Toray Group (Japan)

■Target in fiscal 2024  
100%

Result in fiscal 2024

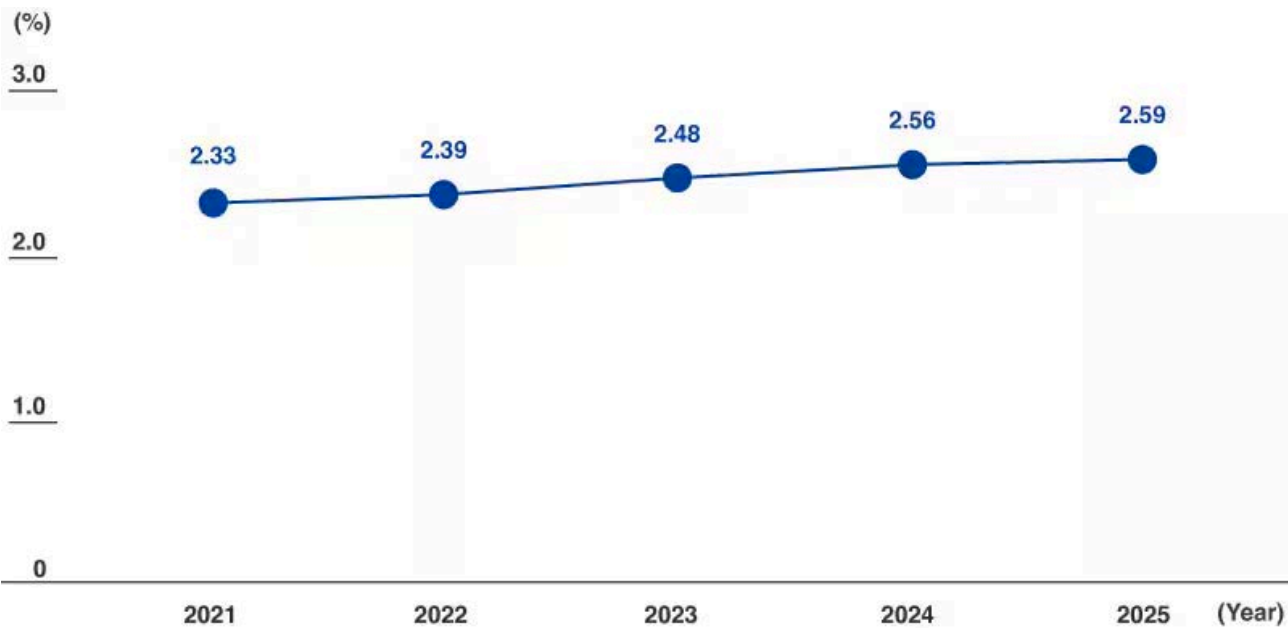
52.9%

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 disabilities 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.

In fiscal 2024, Toray Industries met Japan’s legally mandated employment rate for persons with disabilities, despite it being raised in that year. However, among Toray Group companies in Japan, only 52.9% met the legal standard. While group companies actively sought to hire persons with disabilities through public organizations and job placement agencies, some individual companies did not meet the mandated legal requirement due to hiring difficulties.

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

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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 addition to full-time work, employees can also request shortened work schedules such as working three days a week.

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.

### Webinar on Post-Retirement Work Opportunities

Toray Group held a webinar for employees on the theme of work opportunities after retirement.

Following an introduction by the General Manager of the DE&I Co-Creation Department at Toray Corporate Business Research, Inc., the webinar featured Yoshifumi Noge, Representative of Monozukuri Design Lab, as a guest speaker. Drawing on his own personal experiences, Mr. Noge spoke about working after retirement and his entrepreneurship experiences.

Afterwards, participants shared many positive comments, such as: "This was very informative as I approach the retirement age of 60" and "It was a great opportunity to learn that there are exciting work opportunities even after retirement."



Webinar guest speaker

## Career Advancement for Non-Japanese Employees

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Toray Group respects differences in nationality and culture and is committed to creating workplaces that embrace diverse values. To help employees of all nationalities maximize their potential, the Group is implementing the following initiatives:

### 1. Enhanced Recruitment and Advancement

The Group actively hires graduates of non-Japanese universities and highly skilled global professionals, expanding opportunities to contribute across research, development, production, sales, and other fields.

### 2. Cross-Cultural Training

Training on cross-cultural communication and developing a global mindset fosters greater mutual understanding.

### 3. Language and Daily Life Support

Japanese language education and daily life support programs are provided to ensure non-Japanese employees can work in Japan with confidence.

### 4. Career Development Support

Employees of all nationalities are offered fair opportunities for evaluation and promotion.

## Toray Japan OJT Program

Since fiscal 2014, Toray Group has provided the Overseas Young Employee Training Program for staff hired locally at group companies outside Japan. During one to one-and-a-half years of practical training at Toray Group's head office or a group company in Japan, participants learn the Toray work approach. In fiscal 2024, 11 new participants from Germany, China, and Vietnam came to Japan as part of the program.

### Related Information

> [Securing and Developing Human Resources to Create New Value](#)

## LGBTQ Issue Awareness

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Toray Group is committed to creating workplaces where all employees are respected and can work with confidence, regardless of sexual orientation or gender identity. The Group is continuously advancing initiatives to support the inclusion of LGBTQ individuals.

The Group is working to enhance employee awareness and workplace environment with regard to both system and education. These efforts include the following initiatives:

### 1. Enhancing Internal Regulations

The Group's work rules and Guidelines for the Prevention of Workplace Harassment explicitly prohibit discrimination based on sexual orientation or gender identity.

### 2. Establishing Consultation Systems

In 2017, the Group established a dedicated employee hotline to provide confidential support specifically for LGBTQ issues, ensuring privacy and sensitivity in all responses.

### 3. Awareness-Raising Activities

Through distribution of awareness materials during human rights campaigns, e-learning, and internal seminars, the Group promotes deeper understanding among all employees.

Click > [here](#) for the main initiatives for CSR Guideline 8, "Human Rights Promotion and Human Resources Development" in CSR Roadmap 2025.



## 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 "childcare support company" (Kurumin certification) by Japan's Ministry of Health, Labour and Welfare, which has been maintained for seven consecutive periods.

In fiscal 2025, Toray received Platinum Kurumin Certification in recognition of its advanced initiatives to support employee work-life balance. This special certification is awarded to companies that have already obtained Kurumin Certification and have implemented particularly progressive measures meeting specific criteria.

Toray Industries was also selected by the Ministry of Economy, Trade and Industry and the Tokyo Stock Exchange as a recipient of the fiscal 2024 Next Nadeshiko designation for "Companies Supporting Dual Careers and Co-parenting."

The Next Nadeshiko initiative was launched in fiscal 2023 alongside the Nadeshiko Brand program. It recognizes Japanese companies with outstanding initiatives to support employee work-life balance regardless of gender, thereby enabling two-career households that share child-rearing responsibilities.

The measures Toray Industries has implemented to date for expanding its systems are as follows. All of these measures either exceed statutory requirements or represent voluntary initiatives not mandated by law. The Company's systems go beyond the legal minimum, enhancing ease of work and providing employees with a greater sense of security.



Start Date	Initiative Details
Jun 2010	<ul style="list-style-type: none"> <li>Revamped child care support systems in an effort to encourage male employees to make use of them</li> </ul>
Apr 2011	<ul style="list-style-type: none"> <li>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</li> </ul>
Apr 2012	<ul style="list-style-type: none"> <li>Initiated a telecommuting program aimed at making it easier for employees to work while raising children or caring for family members</li> </ul>
Oct 2012	<ul style="list-style-type: none"> <li>Expanded the scope of the commuting allowance for taking the bullet train</li> </ul>

Start Date	Initiative Details
Apr 2013	<ul style="list-style-type: none"> <li>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</li> </ul>
Jul 2013	<ul style="list-style-type: none"> <li>Revised lower-hour work schedule systems for those raising children or caring for family members</li> </ul>
Jul 2016	<ul style="list-style-type: none"> <li>Expanded leave provisions for employees requiring special consideration as caregivers</li> </ul>
Jan 2017	<ul style="list-style-type: none"> <li>Eliminated restrictions on the number of times that employees can use long-term family care leave and lower-hour work schedule systems for caregivers</li> </ul>
Jul 2017	<ul style="list-style-type: none"> <li>Started a flextime system without core-hour requirements for employees at the Tokyo and Osaka head offices</li> </ul>
Oct 2019	<ul style="list-style-type: none"> <li>Expanded the scope of the telecommuting program to those raising children or caring for family members</li> </ul>
Apr 2020	<ul style="list-style-type: none"> <li>Began allowing the use of paid annual leave on an hourly basis</li> <li>Introduced a working-hour interval system</li> </ul>
Jul 2020	<ul style="list-style-type: none"> <li>Eliminated the requirement of raising children or caring for family members in order to utilize the telecommuting program</li> </ul>
Jan 2021	<ul style="list-style-type: none"> <li>Introduced hourly leave systems for caring for sick children or other family members</li> </ul>
Jul 2021	<ul style="list-style-type: none"> <li>Expanded family-care programs</li> </ul>
Jul 2023	<ul style="list-style-type: none"> <li>Introduced leave to accompany spouse transferred overseas</li> </ul>
Oct 2024	<ul style="list-style-type: none"> <li>Extended the <i>tanshin funin</i> benefits system (for married employees who are temporarily transferred away from their spouses) to those in marriages where the spouses are already living apart</li> </ul>
Apr 2025	<ul style="list-style-type: none"> <li>Expanded the eligible child age range regarding the lower-hour work schedules for childcare</li> </ul>

### Major Support Systems for Employee Work and Family Life Balance

Program	Description	Compliance Level
Prenatal and postnatal leave	<ul style="list-style-type: none"> <li>Prenatal leave can be taken starting eight weeks before the expected delivery date (14 weeks before a multiple pregnancy).</li> </ul>	<ul style="list-style-type: none"> <li>Beyond legal minimum</li> </ul>
	<ul style="list-style-type: none"> <li>Postnatal leave is available for eight weeks after childbirth.</li> </ul>	<ul style="list-style-type: none"> <li>Legal minimum</li> </ul>
Long-term childcare leave	<ul style="list-style-type: none"> <li>Available for employees using child care center services up to the end of the month in which the child turns two years of age</li> </ul>	<ul style="list-style-type: none"> <li>Beyond legal minimum</li> </ul>
Spouse's childbirth leave	<ul style="list-style-type: none"> <li>Available for three days in the event that an employee's spouse gives birth</li> </ul>	<ul style="list-style-type: none"> <li>Beyond legal minimum</li> </ul>



Program	Description	Compliance Level
Postnatal paternity leave	<ul style="list-style-type: none"> <li>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</li> </ul>	<ul style="list-style-type: none"> <li>Legal minimum</li> </ul>
Lower-hour work schedules for childcare	<ul style="list-style-type: none"> <li>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 sixth grade of elementary school</li> </ul>	<ul style="list-style-type: none"> <li>Beyond legal minimum</li> </ul>
	<ul style="list-style-type: none"> <li>May be used concurrently with flextime system</li> </ul>	<ul style="list-style-type: none"> <li>Beyond legal minimum</li> </ul>
Childcare Time	<ul style="list-style-type: none"> <li>Female employees with a child under the age of one are entitled to two daily childcare breaks, each lasting 30 minutes</li> </ul>	<ul style="list-style-type: none"> <li>Legal minimum</li> </ul>
Kids Support Leave	<ul style="list-style-type: none"> <li>Five days per year of leave per child available until the end of the fiscal year in which the child is in sixth grade of elementary school</li> </ul>	<ul style="list-style-type: none"> <li>Beyond legal minimum</li> </ul>
	<ul style="list-style-type: none"> <li>Can be used on hourly basis</li> </ul>	<ul style="list-style-type: none"> <li>Legal minimum</li> </ul>
Family care leave	<ul style="list-style-type: none"> <li>Five days per year of leave available per family member</li> </ul>	<ul style="list-style-type: none"> <li>Legal minimum</li> </ul>
	<ul style="list-style-type: none"> <li>Can be used on hourly basis</li> </ul>	<ul style="list-style-type: none"> <li>Legal minimum</li> </ul>
	<ul style="list-style-type: none"> <li>At maximum 10 additional days per year available when no other appropriate caregiver is available</li> </ul>	<ul style="list-style-type: none"> <li>Beyond legal minimum</li> </ul>
Long-term family care leave	<ul style="list-style-type: none"> <li>Available for a total of 365 days per situation requiring leave to provide care</li> </ul>	<ul style="list-style-type: none"> <li>Beyond legal minimum</li> </ul>
	<ul style="list-style-type: none"> <li>May be split up</li> </ul>	<ul style="list-style-type: none"> <li>Legal minimum</li> </ul>
Lower-hour work schedules for caregivers	<ul style="list-style-type: none"> <li>May be taken multiple times per situation in the five-year period following the first day of use</li> </ul>	<ul style="list-style-type: none"> <li>Beyond legal minimum</li> </ul>
	<ul style="list-style-type: none"> <li>May be split up</li> </ul>	<ul style="list-style-type: none"> <li>Legal minimum</li> </ul>
	<ul style="list-style-type: none"> <li>May be used concurrently with flextime system</li> </ul>	<ul style="list-style-type: none"> <li>Beyond legal minimum</li> </ul>
Toray Smile Support Program	<ul style="list-style-type: none"> <li>Welfare point system offering a selection of programs with an emphasis on providing support for childcare and home acquisition</li> </ul>	<ul style="list-style-type: none"> <li>Beyond legal minimum</li> </ul>
Childcare services payment assistance	<ul style="list-style-type: none"> <li>Childcare coupons offering a 70% discount on services provided by participating companies issued as an additional Toray Smile Support Program service</li> </ul>	<ul style="list-style-type: none"> <li>Beyond legal minimum</li> </ul>
	<ul style="list-style-type: none"> <li>No restrictions on number of coupons or age of participating employee's child</li> </ul>	<ul style="list-style-type: none"> <li>Beyond legal minimum</li> </ul>

Program	Description	Compliance Level
Telecommuting program	<ul style="list-style-type: none"> <li>Available for employees who are proficient in their assigned duties, can perform these duties self-sufficiently, and meet certain requirements.</li> </ul>	<ul style="list-style-type: none"> <li>Beyond legal minimum</li> </ul>
	<ul style="list-style-type: none"> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>Beyond legal minimum</li> </ul>
Registration system for reemployment	<ul style="list-style-type: none"> <li>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</li> </ul>	<ul style="list-style-type: none"> <li>Beyond legal minimum</li> </ul>
	<ul style="list-style-type: none"> <li>The registration period is ten years. Registrants may be immediately eligible for regular employee positions depending on the content of their jobs, expectations of their role in the company, and their personal situations.</li> </ul>	<ul style="list-style-type: none"> <li>Beyond legal minimum</li> </ul>
Commuting allowance for bullet train or other limited express travel	<ul style="list-style-type: none"> <li>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</li> </ul>	<ul style="list-style-type: none"> <li>Beyond legal minimum</li> </ul>
	<ul style="list-style-type: none"> <li>In certain cases, employees may be required to pay a part of the commuting expenses out of pocket.</li> </ul>	<ul style="list-style-type: none"> <li>Beyond legal minimum</li> </ul>
Leave to accompany spouse transferred overseas	<ul style="list-style-type: none"> <li>Can be taken by an employee wanting to accompany their spouse on an overseas job transfer of six months or more</li> </ul>	<ul style="list-style-type: none"> <li>Beyond legal minimum</li> </ul>
	<ul style="list-style-type: none"> <li>Can be taken for up to four years</li> </ul>	<ul style="list-style-type: none"> <li>Beyond legal minimum</li> </ul>
Extended the <i>tanshin funin</i> benefits system to include those in marriages where the spouses are already living apart	<ul style="list-style-type: none"> <li>Employees that must continue to live separately from their spouse after getting married can receive a special allowance for living separately and be compensated for travel expenses to return home</li> </ul>	<ul style="list-style-type: none"> <li>Beyond legal minimum</li> </ul>

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 2024

### Discussion Meeting Held Concerning Support for Those Raising Children or Caring for Family Members (Toray Industries, Inc. Seta Plant)

As part of its initiatives to promote advancement for female employees and to support employee work–life balance, Toray Industries held a discussion meeting on childcare challenges as well as one on family care.

Fifteen participants attended the childcare discussion meeting, including employees from group companies. The session brought together a diverse range of participants: employees currently raising children, employees with no childcare experience who feel uncertain about becoming parents, employees temporarily transferred away from their families with limited time to participate in childcare, and senior employees who had already raised their children and could offer their perspectives. The discussion was lively, with participants exchanging opinions from their various perspectives.

Ten participants, including those from group companies, attended the discussion on caregiving. Comments from participants included: “It is important to make good use of the family care leave system and not face caregiving challenges alone,” and “I felt anxious about the future of my parents who live far away, but learning about the various support programs helped ease my concerns.”



Discussion meeting on childcare support



Discussion meeting on family care support

### Toray Group Employees Speak at a Seminar Hosted by Tokai City and Delivered by NPO SmileyDream: “Preparing to Return to Work After Childcare Leave” (Toray Industries, Inc. Tokai Plant)

As part of Tokai City’s child-rearing support initiatives in Aichi Prefecture, employees from Toray Coms Nagoya Co., Ltd. and Du Pont-Toray Co., Ltd. delivered presentations at a seminar on preparing to return to work after childcare leave.

They introduced Toray Industries’ initiatives to support work–life balance, and shared actual experiences of returning to the workplace after childcare leave, along with perspectives from supervisors. Most of the participants were employees on childcare leave for their first child, and they provided very positive feedback after the seminar.



Seminar on Preparing to Return to Work After Childcare Leave

Utilization of Childcare and Family Care Leave Systems (Toray Industries, Inc.)

		FY2021	FY2022	FY2023	FY2024
Employees taking childcare leave	Women	56	46	51	40
	Men	40	82	95	108
Employees taking family care leave	Women	2	2	1	1
	Men	1	1	1	2

\* 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.)



		FY2021		FY2022		FY2023		FY2024	
		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	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	59	98%	52	100%	37	100%	34	97%
	Men	38	100%	77	100%	95	99%	95	100%
Family Care Leave	Women	2	100%	2	100%	0	—	1	50%
	Men	1	100%	1	100%	1	100%	2	100%

\* Number/percentage of employees returning to work per fiscal year

Reference: Fiscal 2023 retention rates for employees 12 months after returning to work following their childcare leave  
Women: 97.2%  
Men: 92.6%

## Male employees taking childcare leave or other leave for the same reason (%) (Toray Industries, Inc.)

### Male employees taking childcare leave or other leave for the same reason (%)

Result in fiscal 2024

Year-on-year **106%**

#### ■Reporting scope

Employees of Toray Industries, Inc.  
(not including those posted outside Japan)

#### ■Target in fiscal 2024

Year-on-year increase

	FY2022	FY2023	FY2024
Male employees taking childcare leave (%)	81.6%	86.8%	91.6%

## Employees taking leave for spouse's childbirth (Toray Industries, Inc.)

	FY2021	FY2022	FY2023	FY2024
Number of employees	220	233	203	183

Notes: Childcare leave includes postnatal paternity leave.

Childcare leave includes spouse's childbirth leave.

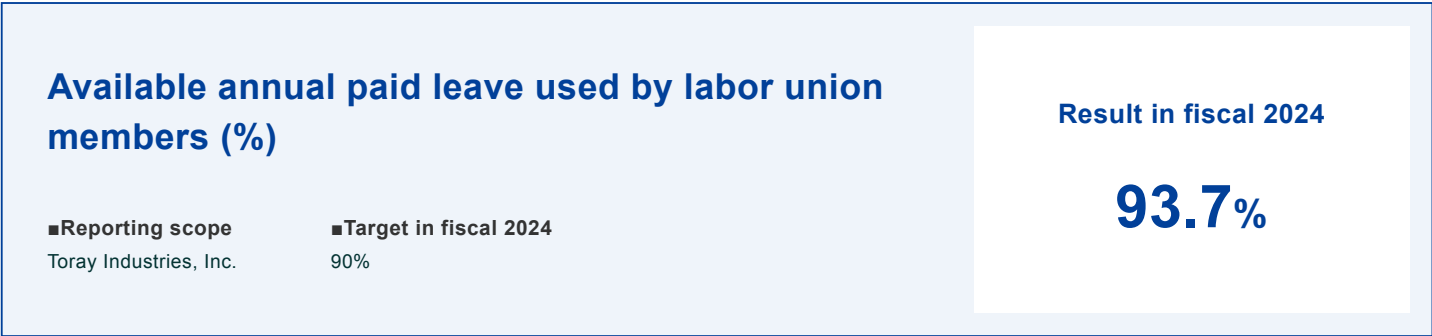
## Initiatives to Promote Childcare Leave Among Male Employees (Toray International, Inc.)

Toray International, Inc. is actively promoting childcare leave among male employees through initiatives such as hosting seminars led by outside speakers and featuring a series of childcare leave examples involving male employees on the company intranet. As a result of these efforts, the company was registered in fiscal 2024 as a "Bronze Company for Promoting Paternal Childcare Leave in Tokyo."



Certificate of Registration as a "Tokyo Company for Promoting Paternal Childcare Leave," awarded by the Tokyo Metropolitan Government

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. As part of its specific initiatives 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. (Union-member employees used 93.7% of available annual paid leave in fiscal 2024).

In addition, Toray Industries has maintained a labor-management committee for many years to hold discussions focused on promoting work-life balance, 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

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Toray Industries sees employee health 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.

### 1. Initiatives to Promote Health and Productivity Management

Toray Industries works to prevent excessive working hours and improve workplace environments and culture through collaborative efforts between labor and management at each office and plant. In particular, health promotion measures are implemented under a company-wide occupational safety and health framework, with action plans formulated, executed, and regularly reviewed.

These initiatives are advanced based on a frontline-oriented approach, with HR departments and health management staff at each site working together to address on-site challenges. In addition, through company-wide health management staff meetings, the Company shares information with these staff from each site, labor unions, and the employee health insurance association, thereby maintaining a system of collaboration across the Company.

Reports on effective initiatives are also submitted to company-wide health and safety meetings as well as the Executive Committee, ensuring that such activities can be adopted across the entire organization.

### 2. Key Health Promotion Measures

- Disseminating health-related information through internal communication tools
- Promoting specific health checkups and specific health guidance programs
- Hosting seminars aimed at the early detection and prevention of mental health issues
- Encouraging participation in cancer screenings and comprehensive medical checkups (in collaboration with the health insurance association)

### 3. Mental Health Initiatives

Since fiscal 2011 Toray Industries 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 also 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 2025, 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 2024

### Health Promotion Event (Toray Industries Inc. Okazaki Plant)

In response to survey results showing that vegetable consumption in Aichi Prefecture is among the lowest in Japan, the Toray Industries Okazaki Plant held a health promotion event under the banner of “The Joy of Growing Vegetables and the Nutritional Benefits of Eating Them.” On the day of the event, the employee cafeteria served lunch menu options rich in vegetables. With the cooperation of the Okazaki City Public Health Center and Co-op Aichi, three booths were also set up: individual vegetable intake assessment with Veggie Check<sup>®</sup>, a health quiz, and an introduction to vegetable gardening using vacant land. About 160 people participated.

Note: Veggie Check<sup>®</sup> is a registered trademark of Kagome Co., Ltd.



Vegetable intake assessment using the Veggie Check<sup>®</sup> device

### Lectures by an Occupational Physician (Toray Industries Inc. Gifu Plant)

As part of the annual lecture series by the plant's occupational physician, two topics were presented in fiscal 2024: “Women's Health and Mental Balance” and “Maintaining a Healthy Liver.” A total of 51 employees participated. Using concrete examples, the lectures explained the importance of workplace measures and health management. Afterwards, participants commented that the sessions “reaffirmed the importance of health” and “raised awareness of changes that occur across different generations and life stages.”



Health lecture

### Radio Exercise Week (Toray Industries Inc. Tokyo Head Office)

Employee participation in warm-up calisthenics (a popular activity in Japan done while listening to daily radio broadcasts of exercise instructions set to music) is a regular part of the work day at the Company's business sites and plants. In the Tokyo Head Office building the exercise routine is played over speakers at 3 p.m. each day, but participation has been limited. Because many head office employees engage mainly in desk work and tend to lack sufficient physical activity, this workplace established a Radio Exercise Week to encourage more active participation. The initiative aims to refocus attention on health, promote enjoyment through participation, and foster both improved well-being and stronger communication, while helping employees build lasting exercise habits.



Radio calisthenics session at the Tokyo Head Office

## Employee Stock Ownership Plan as a Long-Term Incentive

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Since 1968, Toray Group has operated an employee stock ownership plan as a long-term incentive. The aims are to encourage employees to take an active interest in the Group's management as shareholders, promote the long-term improvement of corporate performance and value, and support employees in building personal wealth. The plan has been enhanced over time through measures such as setting monetary incentive rates based on the number of shares held and providing special incentives for new participants, with the goal of further enhancing participation.

## Dialogue with Labor Unions

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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.

In order to resolve issues between labor and management, in addition to the Labor-Management Committee, there are specialized committees for individual topics such as wages and employee benefits, and they are continuously discussing necessary measures.

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 2025, Toray Workers' Union membership stood at 7,762 workers.

Click > [here](#) for the main initiatives for CSR Guideline 8, "Human Rights Promotion and Human Resources Development" in CSR Roadmap 2025.

## 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.

To further promote CSR throughout the supply chain, the Group has formulated the Toray Group CSR Procurement Guidelines to provide specific, detailed action guidelines for suppliers to follow.

As a manufacturer of advanced materials that supplies a wide range of materials and products, Toray Group also considers it important to advance CSR initiatives in the upstream part of its supply chain, including production facility management 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, these policies are continuously reviewed and updated in response to changes in society and other environmental factors.



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.

<sup>1</sup> 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.



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 obtained 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.

**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

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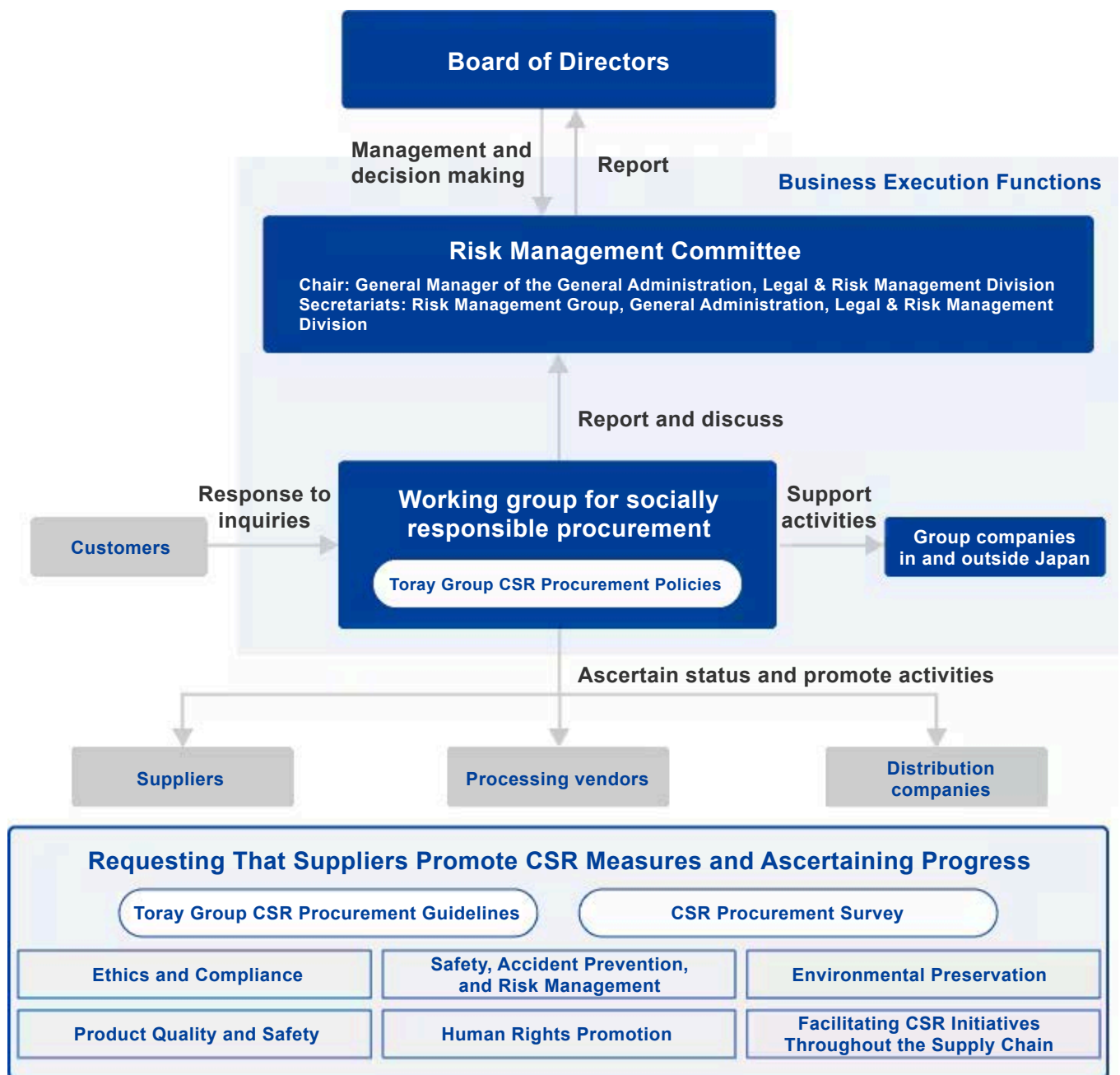
To ensure socially responsible procurement across the Group and address today's increasingly globalized procurement risks, Toray Industries, Inc. has established a working group to lead a group-wide risk management initiative.

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 Committee<sup>2</sup>, which oversees overall risks. The issues reported are discussed by the committee members.

The activities of the Risk Management Committee are reported to the Board of Directors, the Company's supreme governing body, which oversees the substance of the activities and makes policy adjustments or decisions as necessary.

<sup>2</sup> As of July 2025, the senior vice president responsible for risk management serves as the Risk Management Committee Chair.



## Initiatives for Human Rights and Environmental Due Diligence<sup>3</sup> 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. For existing business partners that have been identified as having negative impacts (for example, those with low scores based on the CSR Procurement Survey) the Group requests improvements and conducts follow-up visits and confirmation.

Moreover, 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. As a result, if a partner fails to meet the standards required by Toray Group, such as by showing no effort in implementing improvements, continuing to receive low ratings in the CSR Procurement Survey, or failing to take corrective action for serious violations, the continuation of the business relationship may be reconsidered.

Furthermore, to ensure CSR compliance from new business partners, a requirement for adherence to the Toray Group CSR Procurement Guidelines is stipulated in the basic transaction agreement.

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](#)
  - > [Statement on the UK's Modern Slavery Act](#)

## CSR Roadmap 2025 Targets and Results

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 <sub>2</sub> 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 <sup>4</sup> , contribute to sustainable logistics, for instance by selecting logistics companies that are engaged in working style reform, etc.	-

Key Performance Indicator (KPI)	Targets / Results		
	Fiscal 2023	Fiscal 2024	Fiscal 2025
<b>9-① Suppliers agreeing to the Toray Group CSR Procurement Guidelines (%)</b>	At least 75% / 76.8%	At least 85% / 85.5%	At least 90% / -
<b>9-② Implementation of supply chain due diligence (% of cases)</b>	At least 60% (Fiscal 2024) / - (Fiscal 2023) <sup>5</sup> , 66.7% (Fiscal 2024)		At least 90% / -
<b>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)</b>	At least 70% (Fiscal 2024) / - (Fiscal 2023) <sup>5</sup> , 94.9% (Fiscal 2024)		At least 90% / -
<b>9-④ Reduction in CO<sub>2</sub> emissions per unit of sales from distribution activities (year-on-year)</b>	1% / 11.5%	1% / -5.5% (increase) <sup>6</sup>	1% / -
<b>9-⑤ Key external inventory sites that have been assessed for natural disaster risk and have implemented measures to mitigate serious risks (%)</b>	At least 60% / 58.8%	At least 75% / 70.6%	At least 90% / -

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)

<sup>4</sup> 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

<sup>5</sup> As these are targets for fiscal 2024, there are no figures to report for fiscal 2023.

<sup>6</sup> The average annual reduction over the past five years has been 6.6%.

## Related Materiality for CSR

- Developing in Collaboration with Stakeholders
- Establishing Sustainable Supply Chain

Click [here \(536KB\)](#) **PDF** for the Materiality View of CSR Roadmap 2025.

## Looking to the Future

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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 \(771KB\)](#) **PDF** for the main initiatives and KPIs for CSR Guideline No. 9 "Establishing Sustainable Supply Chain" during the CSR Roadmap 2025 period (fiscal 2023–2025).

## Socially Responsible Procurement Initiatives at Toray Group

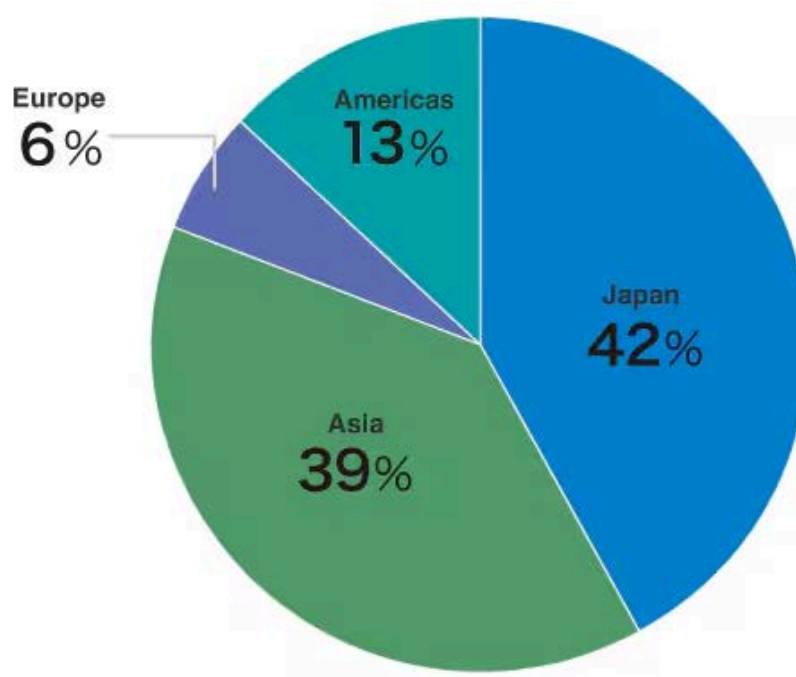
### Toray Group Supply Chain

Toray Group's supply chain extends to diverse countries and regions around the world. In fiscal 2024, the Group's purchasing by region was 42% in Japan, 39% in the rest of Asia, 6% in Europe, and 13% in the Americas. Purchasing by business segment was 31% for Fibers & Textiles, 23% for Plastics & Chemicals, 16% for Films, 13% for Carbon Fibers Composite Materials, and 17% 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. Toray Group engages in either regular or spot transactions and purchases from a wide range of primary suppliers, approximately 4,200, with offices around the world.

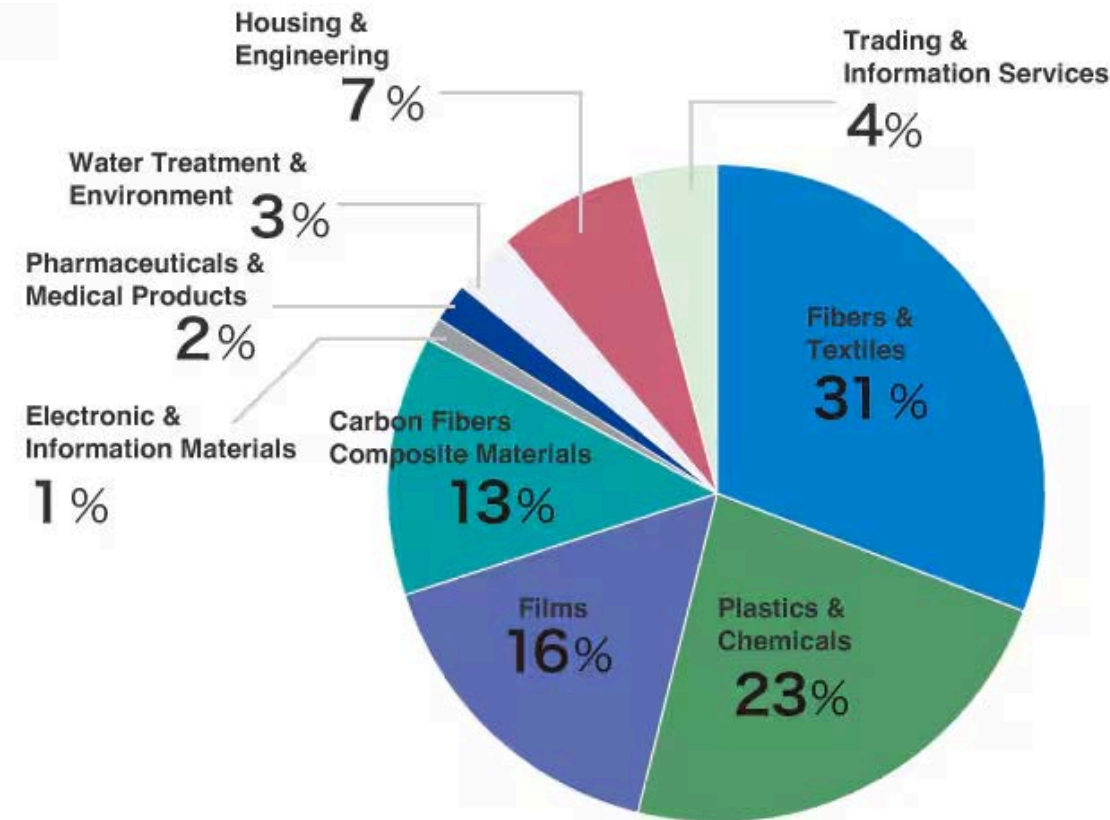
#### FY 2024 Purchasing Breakdowns by Region and Business Segment (Based on Transaction Value)

##### 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 2024  
At least 85%

Result in fiscal 2024

85.5%

Implementation of supply chain due diligence (% of cases)

■Reporting scope  
Toray Group

■Target  
At least 60% (Fiscal 2024)

Result in fiscal 2024

66.7%

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 CSR procurement systems and responding to customers' requests. With regard to suppliers, Toray Group also monitors supplier initiatives, educates suppliers, carries out CSR surveys of suppliers, requests compliance with the Toray Group CSR Procurement Guidelines, and conducts activities to obtain written agreements on these guidelines. In addition, the Group holds briefings for suppliers on compliance-related topics (August 7 and 8, in fiscal 2024) and Basic Distribution Policy Briefings for logistics companies (May 23, in fiscal 2024), to further promote understanding and education concerning the Toray Group CSR Procurement 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. Through this process, Toray Group recognizes suppliers meeting the required CSR compliance level as CSR procurement partners.

When poorly assessed companies demonstrate during follow-up a lack of commitment to making improvements, continue to be poorly assessed in CSR procurement questionnaires, take no corrective action for serious violations, or otherwise fail to meet the compliance levels that Toray requires, Toray Group may reevaluate further transactions with the supplier. Further, the Group has established the Toray Group Supply Chain CSR Promotion Guidebook, which is regularly distributed to suppliers as educational material during CSR procurement survey feedback sessions, as well as at other opportunities. The guidebook is used as part of the Toray supplier education and support program to promote and strengthen CSR along the supply chain.



The Toray Group Supply Chain CSR Promotion Guidebook

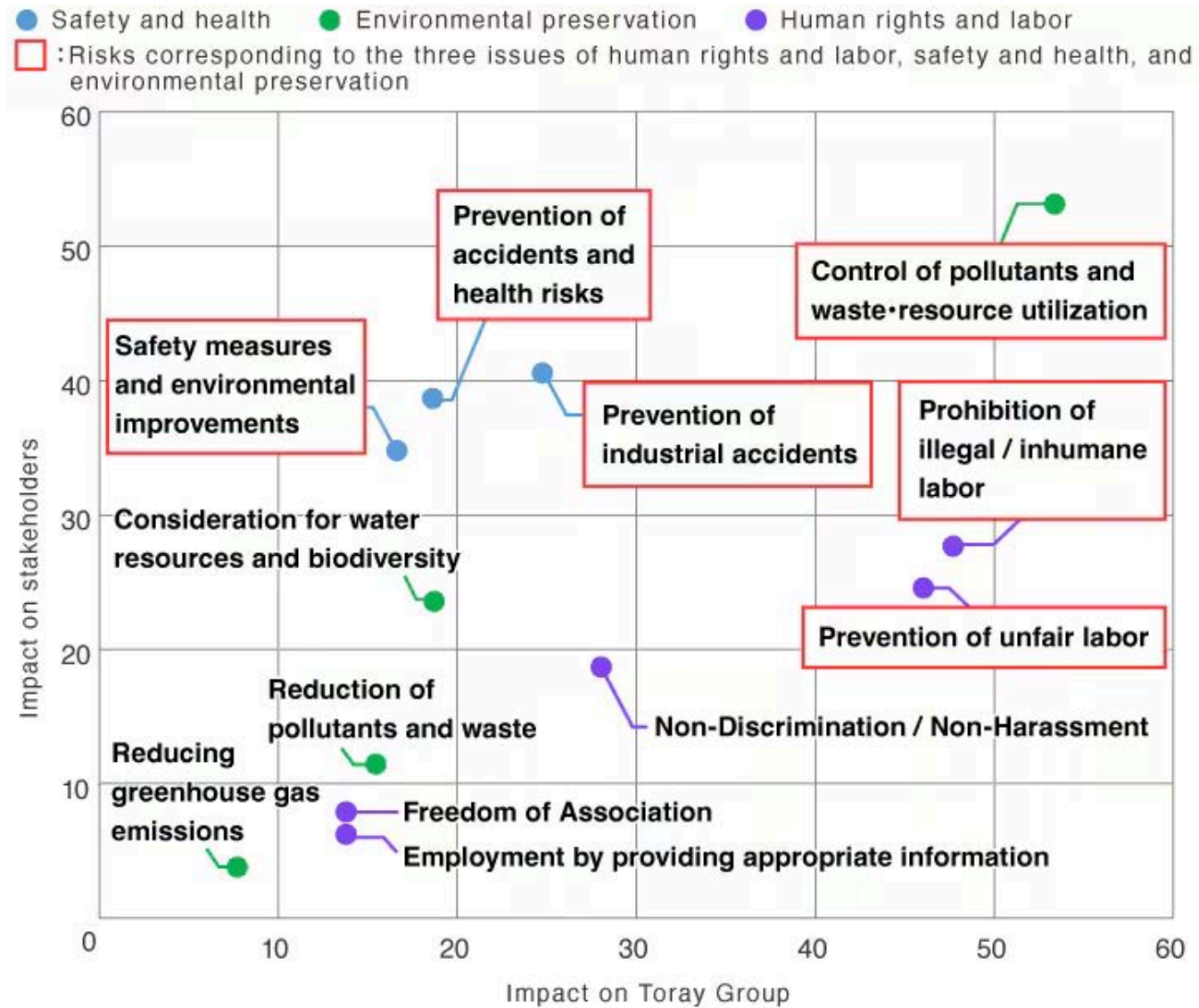
## Initiatives to Mitigate Global CSR Procurement Risk

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.

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 2,220 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. In fiscal 2024, the Group conducted a risk survey and evaluation of three selected companies. As a result, two of these suppliers were assessed as posing a low risk. For the one remaining supplier, the Group will conduct audit and follow-up when risks are present. Through these initiatives, Toray Group will strive to reduce the CSR procurement risk to the Group as a whole.

## 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)

Click [here \(229.8KB\)](#) PDF for more details on Toray Group's due diligence process.

## Main Items of CSR Surveys of Suppliers

### I. CSR promotion system

- ☐ Establishment of and familiarity with policies and guidelines
- ☐ Understanding and sharing the Toray Group CSR Procurement 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
- ☐ Identifying items subject to restrictions on export to third countries

### 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
- ☐ Managing compliance with product quality standards, inspection standards, and fraud prevention

### 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



CSR Procurement Surveys to Ascertain and Evaluate Current Supplier Situations

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, the Toray Group CSR Procurement Guidelines, and the RBA Code of Conduct. The surveys exhaustively confirm the extent to which suppliers are addressing CSR, requesting actions on a variety of social issues such as anti-corruption and anti-bribery measures, respect for human rights, and a variety of environmental conservation activities, including reduction of greenhouse gas emissions and consideration for and assessment of water resources and biodiversity. In fiscal 2024, Toray Industries carried out CSR surveys of major suppliers and received 451 responses (125 raw material suppliers, 153 equipment and material suppliers, 38 logistics companies, as well as 135 production and processing contractors). The results indicated that about 99% of companies surveyed were rated S, A or B<sup>1</sup> 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 451 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% (or four out of five) of the companies that were rated C or D in the previous survey, which were visited to confirm actual conditions and requested to make improvements, improved to an A or higher rating in the current survey.

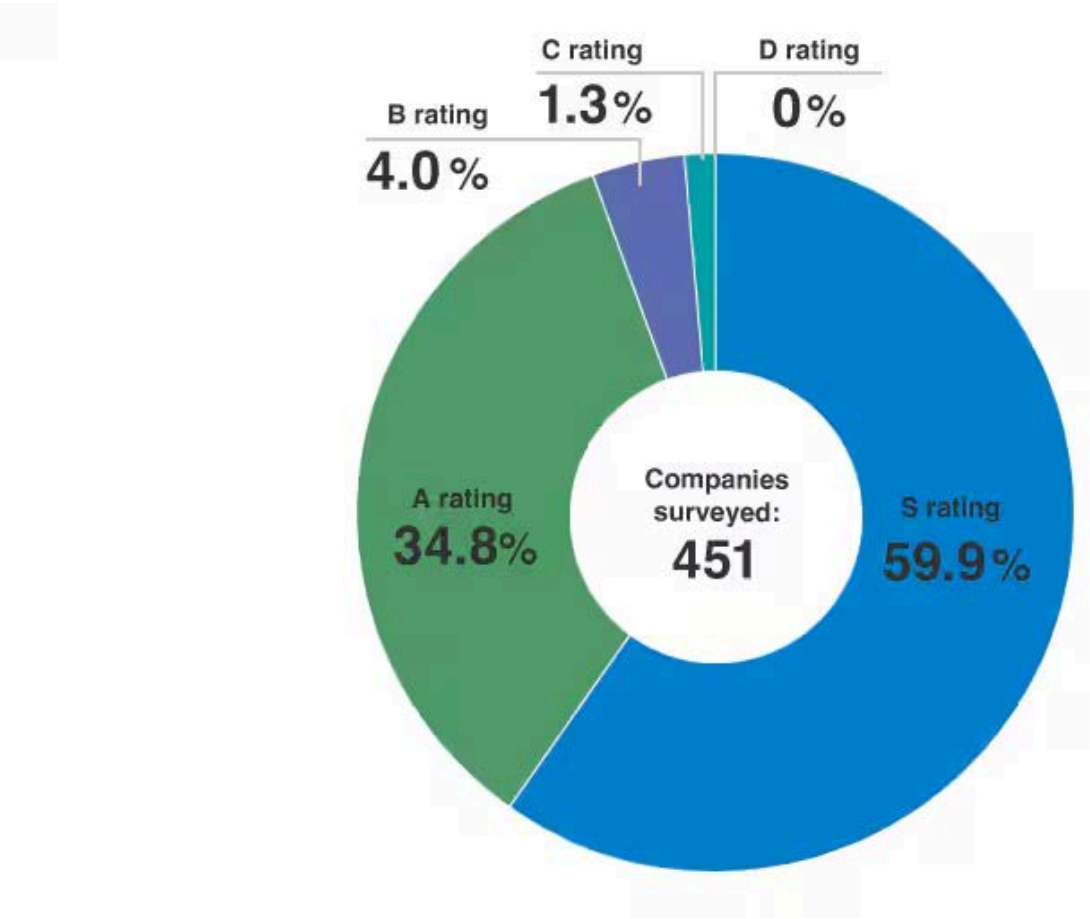
Furthermore, all 451 companies that responded were provided with feedback in the form of a score sheet, which included not only their individual assessment and the contents of the analysis, but also the overall averages for each survey item, including the scores of other companies as benchmarks. The Toray Group Supply Chain CSR Promotion Guidebook was also distributed along with this feedback.

In fiscal 2025, the Company will individually visit all six suppliers that were rated C or D to confirm actual conditions and hold discussions and provide support for corrective actions and improvements. Furthermore, in the case of business partners that meet the standards required by Toray Industries based on the CSR Procurement Survey results, on-site audits are also progressively being planned and carried out by the CSR Procurement Working Group for those in industries where the risks of negative impacts are a concern. The Company then checks in intermittently to confirm progress on the improvements indicated on the follow-up sheet.

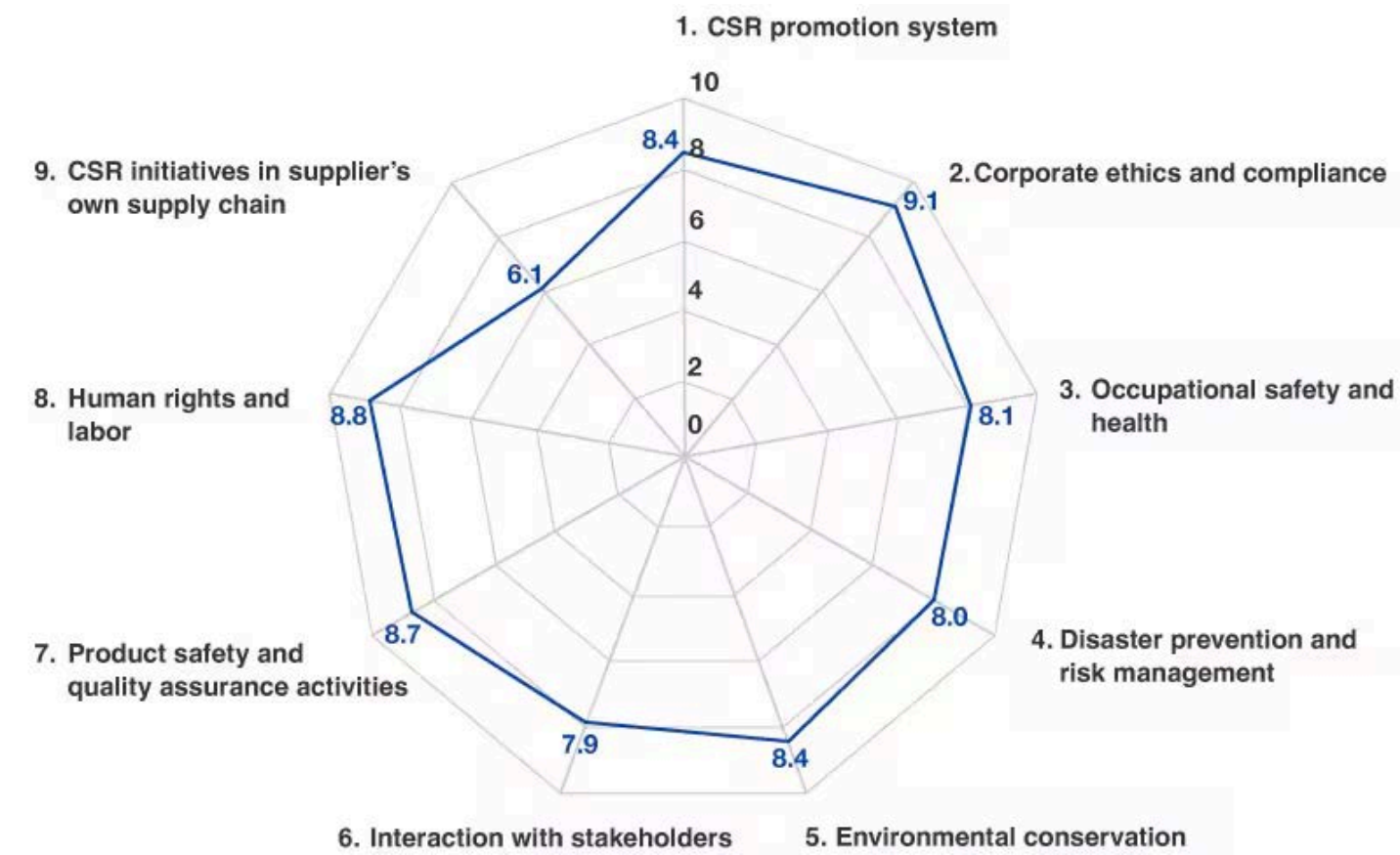
<sup>1</sup> Survey responses are assessed on a 10-point scale for each of the nine survey items. Taking the average score for the nine items as the overall score, 8 or more points is rated as S, 6 or more points but less than 8 is rated as A, 5 or more points but less than 6 is rated as B, 3 or more 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%

FY 2024 CSR Status of Suppliers (Toray Industries, Inc.)

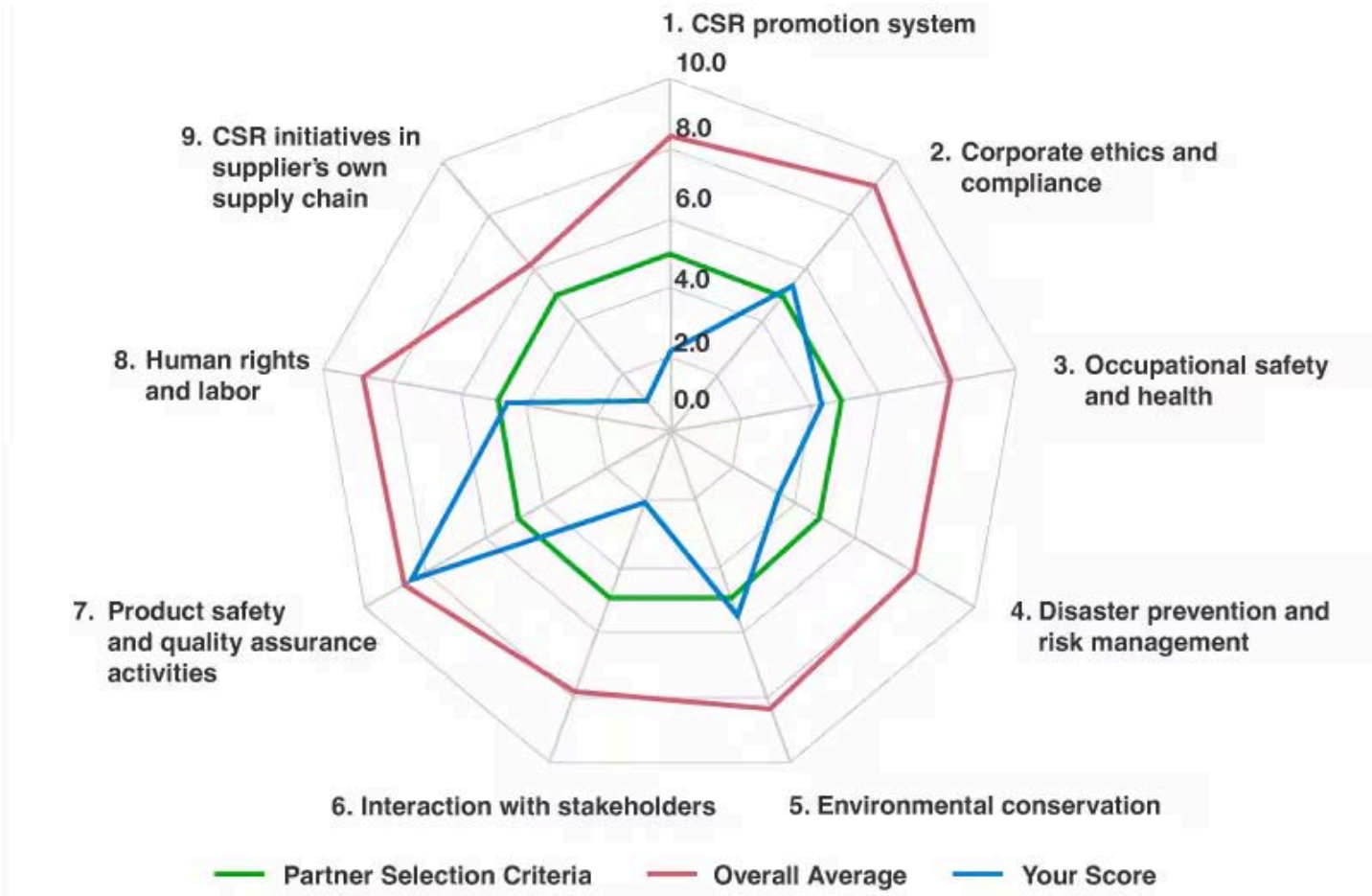


FY 2024 Analysis of CSR Survey of Suppliers (Toray Industries, Inc.)





Feedback Using the CSR Procurement Survey Evaluation Results (Example) (Toray Industries, Inc.)



Providing the CSR Procurement Guidelines and Confirming Compliance

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. Over the three years from fiscal 2022 to fiscal 2024, the Company sent the Toray Group CSR Procurement Guidelines to a total of 539 major suppliers and requested their understanding and compliance. It has been working to obtain and confirm written agreements from suppliers stating that they will adhere to the guidelines. As a result, 446 companies had provided such agreements by the end of fiscal 2024.

In addition, rules for responses to CSR surveys from customers are set and a system is in place to facilitate prompt and accurate responses.

## **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.

### **CSR Procurement Surveys to Ascertain and Evaluate Current Situation**

Group companies in Japan continued to request that their suppliers practice CSR procurement. In fiscal 2024, these companies conducted a CSR procurement survey among their major suppliers and received 129 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. 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.

### **Providing the CSR Procurement Guidelines and Confirming Compliance**

Over the three years from fiscal 2022 to fiscal 2024, 41 group companies in Japan sent the Toray Group CSR Procurement Guidelines to 1,553 major suppliers and requested their cooperation and compliance. They have been working to obtain written agreements from suppliers on adherence to the guidelines. As a result, by the end of fiscal 2024, these group companies obtained written agreements from 1,414 suppliers, excluding 57 suppliers that these group companies do not expect to do business with in the future. Over the three years from fiscal 2022 to fiscal 2024, 80 group companies outside Japan sent the Toray Group CSR Procurement Guidelines to a total of 2,341 major suppliers, requesting their cooperation and compliance. The group companies are working to obtain written agreements from suppliers on adherence to the guidelines. As a result, by the end of fiscal 2024, they had obtained such agreements from 1,779 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 worldwide 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 2024, agreement was obtained from 3,639 out of 4,255 major Toray Group suppliers, representing 85.5% of business partners.

# Human Rights and Environmental Preservation in the Supply Chain

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 2024 CSR Survey of Suppliers Regarding Respect for Human Rights

The survey conducted by Toray Industries in fiscal 2024 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 2025, 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 2026 CSR Procurement Survey.

In addition, CSR procurement surveys are used to investigate whether suppliers are responding appropriately to various issues related to human rights, such as employment and labor issues that could arise due to an infectious disease outbreak, in order 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?	99.7%	<div> <div>[4] 58%</div> <div>[3] 27%</div> <div>[2] 15%</div> <div>[1] 0%</div> <div>[0] 0%</div> </div>
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?	98.9%	<div> <div>[4] 55%</div> <div>[3] 24%</div> <div>[2] 19%</div> <div>[1] 0%</div> <div>[0] 1%</div> </div>
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?	98.6%	<div> <div>[4] 45%</div> <div>[3] 24%</div> <div>[2] 30%</div> <div>[1] 0%</div> <div>[0] 1%</div> </div>
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?	98.9%	<div> <div>[3] 99%</div> <div>[2] 0%</div> <div>[1] 0%</div> <div>[0] 1%</div> </div>

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.)
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?	98.9%	<div> <div>[3] 99%</div> <div>[1] 0% [0] 1%</div> </div>
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%	<div> <div>[3] 96%</div> <div>[1] 3% [0] 1%</div> </div>
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?	99.6%	<div> <div>[3] 100%</div> <div>[1] 0% [0] 0%</div> </div>
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?	99.8%	<div> <div>[3] 100%</div> <div>[1] 0% [0] 0%</div> </div>
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?	99.1%	<div> <div>[3] 99%</div> <div>[1] 1% [0] 0%</div> </div>
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.?	98.0%	<div> <div>[3] 98%</div> <div>[1] 1% [0] 1%</div> </div>
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?	98.4%	<div> <div>[3] 98%</div> <div>[1] 0% [0] 1%</div> </div>
12. Are you giving sufficient consideration to and responding appropriately to various issues related to employment, human rights, and labor that may arise during an infectious disease outbreak?	99.3%	<div> <div>[3] 99%</div> <div>[1] 0% [0] 0%</div> </div>
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?	76.3%	<div> <div>[4] 21%</div> <div>[3] 29%</div> <div>[2] 27%</div> <div>[1] 5%</div> <div>[0] 19%</div> </div>

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 2024 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 2024 confirmed a high rate of implementation of initiatives on 15 survey items, excluding those related to requests to secondary suppliers, out of 16 items related to environmental preservation. For example, the Company confirmed that 87% 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 2024, the Group improved the survey questions on resource and energy conservation efforts by breaking down resources into categories such as water, wood, metals, and oil, allowing for a more detailed understanding.

In fiscal 2025, 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 2024 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 2026 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?	98.7%	<div> <div>[4] 71%</div> <div>[3] 12%</div> <div>[2] 16%</div> <div>[1] 0%</div> <div>[0] 1%</div> </div>
2. Have you prepared the internal system and designated the responsible person to promote environmental preservation?	98.4%	<div> <div>[4] 67%</div> <div>[3] 16%</div> <div>[2] 16%</div> <div>[1] 0%</div> <div>[0] 1%</div> </div>
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?	98.7%	<div> <div>[4] 65%</div> <div>[3] 13%</div> <div>[2] 21%</div> <div>[1] 0%</div> <div>[0] 1%</div> </div>
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?	95.5%	<div> <div>[3] 96%</div> <div>[2] 2%</div> <div>[1] 2%</div> <div>[0] 2%</div> </div>
5. Do you work to minimize emissions and waste generation of ecosystem resources such as drinking water and industrial water, and implement resource- and energy-saving initiatives such as reducing, reusing, and recycling (3Rs) resources used?	87.1%	<div> <div>[3] 87%</div> <div>[2] 4%</div> <div>[1] 4%</div> <div>[0] 9%</div> </div>
6. Do you work to minimize emissions and waste generation of ecosystem resources such as wood and paper, and implement resource- and energy-saving initiatives such as reducing, reusing, and recycling (3Rs) resources used?	90.5%	<div> <div>[3] 91%</div> <div>[2] 3%</div> <div>[1] 3%</div> <div>[0] 6%</div> </div>
7. Do you work to minimize emissions and waste generation of metal resources such as iron and copper, and implement resource- and energy-saving initiatives such as reducing, reusing, and recycling (3Rs) resources used?	92.5%	<div> <div>[3] 92%</div> <div>[2] 3%</div> <div>[1] 3%</div> <div>[0] 5%</div> </div>

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.)
8. Do you work to minimize emissions and waste generation of energy resources such as gas and electricity, and implement resource- and energy-saving initiatives such as reducing, reusing, and recycling (3Rs) resources used?	93.8%	[1] 4% [0] 2% [3] 94%
9. Do you work to minimize emissions and waste generation of plastic resources such as petroleum, and implement resource- and energy-saving initiatives such as reducing, reusing, and recycling (3Rs) resources used?	90.4%	[1] 4% [0] 6% [3] 90%
10. Do you comply with the applicable laws / regulations, (REACH, ROHS, etc.) for, and appropriately manage the procured chemical substances?	98.3%	[1] 2% [0] 0% [3] 98%
11. Do you work to minimize emissions and waste generation of pollutants, appropriately manage emissions of air pollutants, water pollutants, and other chemical substances into the environment, and implement initiatives to reduce these emissions?	95.8%	[1] 3% [0] 1% [3] 96%
12. Do you appropriately manage emission of greenhouse gas and perform the efforts for reduction (prevention of global warming)?	87.0%	[1] 9% [0] 5% [3] 87%
13. 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?	97.1%	[1] 0% [0] 2% [4] 53% [3] 44%
14. 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?	92.9%	[1] 1% [0] 6% [4] 47% [3] 46%
15. Do you perform the environmental assessment regarding the products (assessment of the products' impact on the environment)?	84.8%	[1] 3% [4] 47% [3] 38% [0] 12%
16. Do you request the suppliers for promotion of environmental preservation?	82.5%	[1] 5% [4] 23% [3] 32% [2] 27% [0] 13%

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].

For questions 13 to 15, only [4] [3], [1], and [0] are used; no value has been set for [2].

As part of efforts to promote human rights protections and environmental conservation in the supply chain, the Company enables individuals to report relevant issues at any time via the Toray website.

Out of a total of 313 inquiries and consultations received in fiscal 2024 via the CSR inquiry form on the Toray website, there was one related to human rights and environmental preservation in the supply chain, which was appropriately addressed.



### CSR Related Inquiries

The Group uses an external portal to receive reports and inquiries regarding its CSR initiatives. If you have any concerns or information related to the Group's activities in the areas of human rights, labor, safety, health, environmental preservation, ethics or compliance, please submit them via the web form below.

[Inquiries concerning CSR initiatives by Toray Group and its business partners](#) 

## Addressing Conflict Minerals

The Toray Group CSR Procurement Policies prohibit the use of minerals that come from conflict zones or high-risk areas, as well as those that are clearly tied to armed conflict or human rights violations. To comply with the rules, Toray Industries investigates whether conflict minerals are used in any of the raw materials and production equipment used for its products. If conflict minerals are used, the Company investigates the suppliers to determine the locations of smelters and mines. In fiscal 2024, 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

CSR Roadmap 2025  
Main Initiatives (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)**

■Reporting scope	■Target
Toray Industries, Inc.	At least 70% (Fiscal 2024)

Result in fiscal 2024

94.9%

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. In fiscal 2024, the Company confirmed that its purchases of oils and lubricants containing RSPO<sup>2</sup>-certified palm oil or sustainably and ethically produced palm oil accounted for 94.9% of total oil and lubricant purchased. Considerations such as biodiversity protection and ensuring that products are free from forced or slave labor are defined in the Toray Group CSR Procurement Guidelines. 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.

<sup>2</sup> Roundtable on Sustainable Palm Oil, an international non-profit organization promoting the production and use of sustainable palm oil.



### Toray Group

1. 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.
2. The Toray Industries Purchasing and Logistics Division regularly holds CSR procurement training sessions and seminars for employees in charge of purchasing and logistics operations.
3. In order to raise the awareness and skill level of employees in charge of these operations, the sessions cover the laws, regulations, and taxation systems with which companies must comply in their purchasing and logistics operations.

### Supply Chain

1. Human Rights Education in Collaboration with Logistics Companies  
Toray Industries prioritizes collaboration with logistics companies to reduce environmental impact and improve quality in logistics operations. As part of this effort, the Company holds an annual Toray Group Basic Distribution Policy Briefing.  
At this briefing, the Company shares not only basic logistics policies and environmental initiatives but also the promotion of CSR procurement within the supply chain.
2. Human Rights Education for Overseas Business Partners  
With the aim of mitigating human rights risks, group companies outside Japan provide human rights education to Asian manufacturers contracted to make textile products.
3. 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.

## 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 2024, the briefing was held both online and in person, and 64 logistics companies participated.



Basic Distribution Policy Briefing (fiscal 2024)

#### Participation in White Logistics Movement and Efforts to Improve the Logistics Environment

Toray Industries participates in the White Logistics Movement<sup>1</sup>, 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.

<sup>1</sup> 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 Council and the Chemical 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 Working Group in July 2023, under the Physical Internet Realization Council, organized by the Ministry of Economy, Trade and Industry and the Ministry of Land, Infrastructure, Transport and Tourism. The four companies serve as the secretariat for the working group.

The Chemical Products Working Group currently includes 78 organizations primarily comprising 77 shippers and logistics providers plus one university, (as of December 2024), as well as participants from the Ministry of Economy, Trade and Industry, the Ministry of Land, Infrastructure, Transport and Tourism, the Ministry of Health, Labour and Welfare, the Japan Chemical Industry Association, and the Japan Petrochemical Industry Association. The working group announced a voluntary action plan on March 29, 2024. For more details (in Japanese only), please click [here \(469.8KB\)](#). 

In addition, among the participating companies, Mitsubishi Chemical Group Corporation, Mitsui Chemicals, Inc., Tosoh Corporation, Prime Polymer Co., Ltd., and Toray Industries conducted demonstration trials from September to December 2024, utilizing the logistics data platform and logistics information standardization guidelines promoted by the government under the Physical Internet Realization Council, with support from subsidies provided by the Ministry of Land, Infrastructure, Transport and Tourism and the Ministry of Economy, Trade and Industry. These demonstrations included on-site verification of round-trip logistics between the Yokkaichi and Ichihara industrial complexes (in Mie and Chiba prefectures), simulations of joint logistics between the Nagoya metropolitan area and

the Hokuriku region, and analyses of transport efficiency between Ichihara and the Tohoku region, thereby testing the effectiveness of joint transport and the usefulness of a shared logistics platform. In particular, the on-site verification confirmed significant benefits, including a 20-point improvement in truck loading rates and a 28% reduction in CO<sub>2</sub> emissions. For further details, 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	Before New System	After New System
Reduction of average truck waiting times	56 minutes per vehicle	<b>15 minutes per vehicle (73% reduction)</b>
Digitization of shipping documents	120 sheets of paper per day	<b>0 sheets of paper per day</b>

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 CO<sub>2</sub> emissions related to pallet recovery by using its packaging materials recovery system to recover empty pallets.



Toray Group is working hard to reduce CO<sub>2</sub> 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 2024, at Toray Group (only specified consigners<sup>2</sup> in Japan), CO<sub>2</sub> emissions from distribution activities<sup>3</sup> were 26,900 tons, up 5.9%, or 1,500 tons, from the previous fiscal year, due primarily to an increase in product and raw material transport volume. CO<sub>2</sub> emissions intensity<sup>4</sup> for Toray Group also increased year on year, reflecting the higher transport volume. With the fiscal 2014 level (set at 100) as the base, the change in the Group's CO<sub>2</sub> emissions intensity was 74.5 in fiscal 2024, representing an increase of 5.5% from the previous fiscal year (fiscal 2023). Over the most recent five years, however, the Group has achieved an average annual reduction of 6.6%. In fiscal 2024, Toray Industries' CO<sub>2</sub> emissions from distribution activities totaled 22,900 tons, an increase of 1,000 tons (4.6%) from the previous fiscal year. However, efforts such as full-load transport, improved loading rates, and modal shift helped suppress CO<sub>2</sub> emissions by 213 tons.

Toray Industries' CO<sub>2</sub> emissions intensity from distribution activities decreased by 2.6% year on year (from fiscal 2023) due to continued promotion of modal shift as well as an increase in net sales, the base unit denominator. Over the past five years, however, CO<sub>2</sub> emissions intensity decreased an average of 7.8% per year. As a result, Toray Industries is reliably meeting its legal mandate to reduce CO<sub>2</sub> emissions intensity by an average of at least 1% every year.

Toray Group will continue to seek CO<sub>2</sub> emissions reductions by pursuing environmentally responsible distribution.

<sup>2</sup> Toray Industries, Inc. and Toray Advanced Film Co., Ltd. (TAF), which have annual cargo transport totaling 30 million ton-kilometers or more, are "specified consigners" under Japanese law.

<sup>3</sup> CO<sub>2</sub> emissions from distribution activities refers to "CO<sub>2</sub> emissions related to the transportation of cargo entrusted to freight carriers" stipulated in the Act on Rationalizing Energy Use (Revised Energy Conservation Act)

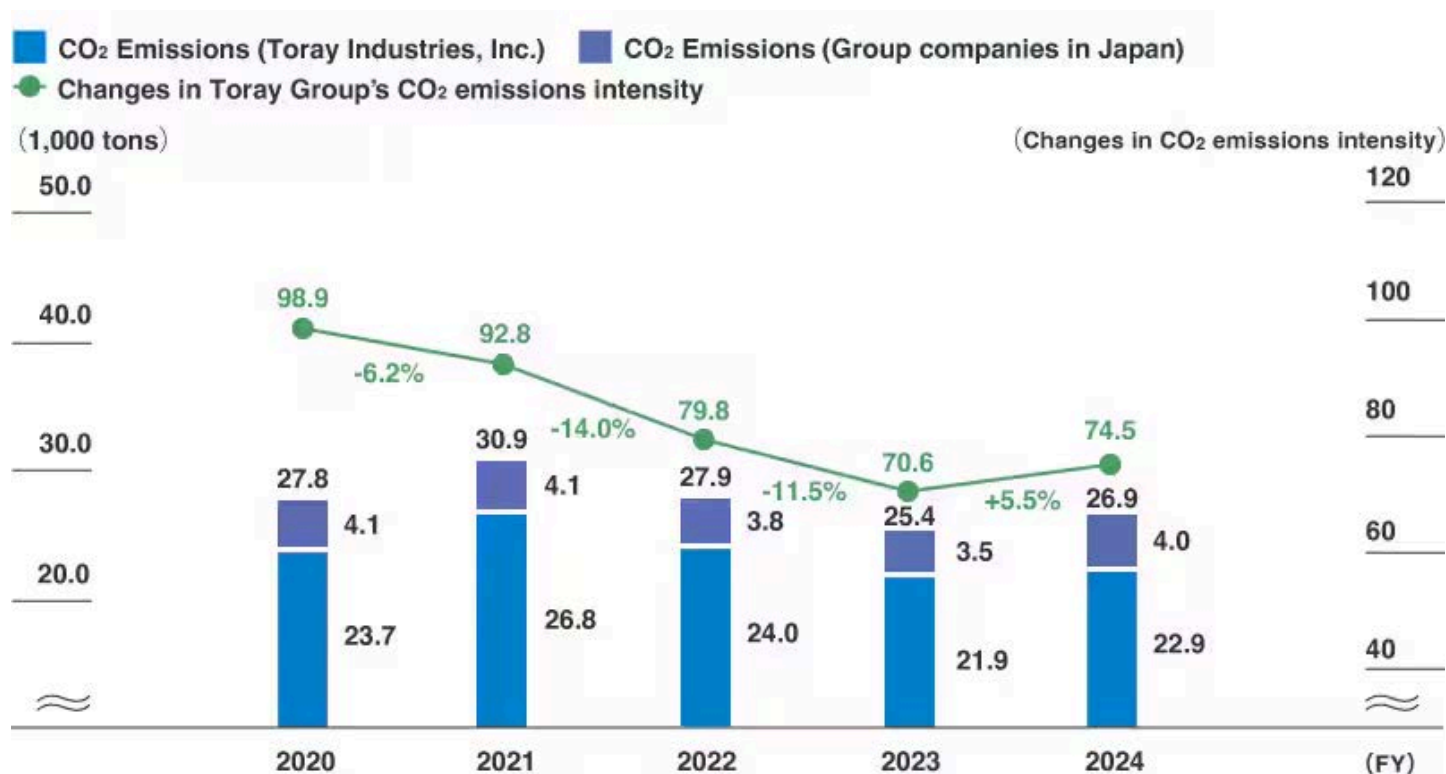
<sup>4</sup> CO<sub>2</sub> emissions from distribution activities ÷ the following transport-related indexes

Toray Industries, Inc.= Net sales

TAF = Shipping volume

Specified consigners are required to endeavor to meet the legal mandate to reduce CO<sub>2</sub> emissions intensity by an average of at least 1% every year over the medium- and long-term.

## CO<sub>2</sub> Emissions Resulting from Distribution Activities and CO<sub>2</sub> emissions intensity (Toray Group's Specified Consigners in Japan)



### Notes:

Changes in Toray Group's CO<sub>2</sub> emissions intensity = Change in CO<sub>2</sub> emissions intensity at each specified consigner group company × Each group company's CO<sub>2</sub> emissions / Total Toray Group CO<sub>2</sub> emissions

Change in CO<sub>2</sub> emissions intensity at each group company = CO<sub>2</sub> emissions / Change in transport-related indexes (Fiscal 2014 = 100)

## CO<sub>2</sub> Reduction Through Modal Shift Promotion (Toray Industries, Inc.)

Details of initiatives	CO <sub>2</sub> Reduction (1,000 tons)
Full-load transport, and increased loading rates, etc.	0.034
Revision of inventory storage locations, and loading at the nearest port, etc.	0.027
Modal Shift	0.152
Total	0.213

## Expanding Collection and Reuse of Packaging Materials

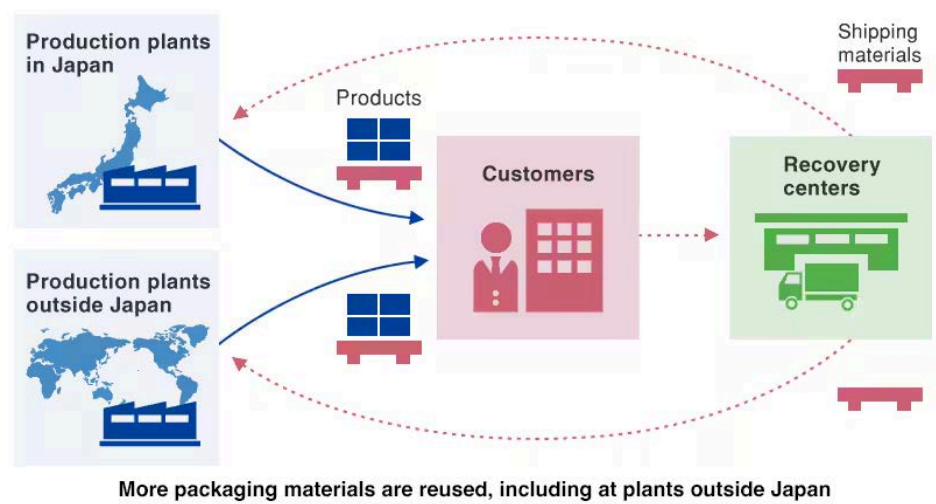
Toray Group is establishing a global framework to collect and recycle packaging and shipping materials that are included with products used by customers.

The value of these materials collected by Toray Industries in fiscal 2024 was 620 million yen, an increase of 30 million yen (5.4%) from the previous fiscal year.

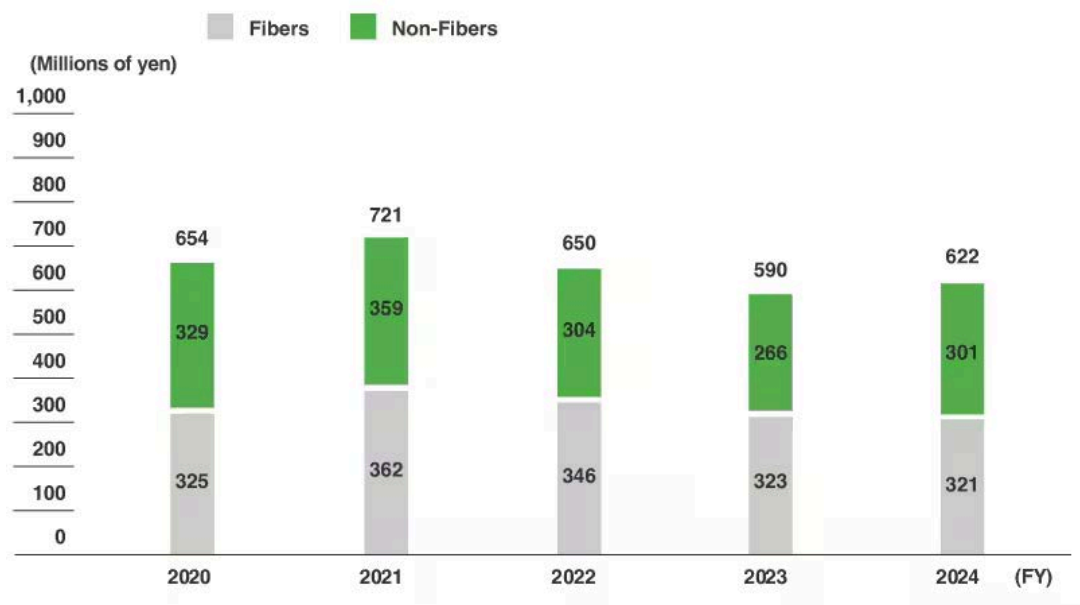
The volume of the materials collected also increased due to a rise in shipment volumes mainly for films.

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.)



New EV Truck at the Shiga Plant (Toyo Logistics Co., Ltd.)

Group company Toyo Logistics acquired an EV truck for cargo transport within Toray’s Shiga Plant, marking a first for Toray Group factories. This initiative is expected to reduce CO<sub>2</sub> emissions by approximately one ton, representing a 99.7% reduction compared to the previous vehicle.



EV truck launch

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, 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 is actively pursuing 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 2024 (Jan – Dec), the modal shift rate increased by 1.0 points from the previous year to 31.3%, 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.





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.

In terms of specific measures, disaster prevention manuals have been created based on flood risk information released by the Japan Meteorological Agency, portable water dams have been prepared, and pallets have been used to elevate the warehouse floor.

From fiscal 2021 to fiscal 2024, inspections were completed at 60 out of the 68 main warehouse sites. Of these, 28 sites were assessed as safe, while 32 sites were found to be at risk. Mitigation measures have been completed for 20 of the 32 sites at risk. As a result, 48 of the 68 sites (70.6%) are now either risk-free or have completed the appropriate mitigation measures.

In fiscal 2025, further on-site inspections and discussions will be carried out to better mitigate risks.

Initiative Stage	Details
Risk analysis I	Ascertaining <b>site risks</b> using hazard maps issued by national and local governments
Risk analysis II	Ascertaining <b>warehouse structural risks</b> using a questionnaire created independently
On-site confirmation	On-site visits with partner insurance companies to confirm <b>risks in detail</b>
Mitigation measure discussion	Proposing and implementing <b>tangible and intangible measures</b> appropriate for the actual risks



Portable water dam



Pallets raised above the floor level

## 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 awards<sup>5</sup>. 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.

<sup>5</sup> Distribution-partner companies receiving awards in fiscal 2024 (alphabetical order):

Iyoshoun Inc., Enshu Truck Co., Ltd., Shikoku Meitetsu Transportation Co., Ltd., Sukagawa Tobu Logistics Co., Ltd., Daisei Warehousing & Transportation Co., Ltd., Chuo Warehouse Co., Ltd., Nagahama-Reizou, Mitsui-Soko Co., Ltd.

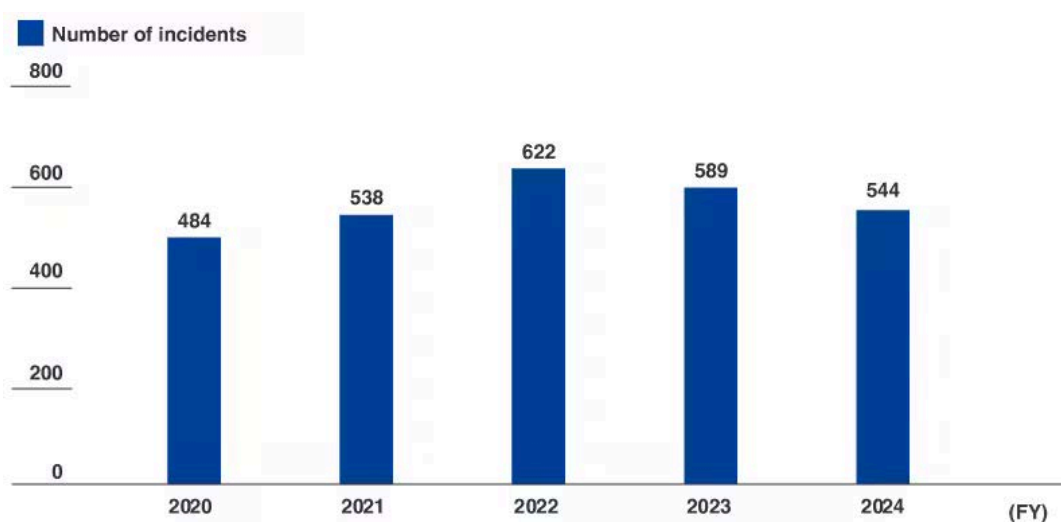
### Distribution Incidents

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 2024 was 544, a reduction of 8% compared to the previous year.

The Company will continue working with partner companies to improve distribution quality.

### Annual Number of Distribution Incidents (Toray Industries, Inc.)



### 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 2024, in addition to explaining security trade control measures to 13 sites belonging to 10 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 Certification<sup>6</sup> and G Mark<sup>7</sup>. 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.

<sup>6</sup> 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)

<sup>7</sup> 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<sup>8</sup> Emergency Response Measures

Drivers of shipping vehicles carry a yellow card 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.

<sup>8</sup> 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)<sup>9</sup> 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)<sup>10</sup> status.

<sup>9</sup> 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.

<sup>10</sup> 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.

Click > [here](#) for the main initiatives for CSR Guideline 9, "Establishing Sustainable Supply Chain" in CSR Roadmap 2025.



## 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." Furthermore, social contribution activities were included in Toray Group's CSR Guidelines established in 2004, and have been implemented 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)<sup>1</sup>. 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.

Specific Examples of Special Awards:

- 1. Years-long employee participation in community activities that contribute to the local community (such as neighborhood association membership, sponsorship of children’s groups, participation in traffic safety or crime prevention activities, or coaching local sports)
- 2. Participation in life-saving or firefighting-related activities
- 3. Ongoing participation in blood donation activities

<sup>1</sup> 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 September 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



Environment and Communities



Health and Welfare

- 330 -



**Science and Technology Promotion:** Toray Group strives to live up to its corporate philosophy of “Contributing to society through the creation of new value” by providing innovative technologies and advanced materials.

Generating continuous innovation requires the securing and development of human resources who will lead the next generation. To this end, through the Toray Science Foundation and partner foundations overseas, the Group provides research grants and supports science education. In addition, through activities such as employee visits to schools to provide science classes, the Group actively works to foster children’s interest in science, thereby making broad contributions to the advancement of science and technology.

**Environment and Communities:** Toray Group is pursuing the Sustainability Innovation (SI) Business that help solve global issues relating to the environment, resources and energy. Utilizing its technology and human resources, the Group is continuously engaged in activities for environmental conservation and local community participation.

**Health and Welfare:** Toray Group’s Sustainability Innovation Business contributes to better medical care, fosters public health, and supports safe and healthy lifestyles. The Group also promotes sports participation, cancer screening awareness, childhood education programs, 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

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To fulfill its responsibility as a company that helps solve social issues, Toray Industries promotes social contribution activities under an organized framework.

In April 2012, the Company established the CSR Operations Department as a specialized department focusing on social contribution activities. The department is responsible for planning and running its own voluntary programs implemented independently, as well as aggregating and sharing CSR performance results across Toray Group. As part of social contribution efforts, the Brand Communications Department has until now been responsible for promoting sports, while the Corporate Communications Department has promoted cultural support activities. In April 2025, Toray consolidated the social contribution functions of the CSR Operations Department into the Brand Communications Department, establishing a new framework in which that department now oversees these activities in an integrated manner. This transfer strengthened the Group's ability to promote social contribution, sports promotion, and cultural support activities — which had previously been carried out separately by different departments — in an integrated and strategic way.

Under this new framework, Toray will strategically promote the Group's social contribution activities as a whole, develop sustainable initiatives rooted in local communities, and, through effective sharing of activity results, work to strengthen trust with stakeholders, foster interaction and shared understanding among employees, and enhance brand value.

Finally, by working closely with sites worldwide, and providing support tailored to local needs in response to requests from group companies in various countries, Toray Group as a whole is carrying out sustainable social contribution activities rooted in local communities.

# CSR Roadmap 2025 Targets and Results

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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)	Targets / Results		
	Fiscal 2023	Fiscal 2024	Fiscal 2025
<b>10-① Social contribution expenditure</b> (% change from average expenditure over last six years)	100% or higher / 124%	100% or higher / 126%	100% or higher / -
<b>10-② Social contribution activities</b> (number)	2,500 or more / 2,173	2,500 or more / 2,214	2,500 or more / -
<b>10-③ Beneficiaries of educational support activities such as science classes for schools and career education (number)</b>	15,000 or more / 18,816	15,000 or more / 22,024	15,000 or more / -

Reporting scope: Toray Group

### Related Materiality for CSR

- Developing in Collaboration with Stakeholders

Click [here \(536KB\)](#) **PDF** for the Materiality View of CSR Roadmap 2025.

## Looking to the Future

Going forward, in addition to contributing to society through its business activities, Toray Group will continue to engage voluntarily and on an ongoing basis in social contribution activities that leverage its unique expertise and technologies as a materials manufacturer. Focusing on three priority areas of “science and technology promotion,” “environment and communities,” and “health and welfare,” the Group will promote initiatives to achieve the Toray Group Sustainability Vision, along with educational support activities that foster understanding of and interest in the environment. While remaining committed to partnering with and supporting local communities, the Group is further deepening its initiatives to help realize a sustainable world and actively address issues faced by society as a whole.

Click [here \(771KB\)](#) **PDF** 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).

## Fiscal 2024 Results

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 2024  
100% or higher

Result in fiscal 2024

**126%**

### Social contribution activities (number)

■Reporting scope  
Toray Group

■Target in fiscal 2024  
2,500 or more

Result in fiscal 2024

**2,214**

### Beneficiaries of educational support activities such as science classes for schools and career education (number)

■Reporting scope  
Toray Group

■Target in fiscal 2024  
15,000 or more

Result in fiscal 2024

**22,024**

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 2024 were 2.20 billion yen, while such expenditures were approximately 1.31 billion yen at Toray Industries, Inc. alone. This figure is 126% of average expenditures over the last six years (fiscal 2018-2023, 1.75 billion yen), surpassing the target of 100% or higher set in the CSR Roadmap 2025.

In fiscal 2024, the main activities included support for the Toray Science Foundation and Toray science foundations in Malaysia, Thailand, Indonesia, and the Republic of Korea, as well as the promotion of sports participation in China through sponsorship of the Shanghai International Marathon.

In fiscal 2024, Toray Industries, on behalf of Toray Group, donated approximately 220 million yen to Toray Science Foundation. Toray Group companies outside Japan donated approximately 200 million yen to Toray science foundations around the world. Through its donation activities, the Group supports the advancement of science and technology both in Japan and overseas.

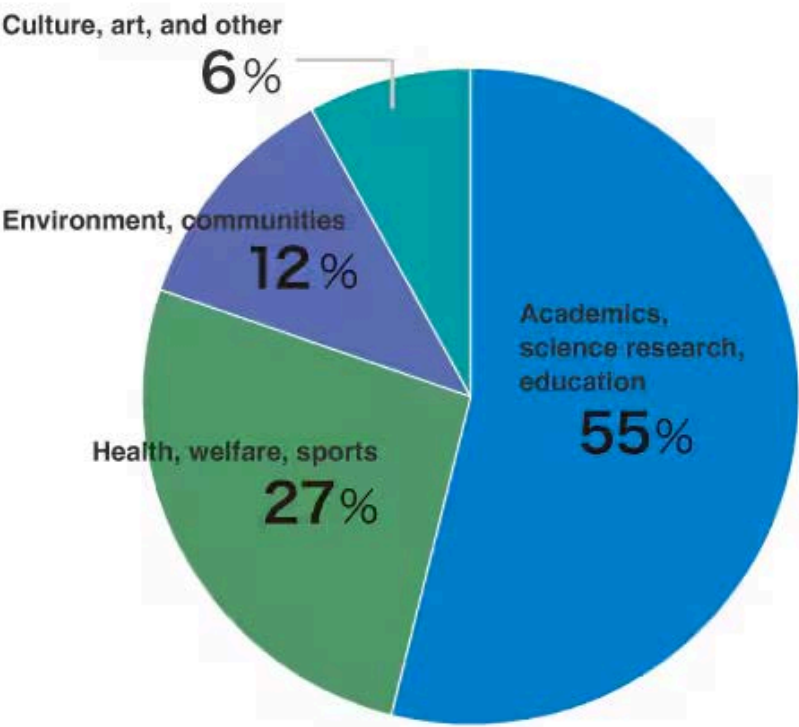
In its CSR Roadmap 2025, Toray Group sets KPIs for the number of social contribution activities to be implemented in order to ensure that the Group continues to actively contribute to society. In addition, the roadmap sets KPIs for the number of beneficiaries of educational support activities, such as 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 2024 was 2,214 (41 more than the previous year), compared to the Group target of 2,500 or more. These included initiatives such as educational support activities and volleyball clinics with employees serving as instructors.

The beneficiaries of educational support activities numbered 22,024 (3,208 more than the previous year), higher than the Group target of 15,000 or more. This was achieved through initiatives such as visits to elementary, junior high, and high schools by Toray science class instructors who encourage interest in science, the environment, and related career possibilities. Other initiatives included hosting plant tours and welcoming visitors at various Toray sites, increasing the number of volleyball clinics held, and actively collaborating on external educational events.

**Related Information**  
> [Toray Science Foundations around the World](#)

**Breakdown of Expenditure in FY 2024**



Click > [here](#) for the main initiatives for CSR Guideline 10, "Social Contribution Activities as a Good Corporate Citizen" in CSR Roadmap 2025.

## Activities Carried Out in Fiscal 2024

### Educational Support

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. In fiscal 2024, Toray instructors conducted in-person classes at 20 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 gained a clear picture of how the science they learned in class is utilized in the real world, while having a good opportunity to think about environmental issues. Another elementary school teacher indicated that by learning about the initiatives of a local company, the students gained a greater sense of belonging and community pride. A junior high school teacher said that while boosting their interest and curiosity, the lesson deepened students' understanding of what they have been learning in class. The teacher also noted that the guest instructor helped students visualize the size of particles that are otherwise invisible. Finally, a high school teacher reported that by learning how Toray's materials are used in everyday life, the students came to understand science and technology as something familiar and relevant. 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.

In fiscal 2024, the Group also provided teaching materials and lent laboratory equipment to 53 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 "a good opportunity for students to discover that science class is relevant to their own lives and the technologies they see around them," and some schools have repeatedly applied for the program year after year.

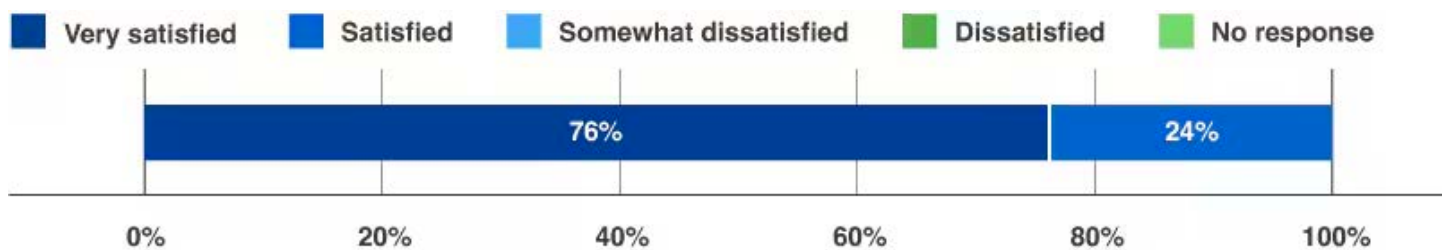




Toray employees delivering science lessons

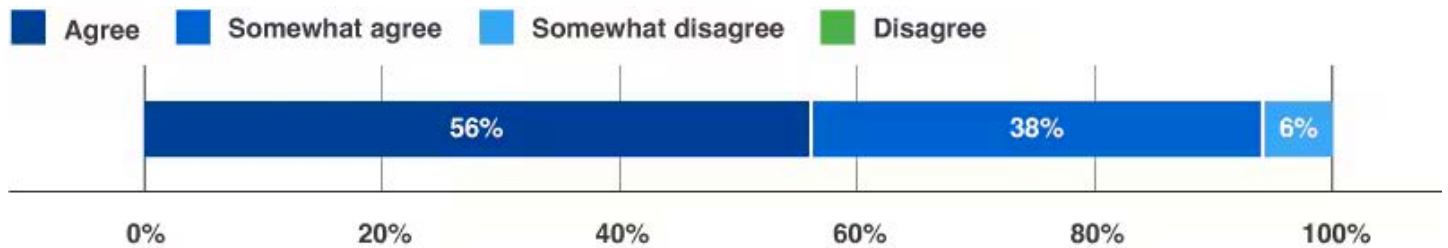
## ■ Results of Questionnaire on Science Classes and Teaching Materials Provided by Toray Group

### Teacher satisfaction with Toray classes

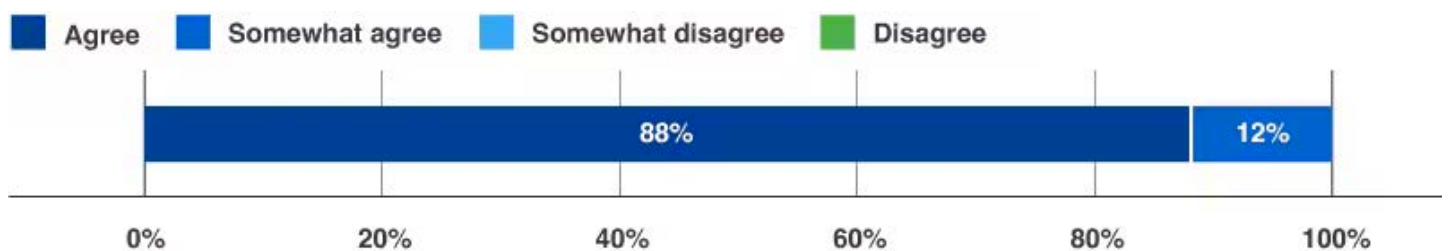


### Survey responses by employee participants

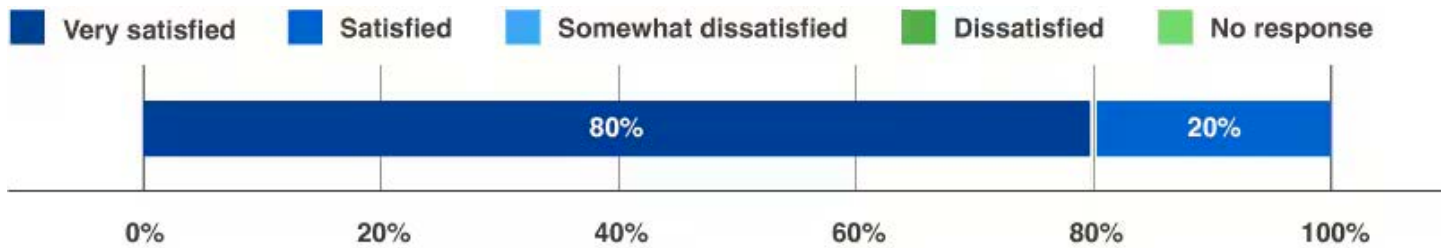
#### 1. It increased my work motivation



#### 2. I gained a better understanding of the company's role and the expectations of society



## 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 continuously conducts educational support activities in response to requests from schools, boards of education, and non-profit organizations. Through initiatives such as career education and SDGs-related classes taught by employees, as well as hosting company visits and plant tours, the Group aims to support children's learning and assist them in making choices about their future paths. These activities are often carried out in connection with local communities, providing opportunities to expand engagement with society. At Toray Industries, career awareness classes in which employees share their work experiences and student days, SDGs-related classes, and hosting of corporate visits and factory tours are offered to junior high and high school students. Meanwhile, group companies in Japan provide diverse educational support, including tailored in-school classes and hosting of company visits for elementary, junior high, and high school students, leveraging each company's business and unique characteristics.

Group companies outside Japan also conduct activities for local students to deepen their understanding of Toray's business and environmental initiatives through classes and factory visits. In fiscal 2024, Toray Composite Materials America, Inc. conducted classes at local schools, while Toray Group in Malaysia, Toray Industries (H.K.) Ltd. (East Asia), and Zoltek Corporation (USA) held science, environmental education, and career awareness classes at Japanese schools in their respective regions.

In recent years, Japanese junior high and high school students have visited overseas group companies, and overseas high school and university students have toured group factories in Japan, contributing to international exchange.



Chairman Akihiro Nikkaku gave a talk to enhance career awareness at his alma mater's 100th anniversary ceremony (Toray Industries, Inc.)



Toray Industries hosted visits from junior and senior high school students across Japan and enhanced their awareness of career possibilities and the Group's SDGs initiatives (Toray Industries, Inc. Tokyo Head Office)



Work experience program for junior high school students (Toray Industries, Inc. Seta Plant)



Factory tour for high school students (Toray Monofilament Co., Ltd.)



Employee delivers an elementary school special social studies class on factory work to third grade students (Toray Industries, Inc. Aichi Plant)



Employee gives a class at a local junior high school (Toray Composite Materials America, Inc)

## Related Information

> [Developing the Next Generation of Talent](#)

## Toray Program for the Summer Riko Challenge 2024

Toray Industries supports the Riko Challenge initiative led by the Gender Equality Bureau of Japan's Cabinet Office. In fiscal 2024, at the R&D Innovation Center for the Future located in Toray's Shiga Plant, the Company once again hosted an event for junior and senior high school students called, "Summer Riko Challenge 2024: 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, 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 completed a survey afterwards, and all responded "satisfied" or "very satisfied." One said it was fun to see equipment they had never seen before and to hear about study fields and other topics in the discussion session. Another student expressed satisfaction in being able to learn a lot about research occupations and universities, and actually became interested in pursuing a science-related career.





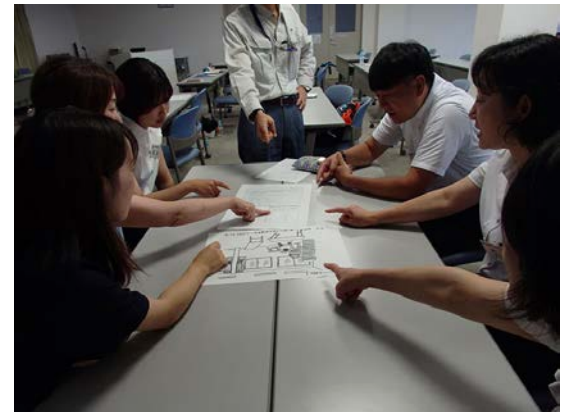
Discussions with researchers



Group photo

## Promoting Communication Between Education and Business Worlds

Through 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, the Toray Human Resources Development Center and Toray Industries' Mishima Plant welcome 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.



Conducting hazard prediction training

## Workshops at the Science Museum

Since 2012, Toray Industries has been conducting a workshop which uses filtration experiments to examine the importance of the Earth's water at the Science Museum located in Kitanomaru Park in Tokyo, every day that the museum is open. In fiscal 2024, approximately 8,300 people, from young children to adults, attended the workshop.

## 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 fiscal 2024, four high school students represented Japan at the 35th IBO held in Astana, Kazakhstan. With 295 students competing at the event, the Japanese students achieved excellent results, all winning silver medals.



The four students representing Japan at IBO 2024  
(Photo courtesy of the Japan Biology Olympiad Committee)

## Aozora Science School

Since 2015, Toray Industries has organized the Aozora Science School<sup>1</sup>, 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 2024, 199 elementary school students participated in the program online and in-person. The outdoor activities took place near Lake Kawaguchi, close to Mt. Fuji, and in Otsu City, Shiga Prefecture, as part of Toray's 100th anniversary celebrations.

The outdoor program featured unique activities designed to make science fun through play. These included a water purification experiment using Toray's hollow fiber membranes to purify lake and river water, as well as a rocket-building activity.

In the online classroom, students learned using experiment kits sent to them in advance. The activities included one that involved dripping water on a Toray water-repellent textile and observing how water drops roll around on the fabric surface, as well as one using Toray's nano-layered polyester film PICASUS<sup>TM</sup> 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.

<sup>1</sup> Aozora Science School: A hands-on educational camp designed by Toray Industries, supervised by Leave a Nest Co., Ltd. and provided by JTB Corporation.



Students exploring the forest



Group photo of participants

## Related Information

[Aozora Science School official website \(Japanese site\)](#) 

[Aozora Science School Facebook page \(Japanese site\)](#) 

\* A Facebook account is needed to view this page

## Environmental Conservation

CSR Roadmap 2025  
Main Initiatives (1)(2)(3)(4)(5)(7)



Individual Toray Group sites continue to carry out clean-up activities and nature conservation efforts in partnership with their local communities. While helping to raise group-wide environmental awareness, the sites are engaged in practical, community-rooted initiatives such as biodiversity conservation, cleaning of local areas, tree planting, and environmental education. These activities are conducted in collaboration with a wide range of stakeholders, including employees and their families, local residents, schools, government agencies, and NPOs. Going beyond simply cleaning up the environment, the activities also help instill environmental awareness in younger generations while building trust with local communities.



Employees once again carried out clean-up activities along Hirokoji Street, near the Nagoya Branch office. In fiscal 2024, Toray Industries had the highest number of participants among the companies taking part in the activity (Toray Industries, Inc. Nagoya Branch)



Employees participating in the Chirihama Nagisa Clean Campaign, a litter-collection activity at Chirihama Beach in Hakui City—the only place in Japan where vehicles can drive along a sandy shoreline (Sowa Textile Co., Ltd.)





Participants in a "plogging" event—a litter-picking fitness activity—where a total of 1,600 employees took part (Toray Advanced Materials Korea Inc.)



Toray participants in the Penang State Government's plan for "Planting One Million Trees in a Single Day" on Earth Day (April 22). The Group donated 2,000 saplings and assisted with planting (Toray Group Companies in Malaysia)

### 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. In fiscal 2024, the event was held twice, in spring (April) and autumn (October), with a total of 80 employees and family members participating. Both times, participants expressed surprise at the large amounts of litter collected.

A nature observation activity entitled, "Experience the Biodiversity of the Arakawa River" was also held during the two events. Participants observed creatures such as red flower crabs, gobies, and East Asian river prawns, as well as non-native plants. This provided both children and adults an enjoyable opportunity to learn more about the environment. Comments received from the post-activity questionnaire included: "It wasn't just picking up litter; the information shared at the event deepened my understanding of environmental issues," and "I appreciated being able to learn about the importance of the clean-up at the lecture held beforehand, and I also enjoyed experiencing the local animals and plants through the nature observation."

Going forward, these activities will continue to be carried out as opportunities to further raise awareness and understanding of the environment.





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.



Group photo of the clean-up participants

### Biodiversity Conservation and Community Contribution Activities at Toray Industries' Tokai Plant

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 Another<sup>2</sup>, 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 2024, the plant participated in an event called LOVE! GREEN DAY 2024, sponsored by the Project Linking Life with One Another, which allows the public to experience the green spaces of participating companies. The facility welcomed 30 participants, including local children and their parents, experts, and the university student members of the project executive committee. Participants were able to interact through factory tours, observing the living creatures in the biotope, and crafting creatures using natural materials such as leaves, branches, and nuts gathered in the green space.



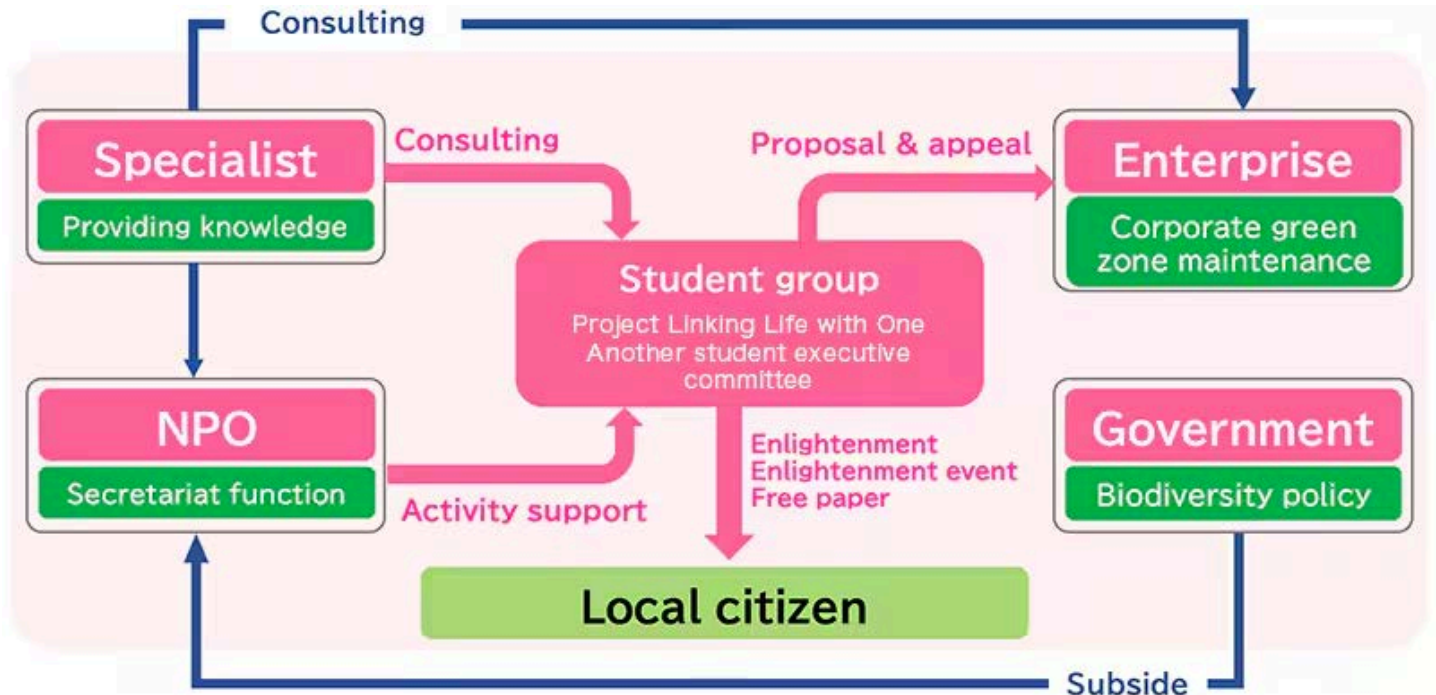
Exploring aquatic life in the biotope



LOVE! GREEN DAY 2024 participants

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



Related Information

> Biodiversity Initiatives





Toray Group places importance on contributing to the development of a healthy society through sports and has been engaged in sports promotion activities for many years. In addition to supporting corporate sports, initiatives include providing instruction to local children and young people, hosting training camps, and conducting activities to further popularize sports. The focus is on fostering healthy development of mind and body and strengthening ties with local communities.

As part of these wide-ranging initiatives, the Group's professional teams and employee-based company teams—including volleyball, judo, kendo, and rowing—actively share the appeal of sports across Japan while also contributing to the promotion of community-based sports culture.

The Group's volleyball team is particularly active in sports promotion efforts, by holding youth volleyball clinics and visiting schools. In fiscal 2024, events were held at 76 locations, with participation by more than 7,000 members of local communities.

In addition to their daily training and competitive activities, the Group's judo, kendo, and rowing teams also provide instruction and opportunities to interact with local children, maintaining efforts to impart the importance of courtesy and striving to take on challenges. Toray Group's initiatives outside Japan include sponsorship of events such as the Shanghai International Marathon, supporting local sports activities and expanding the Group's engagement worldwide.



Providing volleyball clinics and school visits for elementary and junior high school students near group plants (Toray Arrows, Inc.)



Instruction for local elementary and junior high school students conducted by the Toray kendo club (Toray Industries, Inc. Okazaki Plant)

## 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 2024 Shanghai International Marathon, the 28th such event, included a wheelchair category for the first time, providing participation opportunities to a wider range of people. On the day of the marathon, approximately 38,000 participants ran through the streets of Shanghai, generating great excitement in the city.

To help make the marathon more sustainable, Toray Group launched a new initiative in collaboration with the Shanghai Marathon Organizing Committee to collect used plastic bottles and recycle them into fiber made under the Group's sustainable &+™ (And plus) brand. The plan is to take the recycled &+™ fiber produced from the bottles collected during the 2024 event and turn them into new items to be used for upcoming Shanghai Marathons. Through these initiatives, the Group places importance on building relationships with local communities, and has maintained sponsorship activities over many years as part of its contributions rooted in the community.



Marathon starting line



Participants racing down a Shanghai street



With the aim of helping to enrich society through culture and education, Toray Group actively pursues a wide range of activities that provide cultural support. By co-sponsoring performances in Japan by distinguished overseas orchestras and supporting music programs with social welfare objectives, the Group not only introduces high-quality music culture, but also provides opportunities for interaction with local communities.

The Group is also actively involved in supporting local cultural activities. For example, at the Mainz Festival in Germany, the Group has presented Japanese dance and kimono shows featuring SILLOOK™ kimono as a way to foster international cultural exchange and introduce Japanese culture.

These initiatives help promote communication through the arts while preserving and developing regional cultures, playing an important role in deepening ties with local communities.



A string quartet from abroad performing at the Toray Friendship Concert (Toray Industries, Inc. Tsuchiura Plant)

### Supporting Fureai Concerts

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 2024, 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 beautiful harmony was thoroughly enjoyed by the large audience who attended.



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.

In the area of natural disaster relief, the Group recognizes the importance of providing continuous assistance rather than one-time responses, as recovery in affected areas often takes a long time. Based on this approach, as part of support for those affected by the Noto Peninsula Earthquake that struck in January 2024, the Group continued its assistance activities during fiscal 2024, including financial donations. Group company Suido Kiko Kaisha, Ltd. also provided Makusesu Safety water purifiers for use in emergency and disaster situations free of charge to affected communities. These purifiers are designed to rapidly ensure an emergency supply of drinking water.

### Related Information

For more information on Toray Group’s disaster relief efforts after the 2024 Noto Peninsula Earthquake, please visit the website below.

> [Business Continuity Plan Initiatives](#)

### 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 2024, a volleyball clinic was held at Tomiya Daini Junior High School in Tomiya City and at Akai 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 Mari Horikawa, 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.





Kana Oyama (right) and Mari Horikawa (left), receiving a message of thanks from a student representative



Students listening attentively to Kana Oyama's talk

## Support for Flood Victims

In 2024, Thailand experienced prolonged heavy rainfall during its rainy season, leading to severe flooding, particularly in the northern regions. As part of relief efforts, Toray Group companies in Thailand made donations through the Thai Red Cross Society. These funds are being used to deliver essential supplies to those affected by the disaster.



Representatives of Toray Group in Thailand presenting a donation to the Red Cross

## Support for Local Community Development



In fiscal 2024, five Toray Group companies in Nantong, located near Shanghai, donated a total of 100,000 yuan to a local charity association, an initiative that began in 2012. This marked the 13th year the Group has been supporting this initiative for local development (Five Toray Group companies in the Nantong area)



Employees participating in the annual Day of Caring community service activity to support local social welfare organizations (Toray Composite Materials America, Inc.)



Game cards jointly created by visually impaired children and company employees were donated to a social welfare organization in Seoul (Toray Advanced Materials Korea Inc.)



Unused office furniture, including desks, chairs, and lockers, was donated to a local junior high school [Carbon Magic (Thailand) Co., Ltd.]

Click > [here](#) for the main initiatives for CSR Guideline 10, "Social Contribution Activities as a Good Corporate Citizen" in CSR Roadmap 2025.

## 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 realize this goal, it is essential that the Group secures and develops human resources capable of becoming the leaders of tomorrow. Based on this approach, the Group takes a long-term perspective by contributing to the promotion and support of basic science and science education, through the activities of such organizations as Toray Science Foundation and Toray Science Foundations in Malaysia, Indonesia, Thailand, and the Republic of Korea. These efforts constitute one of the Group’s main social contribution activities and support the work of researchers who drive the advancement of science and technology.

### Toray Science Foundation

Toyo Rayon Science Foundation (now called Toray Science Foundation) was established in 1960 to commemorate the 35th anniversary of the company's founding by funding and promoting research into science and technology. The aim was to help advance science, technology and culture. Toray Industries, Inc. contributed one billion yen when it was established, and has continued to donate funds to cover operating costs through the present. The Foundation was much talked about when it was first established as a pioneering corporate foundation. Its support activities include grants and prizes in the fields of basic science and science education. Unlike similar organizations, the Foundation also recognizes science teachers at junior and senior high schools, and its activities have continued to win high praise. Six of the recipients of the Foundation’s Science and Technology Prizes or Science and Technology Grants have gone on to win Nobel Prizes.



First Toyo Rayon Science Foundation presentation ceremony (March 1961)

#### Nobel Prize winners

- Reona Esaki (recipient of the Foundation’s Science and Technology Prize in 1961 and the Nobel Prize in Physics in 1973)
- Masatoshi Koshiha (recipient of various Foundation grants from 1968 to 1970 and the Nobel Prize in Physics in 2002)

- Ryoji Noyori (recipient of the Foundation's Science and Technology Prize in 1990 and the Nobel Prize in Chemistry in 2001)
- Isamu Akasaki (recipient of the Foundation's Science and Technology Prize in 2000 and the Nobel Prize in Physics in 2014)
- Shinya Yamanaka (recipient of the Foundation's Science and Technology Grant in 2004 and the Nobel Prize for Physiology or Medicine in 2012)
- Tasuku Honjo (recipient of the Foundation's Science and Technology Grant in 1981 and the Nobel Prize for Physiology or Medicine in 2018)

## Main activities of Toray Science Foundation

Initiative	Description
Toray Science and Technology Grant	This grant provides financial assistance to young researchers engaged in exploratory research in science and technology.
Toray Science and Technology Prize	This prize is awarded to scientists for their distinguished achievements in science and technology.
Toray Science Education Prize	This prize is awarded to commend junior and senior high school teachers who have given creative and innovative lessons in science with good results.
Toray Science Foundation International Research Grant	This grant is awarded to young researchers engaged in basic research on science and technology in Indonesia, Malaysia, and Thailand.

Note: The prize and grant recipients are selected by a third-party committee made up of experts.

## Cumulative achievements, FY 1960-2024

Category	Number awarded	Amount (million yen)
Toray Science and Technology Grant	711	7,535
Toray Science and Technology Prize	135	518
Toray Science Education Prize	781	242
Japan total	1,627	8,295
Toray Science Foundation International Research Grant	919	533
Total	2,546	8,828

Note: "Toray Science Foundation International Research Grant" includes direct grants to overseas universities from 1989 to 1993 (61 grants, 68 million yen).



## 2024 Presentation Ceremony

In February 2025, the Toray Science Foundation chose the latest recipients of the 65th Toray Science and Technology Prizes, Toray Science and Technology Grants and the 56th Toray Science Education Prizes. At the presentation ceremony, 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. Naoto Nagaosa (Director of RIKEN's Fundamental Quantum Science Program) and Dr. Hitoshi Kurumizaka (Professor, Institute for Quantitative Biosciences, The University of Tokyo). 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 supplementary prize money. Grants totaling 130 million yen were awarded to 11 researcher recipients of Science and Technology Grants.

In his address to attendees, Toray Industries Chairman of the Board and Toray Science Foundation Chairman Akihiro Nikkaku gave the following remarks. “The 2024 Nobel Prizes in Physics and Chemistry were awarded for foundational technologies in machine learning and for computational protein design and structure prediction, respectively. This illustrates how the world of science and technology is undergoing major changes, which is why I feel basic research 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



Chairman Nikkaku, Selection Committee Chair Hiroaki Aihara (front row, fourth and fifth from the left), and the grant recipients



**Dr. Naoto Nagaosa**

### **Theory of quantum geometric phenomena of electronic spins in solids**

Dr. Nagaosa demonstrated the universal existence of quantum phenomena arising from the configuration of spin in real space and momentum space, and made groundbreaking, internationally acclaimed theoretical predictions regarding electronic spins in solids.



**Dr. Hitoshi Kurumizaka**

**Elucidation of chromatin structure and function for genome regulation**

Dr. Kurumizaka developed a unique, high-quality in vitro chromatin reconstitution technique, established a new research method combining structural biology and biochemistry, and elucidated the structural basis and operating mechanism of chromatin control.

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 2025 prize was awarded to Mr. Takeshi Suetani, a teacher at Yamaguchi Prefectural Tokuyama High School.



**Mr. Takeshi Suetani**

**Development of an AR Teaching Tool for Visualizing Motion Vectors**

Mr. Suetani developed an outstanding teaching tool that uses augmented reality (AR) technology to overlay an object's velocity, acceleration, and the forces acting on it—measured via a smartphone's built-in sensors—onto the real-world environment.

**Related Information**

[Toray Science Foundation](#) 

## Toray Science Foundations outside Japan

Toray Industries has established science foundations in three Southeast Asian nations where it has started businesses since the 1960s. These foundations aim to contribute to the advancement of science and technology and promote science education in each country. The science foundations in Malaysia and Indonesia were established in 1993, followed by the establishment of a foundation in Thailand in 1994.

Since their establishment, the foundations have provided awards for outstanding achievements in science, technology and science education, and grants for research in the natural sciences, using funds raised by interest income from endowments, grants from Toray Science Foundation, and annual donations from group companies in various countries. The award winners and grant recipients include outstanding science researchers, young researchers in the basic sciences, and science educators. These activities have earned great social respect in the countries of each foundation.

In 2018, the Korea Toray Science Foundation was established to launch similar efforts in the Republic of Korea, where Toray Group's business continues to expand.

The foundations seek to support the medium- and long-term development of science and technology in the host countries, by generating interest among science and technology researchers, youth, and science educators. The foundations also contribute to mutual understanding, friendship, and goodwill between Japan and each country, and foster economic development there, as well.



## Malaysia Toray Science Foundation (MTSF)

Since its inauguration in August 1993, MTSF has extended awards and grants totaling 12.09 million ringgit to 912 researchers and science teachers. MTSF holds an annual award presentation ceremony with the attendance of guests from the Government of Malaysia and the Embassy of Japan in Malaysia. The awards are a badge of honor for the award winners and grant recipients.

In November 2024, MTSF held the 31st Malaysia Toray Science Foundation Presentation Ceremony in Kuala Lumpur. MTSF awarded a total of 277,000 ringgit in prize money and grants to a total of 25 Malaysian recipients, including one scientist, 9 young researchers, and 15 science educators.

At the award ceremony, the Malaysian Minister of Science, Technology and Innovation, Chang Lih Kang, and Deputy Chief of Mission, Minister Karimata of the Embassy of Japan in Malaysia offered words of praise, recognizing that MTSF has made significant contributions to the development of science and technology in Malaysia for over 30 years. In addition, Toray Industries Chairman of the Board Akihiro Nikkaku, who serves as Honorary Chairman of MTSF, expressed gratitude for the Malaysian government's cooperation and support. He delivered a congratulatory address affirming that Toray Group will continue to support the advancement of science and technology in Malaysia in accordance with its corporate philosophy.



Commemorative photo with the science and technology prize recipients



Toray Industries Chairman of the Board and Honorary MTSF Chairman Akihiro Nikkaku presented a commemorative gift to Minister Chang Lih Kang

**Related Information**

[Malaysia Toray Science Foundation](#) 

# Indonesia Toray Science Foundation (ITSF)

From its inauguration in December 1993 until fiscal 2024, ITSF has extended awards and grants totaling 26 billion rupiah to 884 researchers and science teachers. Many of the past recipients of research grants now teach as professors and associate professors at leading universities, including the University of Indonesia, Bandung Institute of Technology, Gadjah Mada University, and Sekolah Tinggi Teknik Surabaya, and others conduct research at the Indonesian Institute of Sciences.

The 31st Indonesia Toray Science Foundation Presentation Ceremony was held in Jakarta, in January 2025. ITSF awarded prizes and grants totaling 1.050 billion rupiah to 29 individuals, including one scientist, 10 young researchers, and 18 science educators. The ceremony was attended by distinguished guests, including Professor Abdul Mu'ti, Minister of Primary and Secondary Education, Katsuro Nagai, Deputy Chief of Mission from Embassy of Japan in Indonesia, Dr. Karlisa Priandana, director of Bina Talenta Penelitian dan Pengembangan (talent development in research and development), a department under the Ministry of Higher Education, Science, and Technology, as well as ITSF Chairman Dr. Laksana Tri Handoko, who also serves as Chairman of Indonesia's National Research and Innovation Agency.

In a video message, Akihiro Nikkaku, Toray Industries Chairman of the Board and Honorary Chairman of ITSF, offered his congratulations to the award recipients and spoke about how Toray Group has contributed to supporting science and technology and promoting research and development in Indonesia through ITSF's activities. He emphasized in particular the importance of research and human resource development toward the realization of a sustainable society, expressing the Group's intention to continue providing active support. He also conveyed his gratitude to all those attending the ceremony and expressed his hopes for the future success of the award recipients.




Commemorative photo with award winners



ITSF Honorary Chairman and Toray Industries Chairman of the Board Akihiro Nikkaku delivers a speech via video message

**Related Information**

[Indonesia Toray Science Foundation](#) 

## Thailand Toray Science Foundation (TTSF)

Since its inauguration in June 1994, TTSF has extended awards and grants totaling 162.18 million baht to 895 researchers and science teachers. TTSF holds an annual award presentation ceremony. From the inaugural ceremony in 1995 through 2009, the ceremony has been attended by then President of the Privy Council His Excellency General Prem Tinsulanonda, and since 2010 has been attended by current Privy Council President His Excellency General Surayud Chulanont. The ceremony is always a big moment for award and grant winners. The 31st Thailand Toray Science Foundation Presentation Ceremony was held in Bangkok, in March 2025. A total of 5.49 million baht in prizes and grants was awarded to a range of recipients including one scientist and one organization, 20 young researchers, and six science educators, totaling 27 individuals and one organization. In his speech, Masato Otaka, the Japanese Ambassador to Thailand, commemorated the 138th anniversary of diplomatic relations between Japan and Thailand, and stated that Japan would continue advancing cooperation in areas such as human resource development, regulatory reform, and the Bio-Circular-Green (BCG) Economy, making further efforts toward the realization of a sustainable society. Privy Council President General Surayud emphasized that science and technology form the foundation of economic and social development and play a vital role in achieving sustainable progress. He expressed his gratitude for TTSF's 31 years of support for the advancement of science and technology and conveyed his expectation that the future research and educational activities of the awardees would contribute to Thailand's economic development and the improvement of quality of life. Finally, Akihiro Nikkaku, Chairman of Toray Industries and Honorary TTSF Chairman, conveyed his gratitude to General Surayud, the selection committee members for each award, and all those involved in the ceremony. He concluded by expressing his hopes that the recipients' future research activities would yield even greater outcomes.



Recipient accepting her award from Privy Council President General Surayud



Commemorative photo with the science and technology prize recipients

### Related Information

[Thailand Toray Science Foundation](#) 



## Korea Toray Science Foundation (KTSF)

The Korea Toray Science Foundation was established in 2018, 55 years after Toray Group first began operations in the Republic of Korea. The Foundation's aim is to encourage research and development in that country and expand the next-generation research infrastructure by fostering the development of human resources in the fields of science and engineering. Additional aims include building a sustainable research climate in the Republic of Korea in the fields of chemistry and materials, as well as the promotion of basic science and related industries there. From its establishment until fiscal 2024, the Foundation has presented the Science and Technology Prize to 14 individuals, granted the Korea Toray Fellowship to 30 researchers, and provided scholarships to 195 students, distributing a cumulative total of 5.93 billion Korean won.

The 7th Korea Toray Science Foundation Presentation Ceremony was held in October 2024. About 185 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 researchers aiming to promote new research activities for the Korea Toray Fellowship. Each Science and Technology Prize recipient received 100 million won, and the selected fellowship researchers will receive 50 million won each year for three years to support their research.

During the Presentation Ceremony, Professor Tae-ho Kim of Jeonbuk National University's Korean Research Institute of Science, Technology and Civilization delivered a lecture entitled, "The History of Korean Science and the Development of Industry," which drew strong interest from the participants.

In his welcoming remarks during the ceremony, Toray Industries Chairman of the Board and Honorary KTSF Chairman Akihiro Nikkaku extended his congratulations to the awardees and expressed his gratitude for Toray Group's 60 years of business development in Korea. He further stated, "I sincerely hope that KTSF's activities will contribute to the advancement of science and technology and the fostering of outstanding talent, and that the business operations and core technologies of Toray Group in Korea will continue to support the development of the country."



Award recipients and KTSF board members



A Science and Technology Prize recipient and his family members

### Related Information

[Korea Toray Science Foundation](#) 

Click > [here](#) for the main initiatives for CSR Guideline 10, "Social Contribution Activities as a Good Corporate Citizen" in CSR Roadmap 2025.