

Comments from Thought Leaders

Comments are made on the basis of information publicly available as of September 2019.



Kaori Kuroda

Executive Director, CSO Network Japan (served until September 30, 2019)

In July 2018, Toray publicly announced its vision for the future, “The World as Envisioned by the Toray Group in 2050,” seeking to address the shared global challenges set out in the Sustainable Development Goals (SDGs) and the Paris Agreement. Characteristically, Toray is using this vision as the starting point for backcasting as it pursues four initiatives to make a contribution with its innovative technologies and advanced materials.

Also in the Toray Group Sustainability Vision, Toray set out various quantitative targets that are to be attained by fiscal 2030. This vision is being promoted and linked with the medium-term management program, Project AP-G 2019, and also the Sixth CSR Road Map, which was formulated in line with CSR Guidelines, both of which were launched in 2017.

As last year, this year’s report gives a status report on the CSR Road Map, based on the ten items of the CSR Guidelines. I would like to focus my comments on the two following points in particular.

Contributing Solutions to Social Issues through Business Activities

The Green Innovation Business Expansion Project and the Life Innovation Business Expansion Project are both key growth areas identified under Project AP-G 2019, and both of these have been showing robust performance. In terms of Green Innovation, there has also been a definite increase in CO₂ emissions avoided by using Toray Group products. Furthermore, in terms of greenhouse gas emissions as part of measures to mitigate climate change, Toray has consistently achieved its target of maintaining greenhouse gas emissions at least 15% lower than the 1990 level through 2020. Since the adoption of the Paris Agreement, which calls for greenhouse gas emissions to be reduced to zero by the middle of this century, various measures to fight global warming have been accelerated. I expect the Toray Group to make further efforts in this field.

Supply Chain

It is increasingly important to ensure the promotion of CSR throughout the supply chain, including respect for human rights. The cumulative number of business partners that Toray Group companies have requested to practice CSR rose from 3,170 in fiscal 2017 to 5,294 in fiscal 2018. In addition, the number of group companies that have requested their suppliers to practice CSR has reached 150, in line with targets. For business partners that require further investigation concerning actual business practices, improvements are being made with the implementation of on-site surveys, including visits and interviews. Going forward, I hope that, with the cooperation of stakeholders, further efforts will be made to conduct impact assessments and engage in continuous monitoring.

Kaori Kuroda

Profile (as of September 30, 2019)

Executive Director, CSO Network Japan.

Following a career in the private sector, Kaori Kuroda worked for the Center on Japanese Economy and Business at the Columbia University School of Business and The Asia Foundation Japan Office, before joining CSO Network Japan in 2004. From 2007 to 2011 Kuroda was involved in developing the ISO 26000 guidance on social responsibility, representing the views of Japanese NGOs. She is also a member of the Sustainable Development Goals (SDGs) Promotion Roundtable Meeting, a former President of Japan Civil Society Network on SDGs (serving as Advisor since July 2019), and a Board member of the Japan Society for International Development (JASID). She has a master's degree from Harvard University Graduate School of Education.



Takeshi Shimotaya

Executive Director

The Global Alliance for Sustainable Supply Chain (ASSC)

The Toray Group Policy for Human Rights was adopted in December 2017, following the principles set out in the United Nations Guiding Principles on Business and Human Rights. It is critical that all employees maintain respect for human rights with a solid understanding of the concepts of human rights that are shared around the world, including the Universal Declaration of Human Rights, which states that all human beings are born free and equal and upholds the right to pursue happiness. It is similarly important for human rights to be practiced in corporate activities, and necessary to provide education to raise awareness across the Group about policies on human rights. The Sixth CSR Road Map includes key performance

indicators (KPIs) on implementing human rights education and training, however this applies only to Toray Group companies in Japan. As a next step, it will therefore be necessary to follow-up with KPIs that includes the implementation of education and training that will result in Toray's approach to human rights being shared with group companies outside Japan, as well. Internationally, it is the case that governments and companies are advancing human rights initiatives based predominantly on the United Nations Guiding Principles. Many countries in Europe have issued their own action plans on human rights and companies are expected to implement human rights due diligence to prevent or mitigate actual or potential risks of human rights infringements in their business activities. Various laws that oblige companies to report on such processes are also being formulated by individual countries, such as the UK Modern Slavery Act, and the implementation of such laws and processes cannot be delayed any further. In Japan, the foreign technical intern training program for workers from other countries has been criticized overseas as a form of modern slavery, and confirmation of the actual status is required, including in the supply chain. In addition, the Guiding Principles call for the establishment of an effective grievance mechanism, including for those people who may be directly and indirectly affected by corporate activities, whether it be in relation to stakeholders or in the supply chain.

Although Toray Group has developed structures to promote human rights in Japan and overseas, and can respond via its helpline and other means to any internal reports of human rights violations, the next step for the Group should be to respond to these international developments and move to engage in human rights due diligence and construct a grievance mechanism based on the Guiding Principles.

Takeshi Shimotaya

Profile

Takeshi Shimotaya held responsibilities in various areas with a heavy industries enterprise, including HR, general affairs, and health and safety. As the key person in charge of occupational health and safety, he compiled health and safety management principles and designed and implemented an occupational health and safety internal audit system. He was then involved in the launch of a new company engaged in an environment-related business, before moving to the United Kingdom in July 2007. In the UK, he received an MSc from the University of East Anglia in environmental studies, and an MBA from the University of Lancaster. He has been participating in the UN Forum on Business and Human Rights since 2013. He is dedicated to promoting corporate efforts to raise awareness of the UK Modern Slavery Act and resolve supply chain-related issues.



Takeshi Mizuguchi

Professor, Faculty of Economics
Takasaki City University of Economics

Expectations for True Solutions

I would like to express my respect for Toray Group's efforts over the course of many years to pioneer new business fields using its own unique technologies. The Group's conviction that materials can change lives is introduced in the Toray Group Sustainability Vision, and the phrase "power of materials" is used to describe this in the Japanese version. This phrase resonates very strongly with me. The world needs the power of materials more than ever today, given the grave, unprecedented challenges that humanity faces.

Without materials, any products—clothing, homes or transportation equipment—cannot be produced, and of course, the production of materials takes energy. At the same time, however, according to the Special Report on Global Warming of 1.5 °C of the Intergovernmental Panel on Climate Change (IPCC) issued in 2018, average global temperatures have already increased by 1 °C. It seems that torrential rains, floods and other climate disasters now occur almost every year. If an increase of a 1 °C affects our lives this harshly, it is absolutely imperative that we keep the increase under 1.5 °C. That is why by around 2050 the world must effectively reduce greenhouse gas emissions to zero. The question is: what kind of materials can meet this global imperative?

Meanwhile, marine plastics are also posing a challenge to ecosystems. Although bioplastics and biodegradable plastics could be the answer, if production using plant-based materials results in the destruction of forests this would further aggravate global warming. Moreover, the impact of climate change is causing the water cycle to change on a global scale, bringing with it the possibility that water shortages could affect agricultural production. We need a solution for this incredibly complex simultaneous equation with many factors—from materials production, to energy, plant-based materials, forest conservation, and the water cycle—and it could well be found in the power of materials.

On this point, Toray Group has identified "Value Creation" among the themes of its CSR Guidelines and has set the quantitative target of achieving sales of 900 billion yen in Green Innovation businesses. Given that total consolidated sales in fiscal 2018 amounted to 2,380 billion yen, this is an extremely ambitious target. Toray has already achieved many results. It is my hope and expectation that these results will be developed into true solutions for social systems that will be capable of comprehensively resolving the complex challenges I have just described.

Takeshi Mizuguchi

Profile

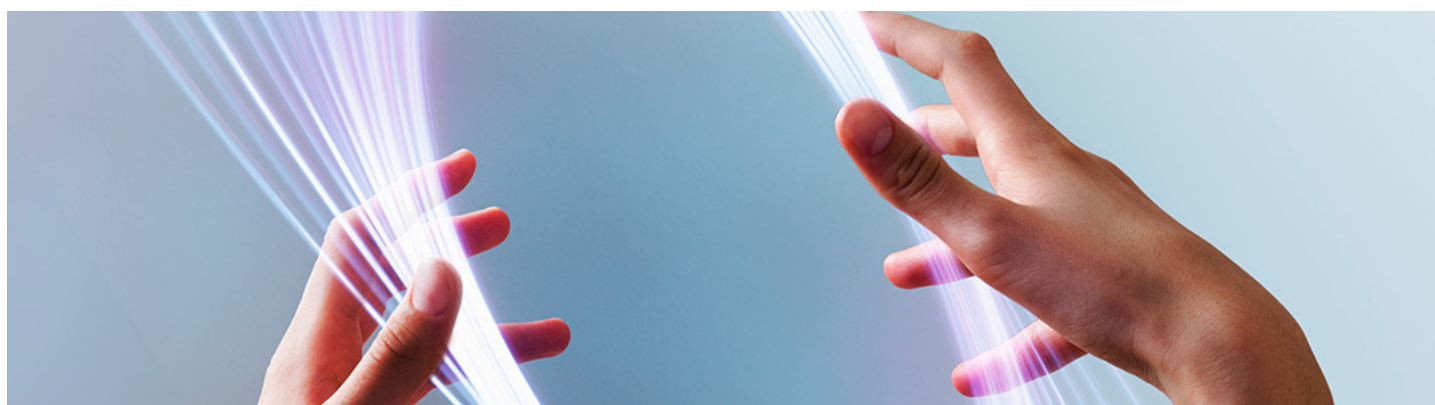
Graduated from Tsukuba University in 1984 and earned a doctorate in economics from Meiji University. After working at a trading company and at an auditing firm, in 1997 he became a lecturer at the Faculty of Economics of Takasaki City University of Economics, and was appointed professor in 2008. His primary fields of research include responsible investment and the disclosure of non-financial information. He has served as the chair of the Green Bond Review Committee, and as a member of the High Level Meeting on ESG Finance, both of which are bodies under the auspices of the Ministry of the Environment of Japan. His major publications include *ESG Investment: A new form of capitalism* (Nikkei Publishing Inc.), *Responsible Investment: Changing the future with capital flows* (Iwanami Shoten, Publishers), and *The Era of Sustainable Finance: ESG/SDGs and the bond markets* (author and editor, Kinzai).

CSR Guidelines & Activity Reports

Contributing Solutions to Social Issues through Business Activities

Value Creation

Leverage innovation to address global-scale environmental issues such as climate change and provide solutions for various social issues such as the need to improve the quality of medical care, the need to reduce the burden on medical staff, and health maintenance and longevity, thereby helping to build a more sustainable world.



Basic Approach

Global environmental issues continue to escalate, marked by climate change, rising CO₂ concentrations, and population growth-induced water shortages and resource depletion. More than seven billion people live on Earth, 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.

Under the medium-term management program, Project AP-G 2016, Toray Group implemented the Green Innovation Business Expansion Project (Green Innovation Project) and the Life Innovation Business Expansion Project (Life Innovation Project) to expand business in growth sectors. The Group established the Global Environment Business Strategic Planning Department and the Life Innovation Business Strategic Planning Department to oversee the Green Innovation Project and Life Innovation Project, respectively, with the meetings that board members attend and by other bodies following up on the progress made. The Group is continuing to implement these group-wide projects, which are overseen directly by the president, under the new medium-term management program, Project AP-G 2019, which was launched in fiscal 2017.

In the Green Innovation Project, Toray Group aims to facilitate the transition to a sustainable and recycling-oriented society, based on its stated commitment to management that prioritizes responsibility for the global environment. The Group is endeavoring to help address resource, energy, and global environmental issues with its Green Innovation approach. For example, the Group is leveraging innovative weight-reducing materials and energy-efficient processes to help reduce greenhouse gas emissions, and utilizing technology integration to further advance R&D for non-fossil materials.

To address social issues in the medical and healthcare field, Toray Group has established its Life Innovation business, which focuses on helping to improve the quality of medical care and reduce the burden on medical staff, as well as to contribute to health maintenance and longevity. Under the Life Innovation Project, the Group has identified the products and services that are important in expanding the business group-wide.

Structure

For more information on the structure for implementing the Green Innovation and Life Innovation projects, please visit the links for the related topics in the Activity Reports below.

CSR Road Map Targets and Results

Help address social issues by developing innovative materials and new technologies, focusing on the fields of Green Innovation and Life Innovation

[Related material issues for CSR]

- Contributing to the solution of environmental issues through business activities
- Contributing to health maintenance and longevity through business activities
- Initiatives for managing water resources

01

■KPI

Sales of Green Innovation products

■Reporting scope

Toray Group

■Fiscal 2019 Target

900.0 billion yen

Fiscal 2018 Result

786.9 billion yen

02

■KPI

Sales of Life Innovation products

■Reporting scope

Toray Group

■Fiscal 2019 Target

270.0 billion yen

Fiscal 2018 Result

223.0 billion yen

03

■KPI

Contribution of Toray water treatment products (converted to treated water amount) (tons/day)

■Reporting scope

Toray Group

■Fiscal 2019 Target

59.0 million tons/day

Fiscal 2018 Result

46.8 million tons/day

Looking to the Future

In fiscal 2018, the Green Innovation Project generated consolidated net sales of 786.9 billion yen. The CO₂ emissions avoided by using Toray Group products increased due to business growth. The Group will continue to help address resource, energy, and global environmental issues through Green Innovation businesses.

In fiscal 2018, the Life Innovation Project generated consolidated net sales of 223.0 billion yen. Moving forward, Toray Group will continue to leverage its strengths in advanced materials in Life Innovation fields. In the Pharmaceuticals & Medical Products Business, the Group will accelerate its entry into new fields such as diagnostic medicines.

Green Innovation Business Expansion Project

Materiality Focus

Value Creation

Sales of Green Innovation products

■Reporting scope
Toray Group

■Fiscal 2019 Target
900.0 billion yen

Fiscal 2018 Result

786.9
billion yen

Toray Group embraces a management policy mandating that all business strategies must prioritize responsibility for the global environment in an effort to help build a more sustainable world with a small carbon footprint. The Group is endeavoring to realize this vision by addressing global environmental, resource, and energy issues through the continued implementation of the Green Innovation Business Expansion Project.

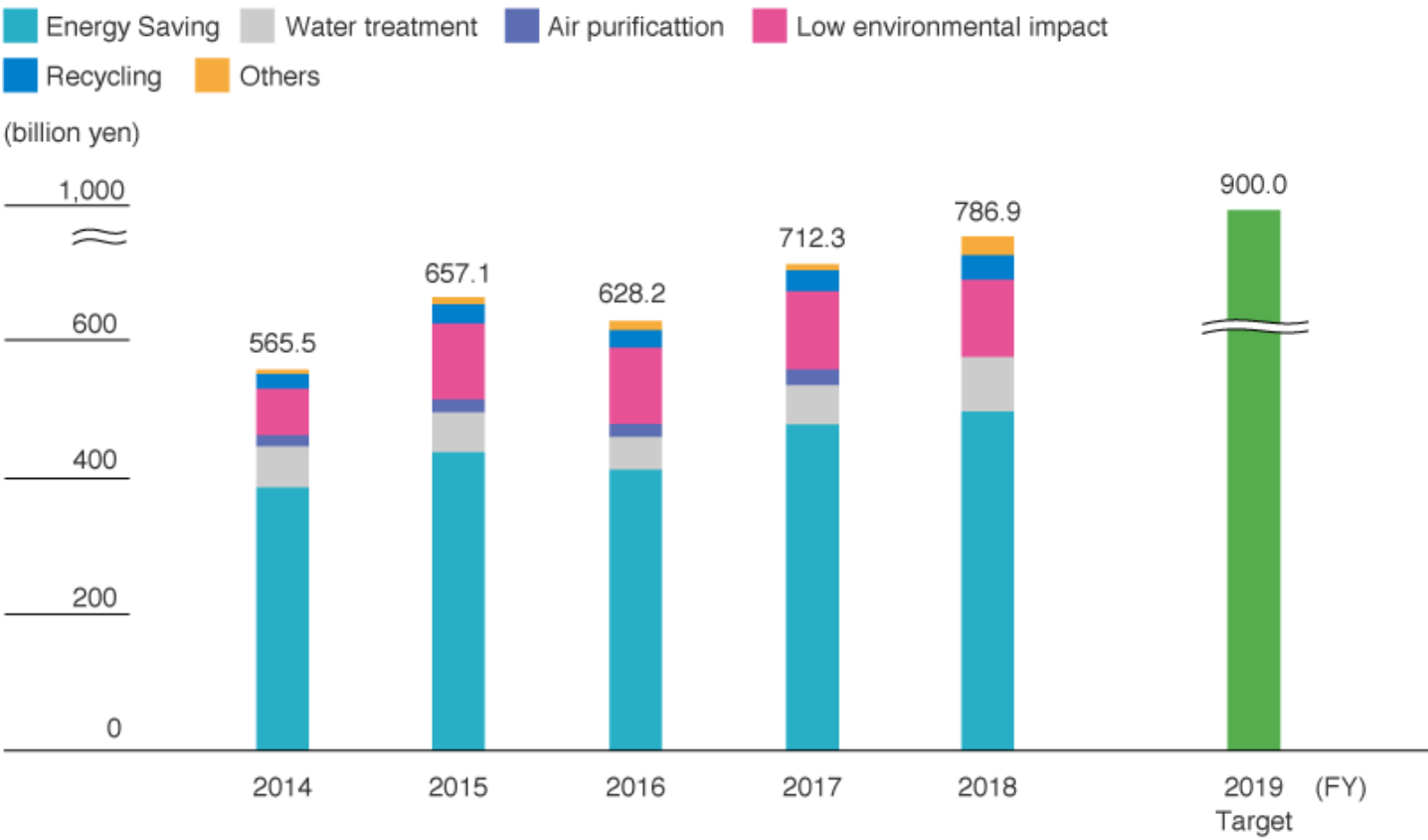
Sales in Green Innovation businesses have steadily increased since the start in 2011, reaching consolidated net sales of 786.9 billion yen in fiscal 2018. In the medium-term management program, Project AP-G 2019, which started in fiscal 2017, Toray Group set a challenging target of 900 billion yen in net sales from Green Innovation businesses on a consolidated basis and aims to expand its environment-related businesses. CO₂ emissions avoided by using Toray Group products have been steadily increasing with the expansion of the business, reaching 162 million tons-CO₂ in fiscal 2018¹ (avoided 4.2 times more CO₂ emissions than in fiscal 2013).

CO₂ emissions avoided by using Toray Group products in fiscal 2018

162 million tons-CO₂
(avoided 4.2 times more CO₂ emissions than in fiscal 2013).

¹ For CO₂ emissions avoided in the supply chain, Toray Industries, Inc. calculates the CO₂ emissions reduced throughout the value chain of products in accordance with the chemical sector guidelines of the Japan Chemical Industry Association, the International Council of Chemical Associations (ICCA), and the World Business Council For Sustainable Development (WBCSD).

Sales of Green Innovation Businesses (Toray Group)



Related Information

[Toray's Green Innovation](#)

Promoting Life Cycle Management

Materiality Focus

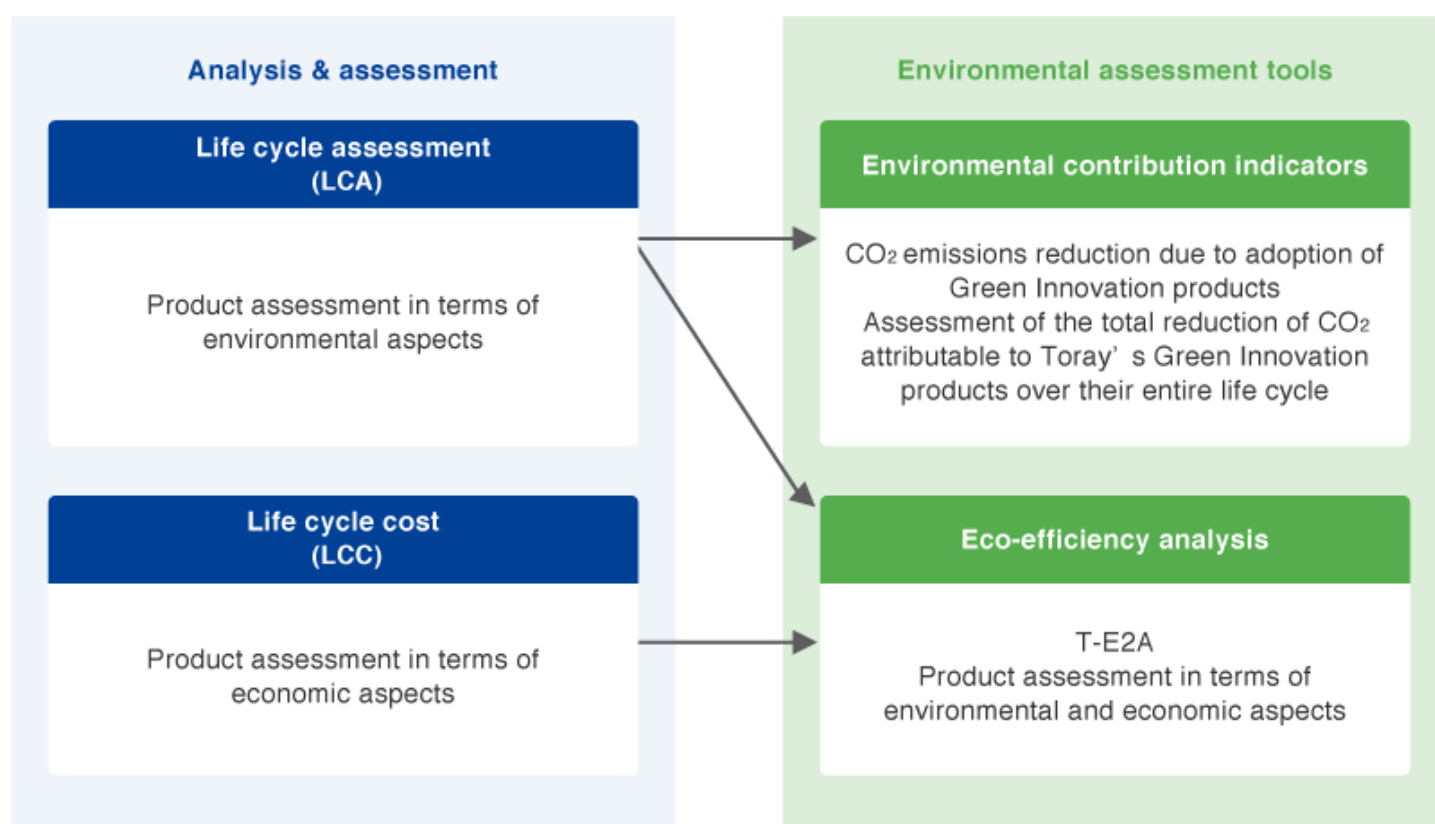
Value Creation

In addressing global environmental issues, it is vital to consider the entire life cycle of products and services in order to reduce environmental impact while also delivering improved economic and social value. In this respect, Toray Group practices life cycle management. Life cycle management is the basis for Green Innovation products, and the Group has adopted life cycle assessment¹ and the Toray Eco-Efficiency Analysis (T-E2A)² tool and is working to ensure these are employed thoroughly in all of its businesses.

¹ Life cycle assessment is a method for quantitatively assessing the resources that have gone into a product and the impact the product will have on the environment and ecosystems over its life cycle.

² T-E2A is an environmental analysis tool developed by Toray Industries, Inc. It produces a map of multiple products plotted along the axes of environmental impact and economic performance, enabling users to select the most environmentally friendly and economical products.

Toray Industries' Life Cycle Management Approach



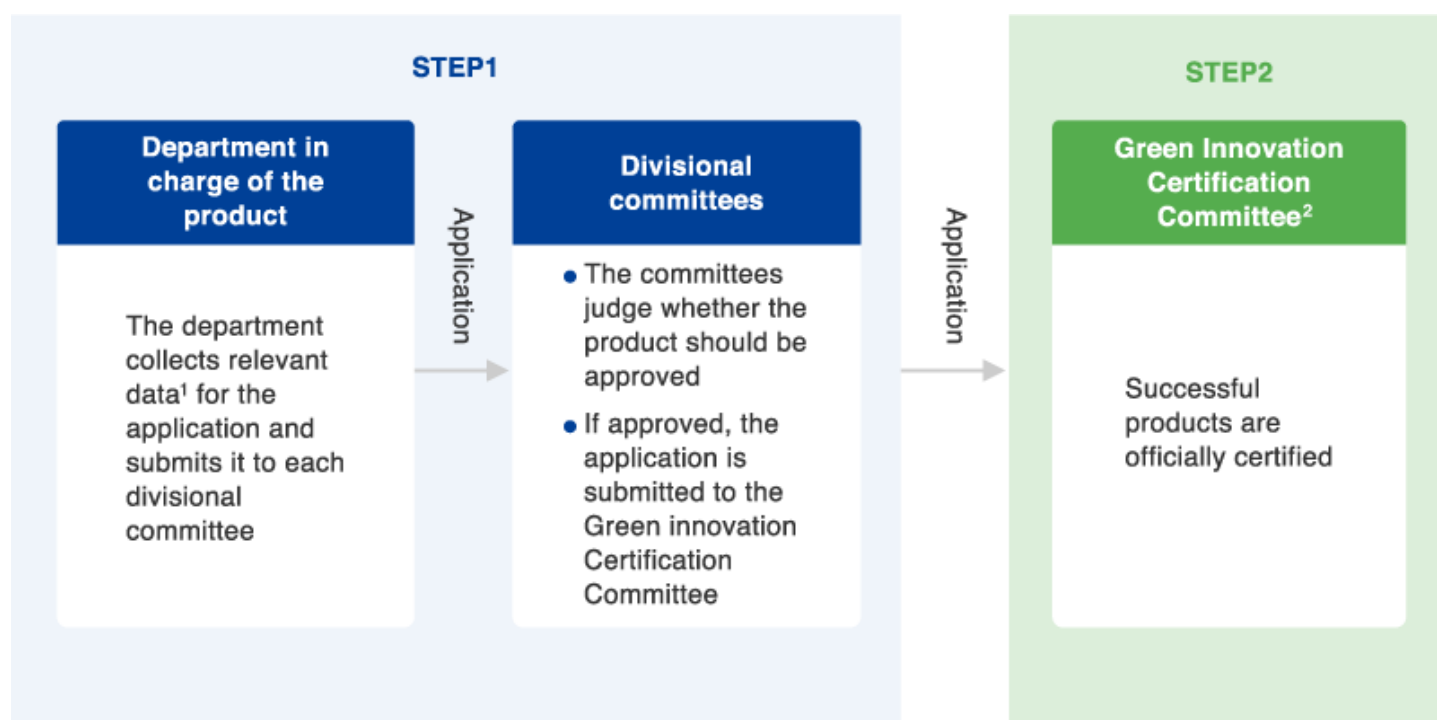
CSR Guidelines & Activity Reports - Contributing Solutions to Social Issues through Business Activities

Approach to Green Innovation Products

Value Creation

The following diagram outlines Toray Group's process and procedures for certifying Green Innovation products. Products are subjected to a two-stage screening process conducted by the divisional committees and by the group-wide Green Innovation Certification Committee. Those able to demonstrate objective evidence of providing an effective solution for global environmental issues are certified as Green Innovation products.

Green Innovation Product Certification Process



¹ This includes LCA data, T-E2A data, and estimates of CO₂ emissions reduction attributable to the product.

² Comprised of members of Toray Industries' Global Environment Business Strategic Planning Department, Corporate Marketing Planning Department, and Technology Center Planning Department, as well as experts when necessary.

Green Innovation Products Released in Fiscal 2018

Development of Reverse Osmosis Membrane Element Optimized for Sewage and Wastewater Treatment, Turns Wastewater into a Viable Resource

In April 2018, Toray Industries launched ROMEMBRA™ TLF Series reverse osmosis (RO) membranes, which offer excellent removal of impurities and permeability with better resistance against membrane fouling.

Compared with conventional RO membranes for wastewater treatment, ROMEMBRA™ TLF Series membranes deliver 30% better permeability, which will help to reduce operating costs. In addition, the Company developed new membrane surface coating technology to maintain enhanced durability against membrane cleaning chemicals, resulting in a longer membrane replacement cycle. This comes amid recent serious water shortages in the United States, China and emerging countries, and worsening water quality due to rapid industrial development, which have become global issues. With the introduction of the ROMEMBRA™ TLF Series, Toray Group aims to meet rapidly growing demand for sewage and wastewater treatment, while also seeking to expand applications for other industrial water treatment such as ultrapure water purification and boiler feedwater treatment.

Introduction of ultrasuede™ BX Non-Woven Material with Suede Texture, Featuring World's Highest Level of Plant-Based Raw Material Content

In January 2019, Toray Industries launched sales of ultrasuede™ BX, a non-woven material with a suede texture that realizes the highest proportion at about 30% of plant-based raw material content—in this case polyester and polyurethane—in the world.

ultrasuede™ BX uses polyester polymerized with ethylene glycol made from the waste molasses of sugarcane, and polyurethane composed of polyol made of castor oil from inedible castor oil plant, which gives the suede texture material the world's highest content of plant-based raw materials. ultrasuede™ BX is the world's first non-woven material with a suede texture made using plant-based polyurethane.

Until now, polyurethane made of plant-based raw materials faced issues with its technical properties resulting in low durability and unsatisfactory texture, and so could not be used for a non-woven suede-like material. To solve these issues, the Company employed original design technologies — from polymer and material structure design to polyurethane coagulation technology — to develop ultrasuede™ BX, which delivers superior texture and functionality with its high durability, air permeability, and easy maintenance.

Toray Industries anticipates that ultrasuede™ BX — as an eco-friendly material that offers both superior feeling and functionality — will be widely adopted for a broad range of applications, including automotive interiors, furniture, and fashion.



ultrasuede™ BX non-woven material with a suede texture

CSR Guidelines & Activity Reports - Contributing Solutions to Social Issues through Business Activities

Promoting Recycling Initiatives

Value Creation

As a manufacturer of a wide range of materials, Toray Group is promoting various recycling initiatives that ensure that the earth's resources are efficiently utilized. The Group will further expand its supply of recycled products and adopt more recycling technologies to help reduce plastic waste and promote a sound cycle of resource usage.

Recycling Activity Principles Adopted 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.

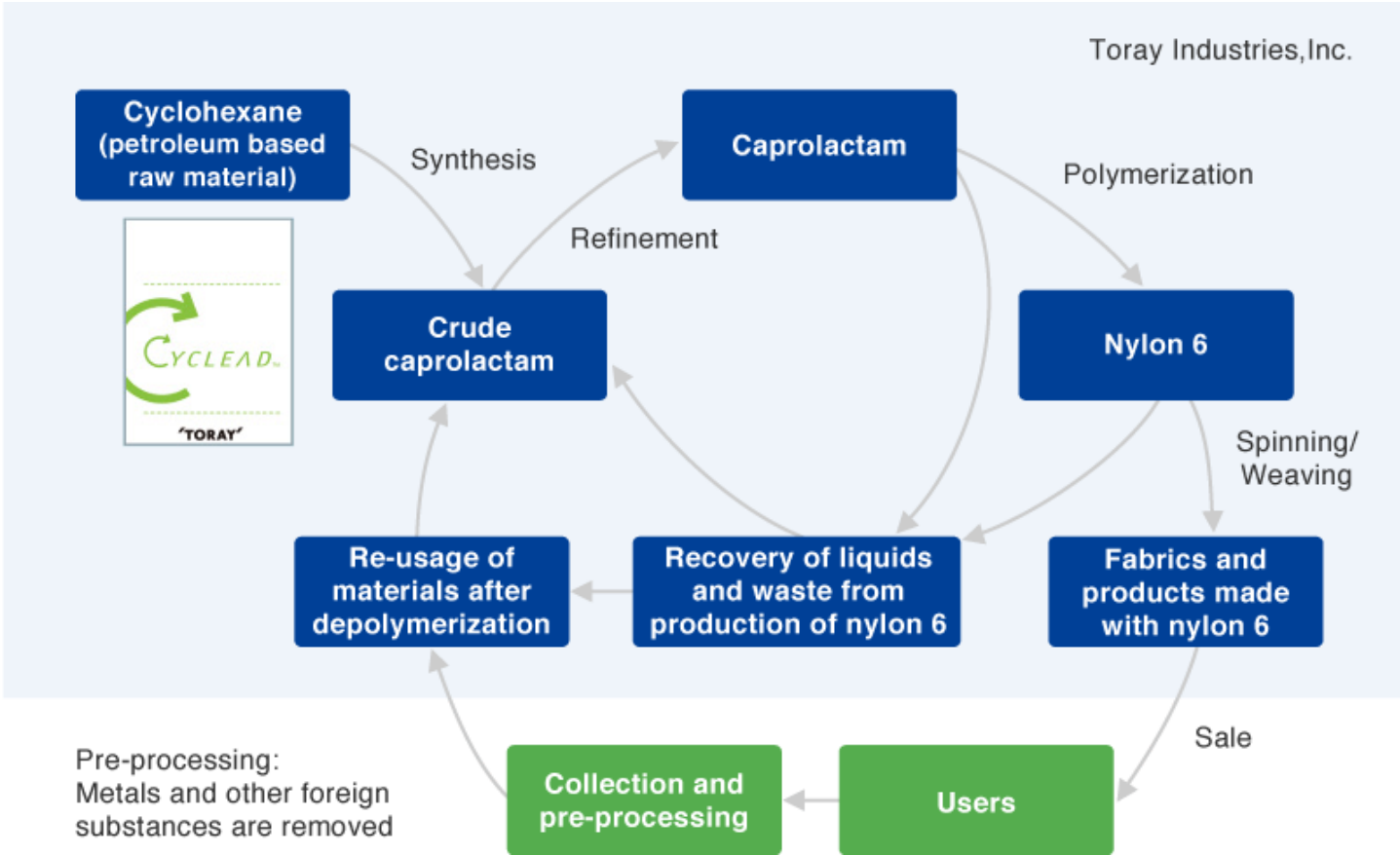
Fiber and Textile Recycling

Toray Industries, Inc. has two brands in the fiber and textile recycling field. CYCLEAD™ is a system for collection and circulation type recycling which is used for recycling nylon 6 fibers, etc. Ecouse™¹ is a regeneration type recycled polyester fabric made from recycled PET bottles, etc.

¹ In fiscal 2015, the Company expanded the Ecouse™ brand to encompass non-fiber products, as an integrated brand name for recycled materials and products offered by Toray Industries.

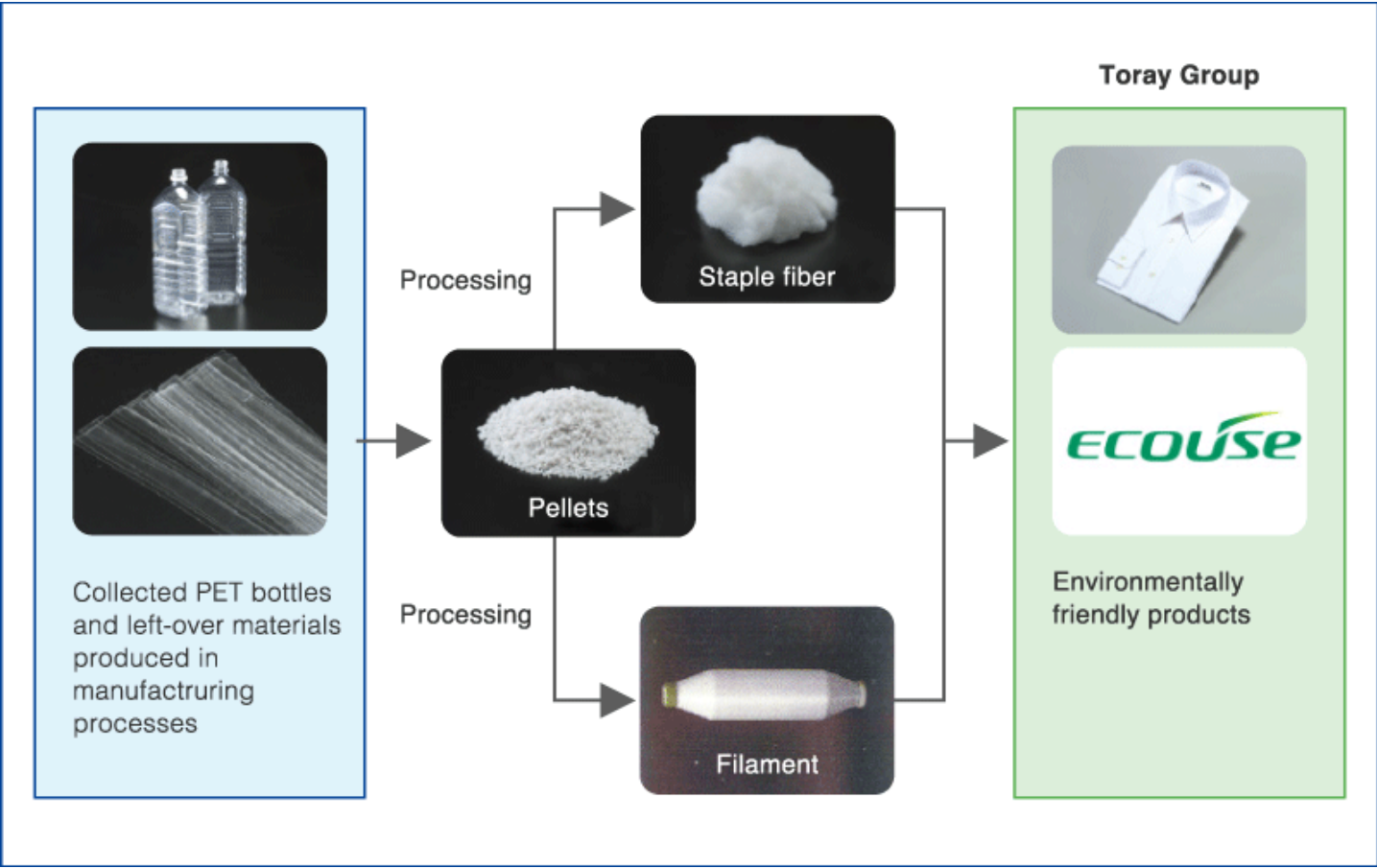
Collection and Circulation Type Recycling with CYCLEAD™

Fabric made from recycled fibers recovered from disposed nylon and other products



Regeneration Type Recycling with Ecouse™

Fabric made from recycled PET bottles for uniforms and functional sportswear

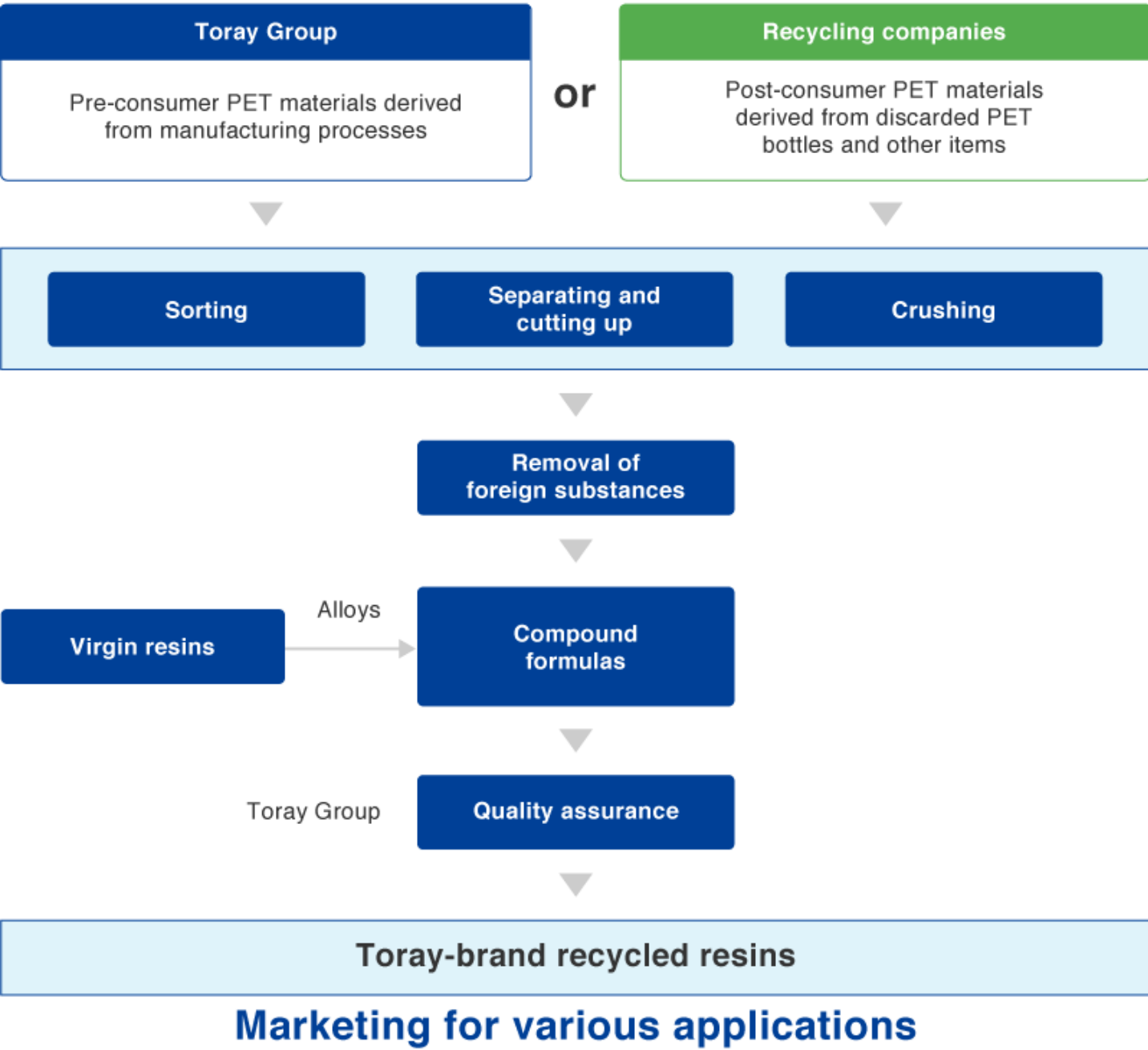


Resin Recycling

The fans inside home air conditioners are designated for recycling under Japan's Act on Recycling of Specified Kinds of Home Appliances. While continuing to conduct closed-loop recycling (in which end-of-life products are recycled into the same product) of fans and other products, Toray Group is also diversifying its procurement sources for fans to address growing market needs.

In addition, Toray Group actively engages in pre-consumer recycling, by reusing byproducts from internal manufacturing processes such as film scraps and fiber scraps. Furthermore, the Group promotes post-consumer recycling using PET bottle scraps in order to comply with green procurement regulations in and outside Japan.

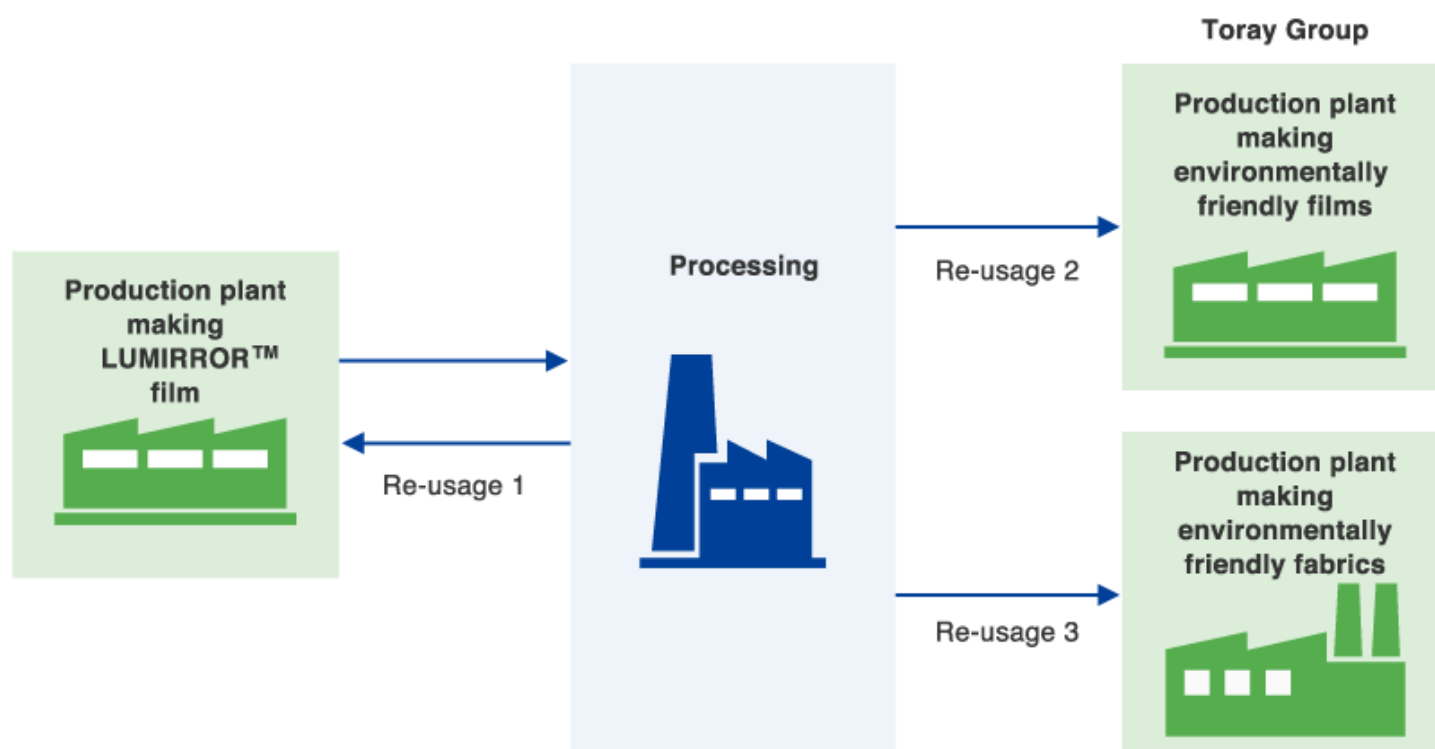
Pre-consumer/Post-consumer Recycling



Film Recycling

Toray Industries is recovering and processing raw materials used to make its LUMIRROR™ optical-use PET film and re-using them to produce environmentally friendly films and fabric products.

Processing and Re-using Recovered Raw Materials Generated from Manufacturing Processes



Carbon Fiber Recycling

Carbon fiber is a lightweight material that significantly curbs CO₂ emissions over the entire lifecycle of the products in which it is used. It is viewed as an important tool for helping to solve global environmental issues. As a result, demand for carbon fiber is expanding across a wide range of applications, including aircraft and automobile parts. As demand grows, market expectations for the development of carbon fiber recycling technologies are also on the rise.

As a member of the Consortium for Carbon Fiber Recycling Technology Development (dissolved at the end of March 2015), Toray Industries has taken steps to develop carbon fiber recycling technologies. The successful development of recycled carbon fiber and associated applications requires collaboration with a wide range of customers to explore various possibilities for use in specific parts and materials.

As part of this effort Toray Industries collaborates with Toyota Tsusho Corporation in a program of the New Energy and Industrial Technology Development Organization (NEDO) for the development of a highly efficient recycled carbon fiber manufacturing technology that uses an innovative and energy-efficient thermal decomposition method.² This new technology uses combustible gas from matrix resin as the energy source for the thermal decomposition process, which is the process that consumes the most energy in this type of carbon fiber recycling. As a result, the companies have significantly reduced the amount of energy consumed in the recycling process.

With an eye towards future commercialization, Toray Industries had constructed a pilot plant to test energy-efficient recycled carbon fiber manufacturing technologies, and began to operate it in July 2017. In addition, Toray Group will promote the development of new applications for recycled carbon fiber.

2 Thermal decomposition method: A recycling method in which carbon fiber is recovered by heating carbon fiber composite materials and thermally decomposing the matrix resins.

Life Innovation Business Expansion Project

Materiality Focus

Value Creation

Sales of Life Innovation products

■Reporting scope
Toray Group

■Fiscal 2019 Target
270 billion yen

Fiscal 2018 Result

223 billion yen

Globally, social environments are being transformed by rapidly declining birth rates, aging populations, rising healthcare costs in developed countries, and the increasing prominence of emerging countries. At the same time, a steady stream of innovative products and technologies have emerged, such as DNA analysis, mobile healthcare, and advanced medical devices. In 2014, the national medical care expenditure in Japan exceeded 40 trillion yen. Japan has a pressing need to optimize medical services, find solutions for remote and in-home medical care, and employ more women and older workers—all of which are major social issues in Japan.

Toray Group launched the Life Innovation Business Expansion Project in fiscal 2014, coinciding with the launch of the medium-term management program, Project AP-G 2016. The Life Innovation Project places a renewed focus on businesses that improve the quality of medical care, reduce the burden on medical staff, and contribute to health and longevity. This group-wide project seeks to leverage Toray Group's advanced materials, fundamental technologies, and business platforms to supply society with something of universal value — people's health.

Product Definitions and Guidelines

Improving the quality of medical care and reducing burden on medical staff

- Products used in medical treatment: Pharmaceuticals, therapeutic devices, materials/components related to preparation of therapeutic agents
- Products used in medical testing and diagnosis: Testing devices and diagnostic systems
- Supplies for hospitals: Functional, special-grade products
- Other: Analysis services, manufacturing equipment/facilities

Contributing to health maintenance and longevity

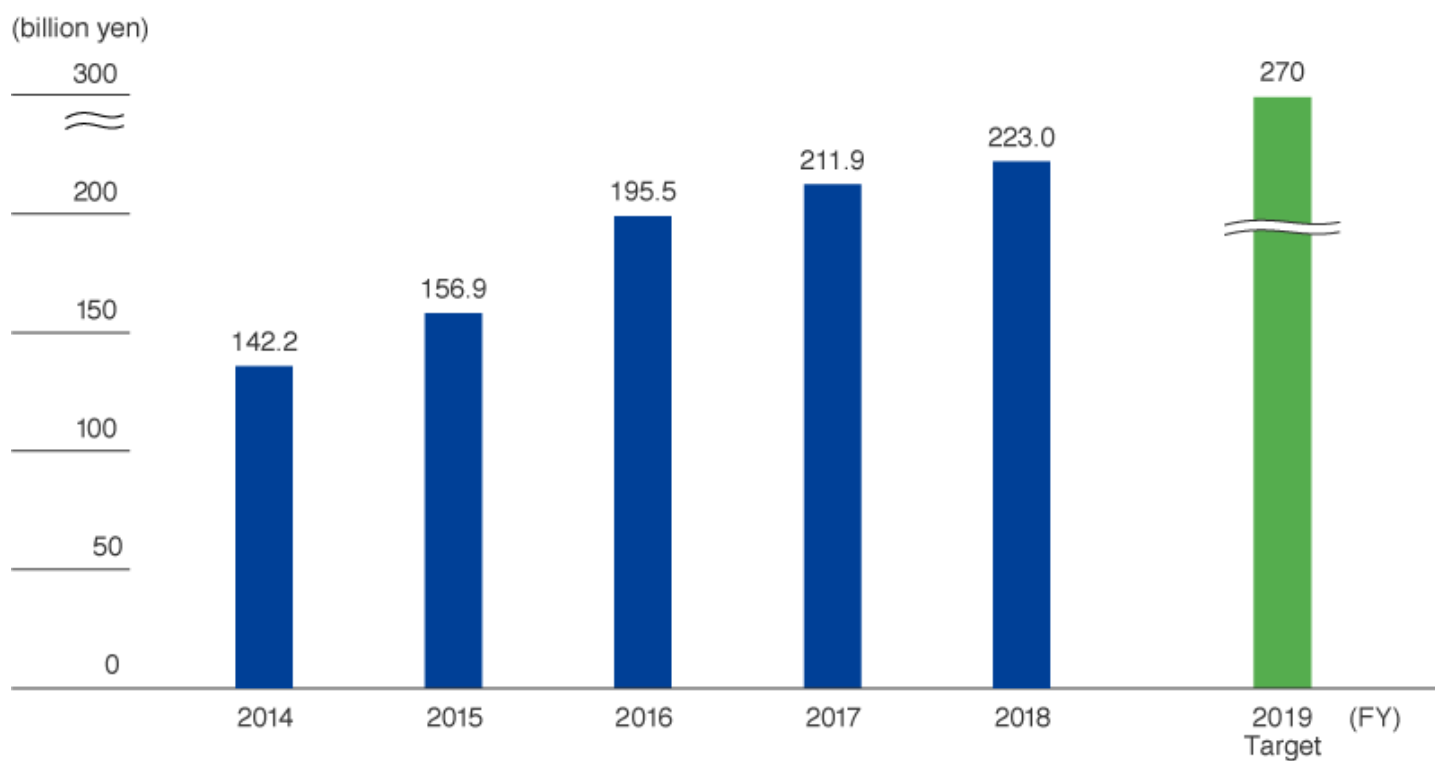
- Products that improve quality of life for the elderly, persons with disabilities, and patients
- Products that prevent diseases and disorders
- Nursing care products

Extreme weather and heat wave solutions

Note: Includes materials and components used in the above products

In fiscal 2018, net sales from Life Innovation businesses were 223.0 billion yen, up from 142.2 billion yen in fiscal 2014. The Group has set a goal of generating 270 billion yen in net sales from Life Innovation businesses by fiscal 2019.

Sales of Life Innovation Businesses (Toray Group)



Life Innovation Products Released in Fiscal 2018

Release of hitoe™ Wearable Electrocardiography System for Medical Applications

Toray Industries, Inc. developed the hitoe™ wearable electrocardiography (ECG) measurement system for medical applications, which can deliver ECG measurements for extended periods. The system is an extension of the Toray Industries' hitoe™ biosensing wearable fabric and was made available through Toray Medical Co., Ltd. in September 2018. Recent research has shown that the longer that ECG measurements are taken, the better the detection rate of atrial fibrillation. This system contributes to the early detection of atrial fibrillation by enabling ECG measurements over an extended period using a comfortable, wearable monitor.



Dedicated wearable vest and compact ECG monitor

Development of LIVMOA™ CL Sterilized Clothing for Use in Cleanrooms

In March 2019, Toray Industries announced the development of LIVMOA™ CL sterilized clothing for use in cleanrooms, the latest iteration of the LIVMOA™ series of disposable protective wear, which combines fiber and film technologies to enhance wearer comfort while maintaining a strong barrier. Sales of LIVMOA™ CL sterilized clothing commenced in August 2019, offering enhanced comfort for workers in industries that require working in cleanrooms, such as in the fields of regenerative medicine and pharmaceutical manufacturing, both of which show high growth potential.

Release of New Addition to INOUE-BALLOON™ Balloon Mitral Valvuloplasty Catheter for Aortic Valvuloplasty

Toray Industries expanded its line of INOUE-BALLOON™ balloon mitral valvuloplasty catheters for patients with cardiac aortic stenosis. The latest type reduces the catheter diameter to facilitate treatment via the artery (retrograde approach), offering a new option for treatment that will benefit patients.

Partnership with U.S. Venture Firm to Develop TRK-880, a Novel Small Molecular Anti-Cancer Drug

Toray Industries has been accelerating its efforts to create novel cancer treatments, including TRK-950 (a Toray Industries development code), which is a solid tumor treatment. The Phase I clinical trial for TRK-950, which began in March 2017, is moving forward steadily. The Company also signed a licensing agreement to acquire the worldwide rights for TRK-880, a novel small molecular drug from U.S. venture firm Systems Oncology, LLC. Following in the footsteps of TRK-950, Toray Industries will develop the novel anti-cancer drug with the aim of gaining rapid approval, seeking to expand its product pipeline in the field of cancer treatment drugs.

Corporate Governance and Management Transparency

Governance

Continually revise management systems, strengthen internal controls and strive for timely and appropriate information disclosure 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 a Management Philosophy that incorporates this principle.

The Group's Management 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 provide our shareholders with dependable and trustworthy management," and the Corporate Guiding Principles stipulate the Group's commitment to "Obtaining the trust of society and meeting the expectations by acting fairly while maintaining high ethical standards and a strong sense of responsibility and maintaining transparency in management."

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

Related Policies

➤ [Basic Policy on Corporate Governance](#)

Related Information

➤ [Corporate Governance](#)

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

Structure

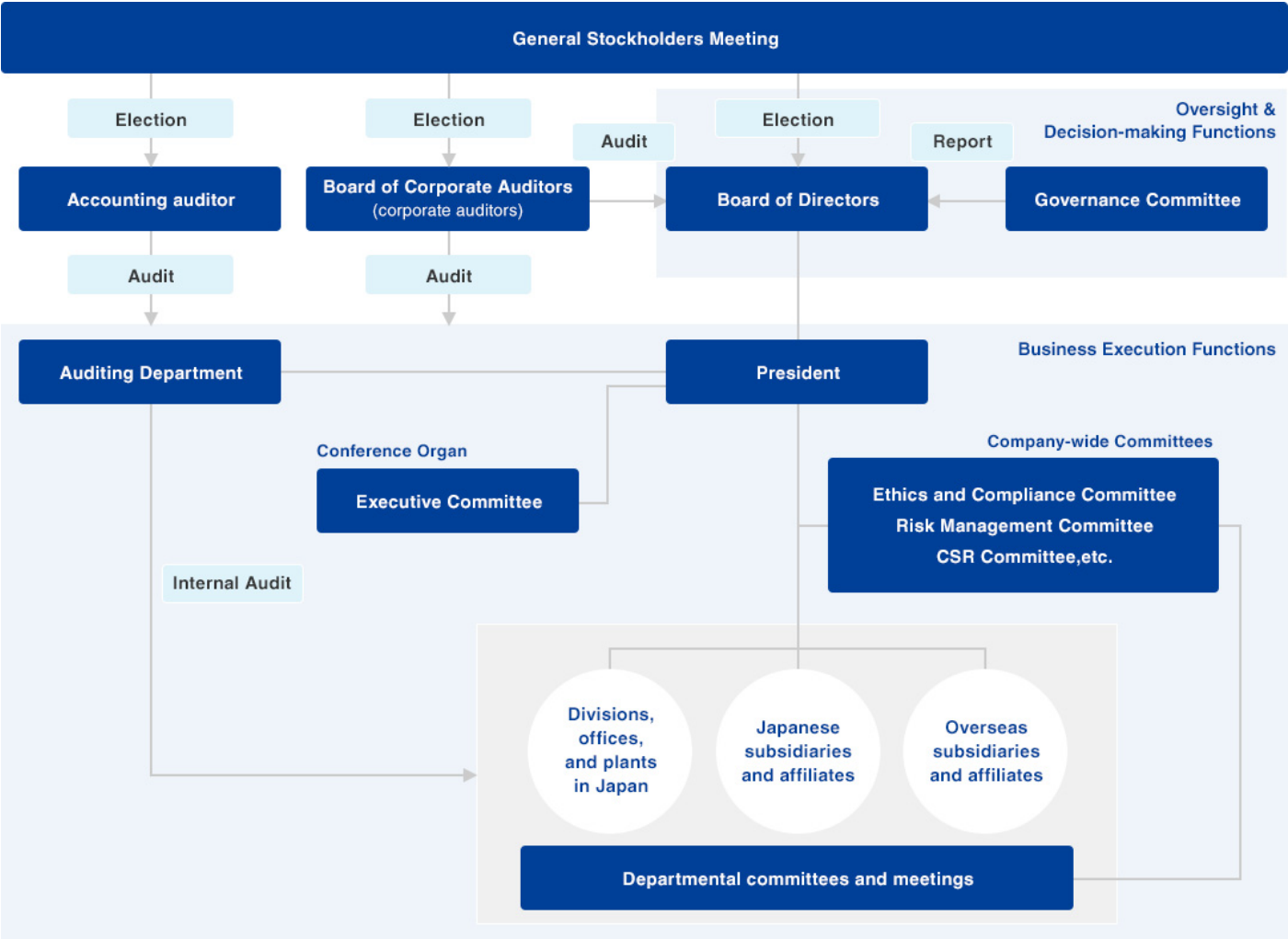
Toray Industries, Inc. operates as a company with a Board of Corporate Auditors and Board of Directors. The Board of Directors, which includes outside directors, decides on the business execution and supervises the execution of duties by the directors. The Board of Corporate Auditors includes outside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

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

The Board of Corporate Auditors is entirely independent of the Board of Directors. Based on professional expertise in finance, accounting, and law, as well as an understanding of the Group's businesses, the Board of Corporate Auditors exercises oversight over directors' execution of their duties.

Governance Committee consists of the chairman of the Board, president, and all of the outside directors; and an outside director serves as chairperson.

Toray Group's Corporate Governance System



CSR Road Map Targets and Results

01

Enhance management transparency, continually reflect stakeholder feedback in management, and fulfil responsibilities to explain corporate activities

■KPI

Number of dialogue meetings with stakeholders

■Reporting scope

Toray Group

■Target in fiscal 2018

Eight times

Result in fiscal 2018

8 times

02

Perform monitoring based on the Basic Policy for Internal Control Systems, in accordance with Japan's Companies Act

■KPI

Board of Directors' positive assessment of the implementation of the Basic Policy for Internal Control Systems

■Reporting scope

Toray Group

■Target in fiscal 2018

90%

Result in fiscal 2018

94.5%

03

Expand CSR education throughout the Toray Group to facilitate CSR activities

■KPI

Group companies implementing CSR education

■Reporting scope

Toray Group

■Target in fiscal 2018

100%

Result in fiscal 2018

100%

Looking to the Future

An analysis and assessment of the effectiveness of the Board of Directors in fiscal 2018 concluded that the Board had generally fulfilled its roles and responsibilities, but also called for more active discussion by the Board. In response, concrete measures were implemented for fiscal 2019 and beyond to further enhance the Board's effectiveness. The assessment of the Board also gathered feedback from directors and auditors, which is being discussed by the Governance Committee and will be used to further enhance the Board's effectiveness.

Ensuring Proper Business Conduct and Transparency

Governance

Board of Directors' positive assessment of the implementation of the Basic Policy for Internal Control Systems¹

■Reporting scope
Toray Group

■Target in fiscal 2018
90%

Result in fiscal 2018

94.5%

¹ The effectiveness of the implementation of the nine items in the Basic Policy on Internal Control System set in accordance with the provisions of the Companies Act of Japan is evaluated by all the directors and statutory auditors and monitored as a KPI of the internal control system to share with stakeholders.

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 will continue to make every effort to ensure compliance with laws and regulations, efficient execution of duties, preservation and management of information, and control over risks of loss.

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 2018 was 94.5%, surpassing the target of 90%.

Related Information

➤ [Basic Policy on Corporate Governance](#)

Corporate Governance Report [PDF](#)

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

➤ [Information Disclosure Principles](#)

Dialogue with Labor Unions

Toray Industries holds meetings of the Central Labor and Management Council twice a year. The meetings are attended by directors at the senior vice president level and higher and labor representatives at the union head level and above. In addition to briefing the union on management information about Toray Group, the meetings facilitate ongoing dialogue with the union. Resolution of labor issues is undertaken at separate Labor and Management Council meetings. As of March 2019, Toray Workers' Union membership stood at 8,584 workers.

CSR Guidelines & Activity Reports - Corporate Governance and Management Transparency

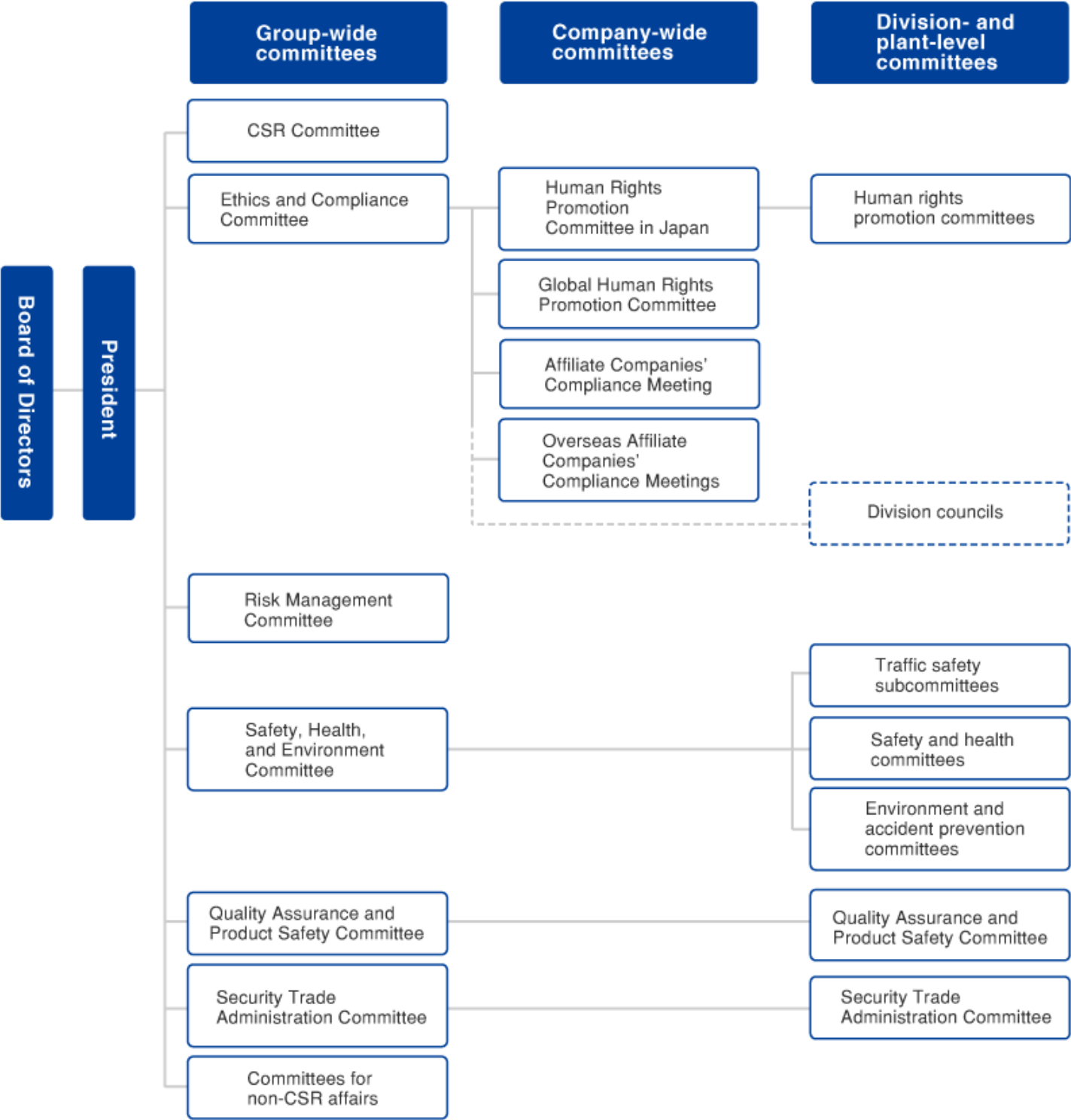
Implementing CSR Activities and Improving CSR Education

Governance

Organizational Structure for Social Responsibility

The CSR Committee is headed by the chief social responsibility officer and coordinates five other group-wide committees, assigning tasks under each of the themes of the CSR Guidelines to them, in order to ensure Toray Group comprehensively implements CSR initiatives. Furthermore, committees and meetings on CSR have been established at each group company to help implement group-wide CSR activities.

Committee and Implementation Organization



Promoting CSR Initiatives in Every Workplace

A special characteristic of Toray Group's approach to corporate social responsibility is its "CSR line activities," a unique 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.

Group companies also implement various other initiatives.

Du Pont-Toray Co., Ltd. was awarded an EcoVadis Gold Medal for Corporate Social Responsibility, placing it in the top 5% of companies that were objectively evaluated for CSR by EcoVadis.¹ Du Pont-Toray is addressing the areas for improvement that were identified in the evaluation in order to further enhance its CSR. The company also issued internal guidelines for securing compliance with Japan's Act against Delay in Payment of Subcontract Proceeds, Etc. to Subcontractors. The guidelines address questions about the regulations, offer precautions, and provide clarifications to ensure that employees fully understand the regulations and secure compliance in the company's transactions.

Toray International, Inc. issued an internal CSR handbook and launched a regular CSR news bulletin to encourage workplace discussion.

¹ EcoVadis provides comprehensive CSR ratings services for companies all over the world. More than 45,000 companies including Toray Industries have been assessed by EcoVadis to date.

In-House Training on CSR-Related Issues



Toray Group strives to ensure that social responsibility is firmly rooted in its culture by providing various training opportunities. In fiscal 2018, 100% of Group companies implemented CSR education, achieving the target.

In fiscal 2018, Toray Industries, Inc. and its group companies in Japan implemented CSR education for their employees. Head office staff visited group companies in Japan and confirmed progress on CSR initiatives and gave seminars in order to increase awareness of CSR.



CSR seminar at Kansai TEK Co., Ltd.

Dialogue with Stakeholders

Toray Group's Corporate Missions call for contributing to customers, employees, shareholders, and society, by emphasizing stakeholders in its practice of business management. The Group is increasing its dialogue with stakeholders, both through its business operations and through briefing sessions and meetings in each region. In fiscal 2018, Toray Industries conducted regular dialogue with shareholders and employees, taking advantage of opportunities such as the general meeting of stockholders and labor and management meetings.

The Group will continue to seek opportunities to hear from stakeholders and gauge their expectations with the involvement of corporate management, in order to shape the direction of its management.

Related Information

➤ [Materiality](#)

Number of dialogue meetings with stakeholders

■Reporting scope	■Fiscal 2018 target
Toray Group	Eight times

Result in fiscal 2018

8 times